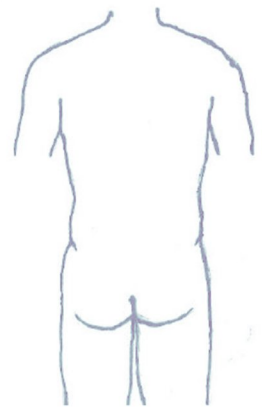


A HANDOUT ON MEDICAL ENGLISH FOR HEALTH PROFESSIONALS

Goretti Faya Ornia
Héctor Hernández Lázaro



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To Ignacio and María Jesús,
For their help with the pictures and unconditional support.
Thanks for everything!
With all our love.

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UNIT 1

REVIEW OF TENSES; BASIC MEDICAL VOCABULARY; SOUNDS OF ENGLISH

Grammar: Review of Tenses

THEORY

Here you can find a sketch of the structure of the most frequent tenses, as well as some basic notes about them.

⚡ PRESENT SIMPLE

Present simple is used for *habits and routines*. Remember that the third person singular adds an “-s” to the verb and its matching auxiliary is “does”.

Have a look at the structure of sentences in the present simple:

(+) *You play football / He plays football.*

(-) *You don't play football / He doesn't play football.*

(?) *Do you play football? / Does he play football?*

(Y/N) *Yes, I do. No, I don't. / Yes, he does. No, he doesn't.*

NOTE: As they are frequent actions and events, frequency adverbs are used (such as “always”, “almost always”, “usually”, “normally”, “often”, “frequently”, “hardly ever”, “never”, etc.). Remember that *frequency adverbs* are placed (1) before main verbs, (2) after the verb TO BE, and (3) between the auxiliary and the verb. Also, remember that with “never” the verb must be in the affirmative. Have a look at these examples:

*You usually play football.
I am usually happy.
You don't usually play football.
You never play football.*

‡ PRESENT CONTINUOUS

Present continuous is used for events that are currently happening (usually for a long time). It is built with the verb TO BE.

Have a look at the structure of sentences in the present continuous:

*(+) You are playing football at the moment / He is playing football at the moment.
(-) You aren't playing football at the moment / He isn't playing football at the moment.
(?) Are you playing football at the moment? / Is he playing football at the moment?
(Y/N) Yes, I am. No, I am not. / Yes, he is. No, he isn't.*

NOTE: The gerund is formed by adding “-ing” to the verb. Remember that:

- If the verb finishes in “-y”, the suffix “-ing” is added as happens when the word finishes in any other letter (*study > studying; play > playing*).
- If the verb ends in a weak “-e”, it disappears (e.g. *write > writing*)

The gerund has four main uses in English:

1. The main lexical verb in the present continuous (as in the examples above). As it is a non-conjugated form, it cannot appear immediately after the subject.
Ex.: ~~*I working*~~ BUT *I am working*.
2. Gerunds are also used after a preposition.
Ex.: *After working as a teacher, he became a lawyer.*
3. As the subject of a sentence.
Ex.: *Working as a physiotherapist is not an easy task.*
4. After some verbs.
Ex.: *He suggested going to the cinema on Monday.*

⚡ **PAST SIMPLE**

Past simple is used to refer to finished events in the past. Words such as “yesterday”, “last week”, “last year” or “ago” are frequently found in simple past sentences.

Remember that there are regular and irregular verbs (see the second column of the list of irregular verbs). Please refer to the list of irregular verbs below.

Remember that the third person singular does not change. The auxiliary for negative sentences and questions is “did”.

Have a look at the structure of sentences in the past simple:

- (+) *You played football yesterday. / He played football yesterday.*
 (-) *You didn't play football yesterday. / He didn't play football yesterday.*
 (?) *Did you play football yesterday? / Did he play football yesterday?*
 (Y/N) *Yes, I did. No, I didn't. / Yes, he did. No, he didn't.*

Here you can find a list of the main irregular verbs. The first column is the infinitive form, the second column is the past tense (the one referred to in this section), and the third column is the past participle (which will be used later for “perfect tenses”, such as the present perfect, the past perfect, or the future perfect).

INFINITIVE	PAST	PARTICIPLE	INFINITIVE	PAST	PARTICIPLE
be	was/were	been	learn	learnt	learnt
beat	beat	beaten	leave	left	left
become	became	become	lend	lent	lent
begin	began	began	let	let	let
bite	bite	bitten	lie	lay	lain
blow	blew	blown	lose	lost	lost
break	broke	broken	make	made	made
bring	brought	brought	mean	meant	meant
build	built	built	meet	met	met
buy	bought	bought	pay	paid	paid
can	could	been able to	put	put	put
catch	caught	caught	read	read	read
choose	chose	chosen	ride	rode	ridden
come	came	come	ring	rang	rung
cost	cost	cost	rise	rose	risen
cut	cut	cut	run	ran	run
do	did	done	say	said	said
draw	drew	drawn	see	saw	seen
dream	dreamt	dreamt	sell	sold	sold
drink	drank	drunk	send	sent	sent
drive	drove	driven	set	set	set
eat	ate	eaten	shine	shone	shone
fall	fell	fallen	show	showed	shown
feel	felt	felt	shut	shut	shut

Review of Tenses; Basic Medical Vocabulary; Sounds of English

fight	fought	sang	sung
find	found	sat	sat
fly	flown	slept	slept
forget	forgotten	spoke	spoken
get	got	spent	spent
give	given	stood	stood
go	gone	stole	stolen
grow	grown	swam	swum
hang	hung	took	taken
have	had	taught	taught
hear	heard	told	told
hide	hidden	thought	thought
hit	hit	threw	thrown
hold	held	understood	understood
hurt	hurt	woke	woken
keep	kept	wore	worn
know	known	won	won
lay	laid	wrote	written

⚡ **PRESENT PERFECT**

Present perfect is used to refer to actions that have recently happened or that have some consequence in the present.

Remember that it is built with the auxiliary “have” or “has” (for the third person singular) followed by the past participle of the lexical verb. Have a look at the structure of sentences in the present perfect:

(+) *You have played football twice this week. / He has played football twice this week.*

(-) *You haven't played football twice this week. / He hasn't played football twice this week.*

(?) *Have you played football twice this week? / Has he played football twice this week?*

(Y/N) *Yes, I have. No, I haven't. / Yes, he has. No, he hasn't.*

⚡ **PRESENT PERFECT CONTINUOUS**

As happened with the present perfect, the present perfect continuous refers to actions that have recently happened or that have some consequence in the present. However, the present perfect continuous emphasizes that the action happened for a long time.

It is built with the suitable auxiliary (*have/has*), the past participle of the verb TO BE (*been*), and the lexical verb in the gerund form (-ing). Have a look at the structure of sentences in the present perfect continuous:

(+) *You have been playing football all day. / He has been playing football all day.*

(-) *You haven't been playing football all day. / He hasn't been playing football all day.*

(?) *Have you been playing football all day? / Has he been playing football all day?*

(Y/N) *Yes, I have. No, I haven't. / Yes, he has. No, he hasn't.*

⚡ **PAST CONTINUOUS**

As happened with the past simple, the past continuous tense refers to a finished action that happened in the past, but focuses on the duration. It is

frequently used in conjunction with the past simple, that is to say “when an event was taking place, something happened”.

It is built with the past tense of the verb TO BE, followed by the gerund form of the lexical verb:

(+) *You were playing football when I phoned you. / He was playing football when I phoned you.*

(-) *You weren't playing football when I phoned you. / He wasn't playing football when I phoned you.*

(?) *Were you playing football when I phoned you? / Was he playing football when I phoned you?*

(Y/N) *Yes, I was. No, I wasn't. / Yes, he was. No, he wasn't.*

✚ **PAST PERFECT**

The past perfect refers to an action in the past which happened *before* another event in the past.

It is built with the past tense of the verb TO HAVE (*had*), followed by the past participle of the lexical verb:

(+) *You had played football before I phoned you. / He had played football before I phoned you.*

(-) *You hadn't played football before I phoned you. / He hadn't played football before I phoned you.*

(?) *Had you played football before I phoned you? / Had he played football before I phoned you?*

(Y/N) *Yes, I had. No, I hadn't. / Yes, he had. No, he hadn't.*

✚ **PAST PERFECT CONTINUOUS**

As happened with the past perfect, the past perfect continuous refers to an action in the past which happened *before* another event in the past. However, the past perfect continuous emphasizes the duration.

It is built with the past tense of the verb TO HAVE (*had*), followed by the past participle of the verb TO BE, followed by the gerund of the lexical verb:

(+) *You had been playing football before I phoned you. / He had been playing football before I phoned you.*

(-) *You hadn't been playing football before I phoned you. / He hadn't been playing football before I phoned you.*

(?) *Had you been playing football before I phoned you? / Had he been playing football before I phoned you?*

(Y/N) *Yes, I had. No, I hadn't. / Yes, he had. No, he hadn't.*

✚ **FUTURE (WILL)**

There are three kinds of future in English:

- (1) Future with “will”
- (2) Future with “going to”
- (3) Present continuous meaning future events

The future with “will” has different meanings. The three most common ones are:

- (1) Events that are far in the future, that is to say, future events which are undetermined.
- (2) Predictions (for example: it'll rain tomorrow)
- (3) Instant decisions (for example: OK, I'll go!)

It is built with the auxiliary “will” followed by the infinitive of the lexical verb. Have a look at the structure of sentences in the future with “Will”:

(+) *You will play football next year. / He will play football next year.*

(-) *You will not (=won't) play football next year. / He will not (=won't) play football next year.*

(?) *Will you play football next year? / Will he play football next year?*

(Y/N) *Yes, I will. No, I won't. / Yes, he will. No, he won't.*

✚ **FUTURE (GOING TO)**

The future with “going to” refers to actions which are already planned and defined.

It is built with the verb “TO BE”, followed by “going to” plus the infinitive of the lexical verb. Have a look at the structure of sentences in the future with “Going to”:

(+) *You are going to play football next month / He is going to play football next month.*

(-) *You aren't going to play football next month / He isn't going to play football next month.*

(?) *Are you going to play football next month? / Is he going to play football next month?*

(Y/N) *Yes, I am. No, I am not. / Yes, he is. No, he isn't.*

✚ **FUTURE (PRESENT CONTINUOUS)**

The present continuous tense can also have a future meaning. It is used for very planned actions and immediate events. Context is very important for determining the use of this tense. Have a look at these examples:

(+) *I'm copying this page in the copy room, I'm coming in a minute.*

(-) *He's just sent me a text and told me he's not coming to dinner.*

(?) *Are you eating out this evening?*

(Y/N) *Yes, I am. / No, I am not.*

✚ **FUTURE CONTINUOUS**

The future continuous tense is used for referring to continuous actions that will happen in the future.

It is built with the auxiliary “will” followed by the verb “TO BE” plus the gerund form of the lexical verb. Have a look at the structure of sentences in future continuous:

(+) *By this time tomorrow, you will be playing football. / By this time tomorrow, he will be playing football.*

(-) *By this time tomorrow, you won't be playing football. / By this time tomorrow, he won't be playing football.*

(?) *Will you be playing football by this time tomorrow? / Will he be playing football by this time tomorrow?*

(Y/N) *Yes, I will. No, I won't. / Yes, he will. No, he won't.*

✚ **FUTURE PERFECT**

The future perfect is used for referring to finished actions in the past (they are a kind of predictions).

It is built with the auxiliary “will” followed by the verb “TO HAVE” plus the past participle of the lexical verb. Have a look at the structure of sentences in the future perfect:

(+) *You will have played football twice by Friday. / He will have played football twice by Friday.*

(-) *You won't have played football twice by Friday. / He won't have played football twice by Friday.*

(?) *Will you have played football twice by Friday? / Will he have played football twice by Friday?*

(Y/N) *Yes, I will. No, I won't. / Yes, he will. No, he won't.*

✚ **CONDITIONAL**

The conditional tense is used for referring to hypothetical situations.

It is built with the auxiliary “would” followed by the infinitive of the lexical verb. Have a look at the structure of sentences in the conditional tense:

(+) *I would travel more if I had more money. / He would travel more if he had more money.*

(-) *I wouldn't travel more if I had more money. / He wouldn't travel more if he had more money.*

(?) *Would you travel more if you had more money? / Would he travel more if he had more money?*

(Y/N) *Yes, I would. No, I wouldn't. / Yes, he would. No, he wouldn't.*

Please note that there are three types of conditional sentences. They will be explained in further detail in Unit 3.

✚ **PERFECT CONDITIONAL**

The perfect conditional tense is used for referring to hypothetical situations in the past.

It is built with the auxiliary “would” followed by the verb “TO HAVE” plus the past participle of the lexical verb. Have a look at the structure of sentences in the perfect conditional tense:

(+) *I would have travelled more if I had had more money. / He would have travelled more if he had had more money.*

(-) *I wouldn't have travelled more if I had had more money. / He wouldn't have travelled more if he had had more money.*

(?) *Would you have travelled more if you had had more money? / Would he have travelled more if he had had more money?*

(Y/N) *Yes, I would. No, I wouldn't. / Yes, he would. No, he wouldn't.*

PRACTICE

Exercise 1

Circle the correct form of the verb.

Alice and Jack **had bought / will buy**¹ two plane tickets to Malaysia because their best friend **was going / is going**² to get married with a Malaysian girl the following weekend. Since they **received / had received**³ the invitation letter, they **were looking forward to / will be looking forward to**⁴ their trip. The **decided / had decided**⁵ they **would go / will go**⁶ a couple of weeks in advance to visit the country.

However, they **got / were getting**⁷ a nasty surprise when they **had checked in / were checking in**⁸ at the airport. They were asked if they **had got / got**⁹ vaccinated against malaria. Unfortunately, they **had been forgetting / had forgotten**¹⁰ about it. The police told them that getting vaccinated was strongly recommended. Luckily they **had arrived / were arriving**¹¹ very early for their flight so they still had time to try to solve it. They **had run / ran**¹² to the police station at the airport, where they received all the required information. While one **had filled in / was filling in**¹³ the forms, the other **was going / went**¹⁴ to the A&E section. Everything was solved in an hour, so they **hurried / were hurrying**¹⁵ back to check-in and **caught / had caught**¹⁶ their flight. The only problem was that they had to spend the first two weeks in their hotel in Malaysia, waiting for the vaccine to take effect. However, on the weekend they really **enjoyed / were enjoying**¹⁷ their best friend's wedding.

Exercise 2

Fill in the gaps with a suitable verb in the appropriate tense.

Present

Rest

Get

Be

Smoke

Have

Work

Use

Radiate

Locate

A 70-year-old man _____¹ himself in A&E with chest pain. He had had the pain for two hours prior to arrival. The pain was _____² in the centre of his chest and _____³ to his left arm. For the last six months, he _____⁴ this chest pain after effort, but it _____⁵ to disappear once he _____⁶. This time, however, it _____⁷. He _____⁸ as a gallery attendant and has to walk around guiding groups. He _____⁹ approximately 20 cigarettes a day and _____¹⁰ teetotal. His father died of a myocardial infarction aged 65. He _____¹¹ aspirin, B-blockers for the previous two years, and a glyceryl trinitrate (GTN) spray to use as required.

Exercise 3

Complete the text with the correct form of the verb in brackets.

A record of 4,655 organ transplants _____¹ (*be carried out*) in a year by hospitals.

However, three patients _____² (*still die*) every day waiting for a donor, health officials _____³ (*warn*).

“Transplants _____⁴ (*rise*) by 10% from 2013 to 2014, with almost 25% of donors donating a kidney or part of a liver. But 40% of families _____⁵ (*refuse*) to allow the use of dead loved ones’ organs and the proportion of those who _____⁶ (*agree*) to help _____⁷ (*remain*) stubbornly low,”

_____⁸ (*say*) NHS Blood and Transplant as it _____⁹ (*mark*) National Transplant Week.

NHS BT’s Sally Johnson _____¹⁰ (*say*): “The UK must do more to save lives through organ donation. Whenever a family cannot bring themselves to donate, patients waiting for an organ may die.”

(Adapted from the Daily Mirror July 9, 2014)

Exercise 4

Complete the text with the correct form of the verb in brackets.

Dear Coleen,

I _____¹ (*be married*) for 53 years, and for the past three years my husband _____² (*have*) dementia.

He _____³ (*keep*) accusing me of having affairs with his friends. He _____⁴ (*have*) a carer who

_____⁵ (*come*) around to _____⁶ (*wash*) and _____⁷ (*dress*) him, and now my husband

_____⁸ (*say*) I _____⁹ (*sleep*) with him.

Our children _____¹⁰ (*say*) it’s time he _____¹¹ (*go into*) a home, but I can’t do that—we

_____¹² (*marry*) in sickness and health. I _____¹³ (*love*) him but I _____¹⁴ (*know*) how

much more I can take.

Coleen says ...

Until you _____¹⁵ (*live*) with a loved one with dementia, it
 _____¹⁶ (*be*) impossible to know or explain how hard it
 _____¹⁷ (*be*).

I _____¹⁸ (*go through*) it with my mother and it
 _____¹⁹ (*be*) devastating. What you have to keep in mind
 _____²⁰ (*be*) that it _____²¹ (*not be*) your
 husband _____²² (*accuse*) you of affairs, it's his illness
 _____²³ (*drive*) him to say it.

My mum _____²⁴ (*be*) the most laid-back woman in the
 world, but Alzheimer's _____²⁵ (*turn*) her into a violent,
 aggressive person who I _____²⁶ (*not recognise*) at all. She
 _____²⁷ (*call*) me every name under the sun.

I had to keep _____²⁸ (*come*) home after visiting her and
 telling myself it _____²⁹ (*be*) the illness and not how she
 really _____³⁰ (*feel*).

You mustn't be afraid to get support. I _____³¹ (*be*) sure
 your children _____³² (*be*) only suggesting a home for your
 husband as they _____³³ (*be*) worried about you. Maybe
 there _____³⁴ (*be*) other ways they can help? Age UK
 _____³⁵ (*have*) good information and links to support
 groups, and _____³⁶ (*get*) in touch with the Alzheimer's
 Society, which _____³⁷ (*help*) me.

You have to try hard not to take it personally and to remember that your
 husband does love you and he _____³⁸ (*love*) you
 throughout your married life.

(Adapted from *the Daily Mirror* July 9, 2014)

Exercise 5

Complete the text with the correct form of the verb in brackets.

How physiotherapy _____¹ (*work*)

The aim of physiotherapy _____² (*be*)
 _____³ (*help*) restore movement and normal body function
 in cases of illness, injury and disability.

As well as _____⁴ (*treat*) specific problems, your
 physiotherapist may also _____⁵ (*suggest*) ways to
 _____⁶ (*improve*) your general wellbeing—for example, by
 _____⁷ (*take*) regular exercise and _____⁸
 (maintain) a healthy weight for your height and build.

Physiotherapists _____⁹ (*take*) a holistic approach,
 _____¹⁰ (*look*) at the body as a whole rather than
 _____¹¹ (*focus*) on the individual factors of an injury or
 illness. The person _____¹² (*be treated*)
 _____¹³ directly involved in their own care.

For example, back pain can be _____¹⁴ (*cause*) by a number
 of different things, including: poor posture, inherited spinal deformity,
 bending or twisting awkwardly, overstretching, standing for long periods,
 and lifting or carrying objects incorrectly.

A physiotherapist _____¹⁵ (*look*) at your individual
 situation. As well as treating the problem, they may also
 _____¹⁶ (*suggest*) things you can _____¹⁷
 (*do*) on a daily basis to help _____¹⁸ (*relieve*) pain and
 discomfort. They may also _____¹⁹ (*give*) you advice about
 how _____²⁰ (*prevent*) the injury re-occurring.

For example, if you _____²¹ (*have*) lower back pain,
 _____²² (*maintain*) good posture and
 _____²³ (*do*) core stability exercises to
 _____²⁴ (*strengthen*) your stomach and lower back muscles
 may _____²⁵ (*help*).

Source: <https://www.nhs.uk/Conditions/Physiotherapy/Pages/How-does-it-work.aspx>

Exercise 6**Complete the text with the correct form of the verb in brackets.**

A UK-qualified physiotherapist with more than 26 years' experience _____¹ (*come*) to work in southern Spain almost by chance after _____² (*work*) extensively in both the health service and the private sector in the UK.

"I _____³ (*have*) my own private practice on Jersey for ten years, and we _____⁴ (*be*) about to take six months off to research various European locations, with a view to working abroad. We _____⁵ (*come*) to Spain for a holiday and we _____⁶ (*never leave*)." Anne and her husband Rob, who now _____⁷ (*run*) their own successful practice near Marbella, _____⁸ (*say*) that despite the wonderful lifestyle, _____⁹ (*work*) as a physiotherapist in Spain _____¹⁰ (*be*) difficult. Attitudes to physiotherapists _____¹¹ (*be*) very different in Spain from those in the UK, for example. They _____¹² (*treat*) on a prescriptive basis, as recommended by a doctor or a surgeon, rather than on a diagnostic basis, and they _____¹³ (*be*) usually poorly _____¹⁴ (*pay*) in comparison with the UK.

They _____¹⁵ (*know*) that there _____¹⁶ (*be*) plenty of potential clients among the English-speaking population in southern Spain and _____¹⁷ (*want*) to offer them a "gold standard": the best facilities and specialists they _____¹⁸ (*can*). "For me, _____¹⁹ (*work*) in the Spanish health system _____²⁰ (*not be*) an option," _____²¹ (*say*) Anne. "Apart from anything else, you _____²² (*need*) to speak really fluent Spanish to do that, but more importantly I _____²³ (*not want*) to work in that way. I _____²⁴ (*want*) to offer the kind of services I _____²⁵ (*be able*) to offer in the UK. I _____²⁶ (*know*) there _____²⁷ (*be*) a need for it."

Despite all of the problems that she _____²⁸ (*experience*) getting things done properly in Spain, Anne's overriding advice to other physiotherapists who _____²⁹ (*want*) to work there _____³⁰ (*be*) to do things the same way: "If you _____³¹ (*value*) your profession, jump through all the hoops because then you can hold your head up both in Spain and in your home

country. Anything less _____³² (*devalue*) the profession.” She strongly _____³³ (*advise*) less experienced physiotherapists not to try to work here until the _____³⁴ (*have*) plenty of varied experience in their home country: “There _____³⁵ (*not be*) the same kind of back-up network here, and it _____³⁶ (*be*) irresponsible and unprofessional, as you could be seriously compromising your patient’s health.” Like other health professionals in Spain, Anne _____³⁷ (*say*) it _____³⁸ (*be*) a long hard road and only recently, several years down the line, she _____³⁹ (*find*) that all the hard work _____⁴⁰ (*pay off*): “I’m very busy and, although we _____⁴¹ (*use*) advertising in the early days, now I tend to have more word-of-mouth recommendations. I _____⁴² (*manage*) to build up my own network of health professionals both here and in the UK who I can _____⁴³ (*refer*) to and who _____⁴⁴ (*support*) my services. We _____⁴⁵ (*work*) longer hours and for less money here in Spain, but the quality of life and the enjoyment and satisfaction we _____⁴⁶ (*get*) from our work _____⁴⁷ (*be*) second to none. The only problem is that we _____⁴⁸ (*have*) a holiday since we _____⁴⁹ (*arrive*) in Spain!”

A useful website for physiotherapists _____⁵⁰ (*be*) the European region of the World Confederation for Physical Therapy (WCPT, www.physio-europe.org). This _____⁵¹ (*provide*) helpful information on migration to all European countries, and _____⁵² (*list*) requirements for _____⁵³ (*apply*) to the competent authority, which in Spain _____⁵⁴ (*be*) the Ministry of Health.

Source:

<https://www.justlanded.com/english/Spain/Articles/Jobs/Physiotherapists>

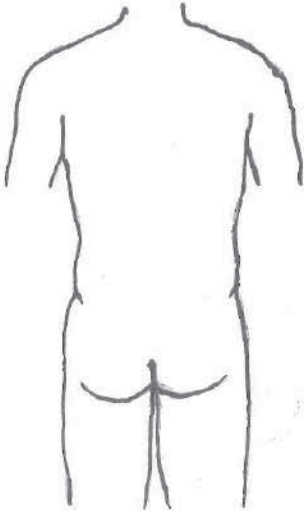
Health Sciences: Basic Medical Vocabulary

SECTION A: General Parts of the Body

Exercise 1

Have a look at the vocabulary. Locate each part in the picture.

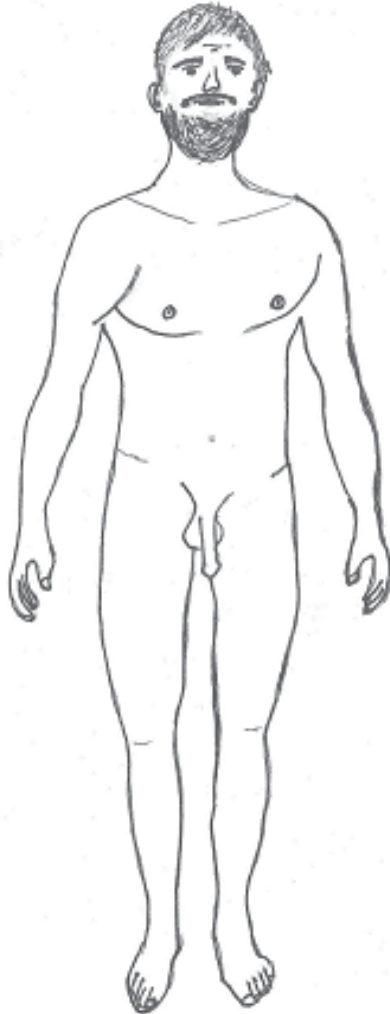
- 1.** Armpit / Axilla **2.** Back **3.** Breast / Mamma **4.** Calf (plural: calves)
5. Chest / Thorax **6.** Foot (plural: feet) **7.** Forearm **8.** Groin / Inguinal region
9. Hand **10.** Head **11.** Leg **12.** Loin **13.** Nates / Buttocks / Bottom (colloquial)
14. Navel / Belly button / Umbilicus **15.** Nipple
16. Shin **17.** Thigh **18.** Tummy / Belly / Abdomen / Stomach
19. Upper arm **20.** Waist



Exercise 2

Have a look at the vocabulary. Locate each part in the picture.

1. Ankle 2. Elbow / Elbow joint / Cubit 3. Hip / Coxa 4. Knee
5. Lower limbs 6. Neck 7. Shoulder 8. Trunk 9. Upper limbs
10. Wrist



Exercise 3

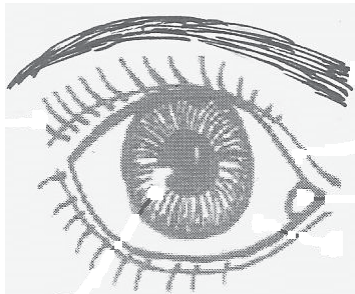
Have a look at the vocabulary. Locate each part in the pictures.

HEAD

1. Adam's apple / Laryngeal prominence
2. Beard / Stubble / Goatee
3. Cheek
4. Chin
5. Ear
6. Eye
7. Forehead
8. Hair / Fringe / Sideburns (Sideboards) / Scalp
9. Moustache
10. Mouth
11. Nose
12. Temple

**EYE**

1. Corner of the eye / Tear duct
2. Eyebrow
3. Eyelash
4. Eyelid
5. Pupil and iris
6. White of the eye / Sclera



MOUTH

1. Back teeth
2. Fang
3. Lower lip
4. Palate (hard and soft palate)
5. Tongue
6. Tonsils
7. Tooth (plural: teeth)
8. Upper lip
9. Uvula

***NOSE***

1. Nasal septum
2. Nostril

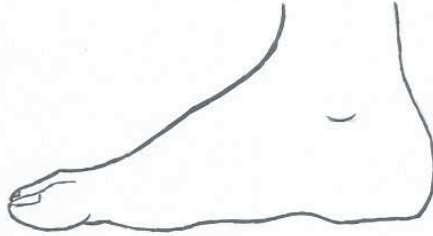
***EAR***

1. Eardrum / Tympanum
2. Outer ear



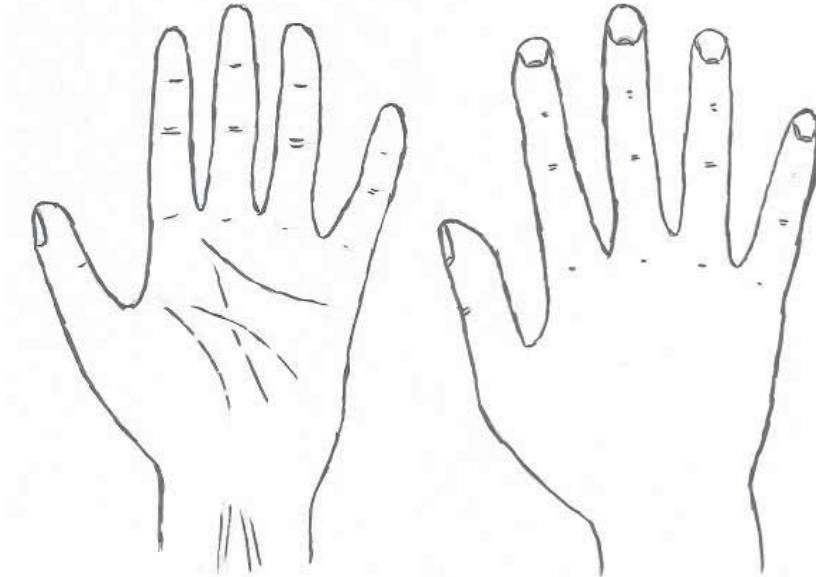
FOOT

1. Big toe / Hallux 2. Heel 3. Sole / Arch of the foot 4. Toe



HANDS

1. Finger 2. Knuckle 3. Nail 4. Palm 5. Thumb / Pollex



Exercise 4

Now make a list with some words from the previous exercises, and give it to your partner. How many can your classmate remember?

Exercise 5

Fill in the gaps by using some of the words you have just learnt.

1. Don't bite your _____.
2. If you are congested, you should blow your _____.
3. Brush your _____ or your _____ before going to bed.
4. Clap your _____ if you like the show.
5. Comb your _____, you look a mess.
6. Folding your _____ means that you put a barrier between you and the other person.
7. She held her daughter's _____ to take her across the street.
8. When you want to say "yes", you nod your _____.
9. When you want to say "no", you shake your _____.
10. She raised her _____ to show surprise.
11. When he arrived, he shook _____ with everybody.
12. He didn't know the answer and shrugged his _____.

Exercise 6

Write the part of the body which is related to the highlighted verb.

1. He wasn't serious, that's why he **WINKED** at her. _____.
2. The first thing I do when I get out of bed is to **YAWN** and **STRETCH**. _____ / _____.
3. The meat was tough and difficult to **CHEW**. _____.
4. After one year abroad, I **HUGGED** my family as soon as I saw them at the airport. _____.
5. Men used to **KNEEL DOWN** to propose marriage to a woman, but now that's old-fashioned. _____.
6. When children have chicken pox, they mustn't **SCRATCH** their spots. _____.
7. The Queen of England always **WAVES** when she's on the balcony of her palace. _____.
8. I couldn't believe what she was saying to me. I was **STARING** at her dumbfounded. _____.
9. When my little child wants me to look at something, he always **POINTS** at it. _____.

10. I knew he didn't like the idea I'd suggested because he **FROWNED**. _____.
11. He can't **SING**, because his vocal cords are inflamed. _____.

Exercise 7

Circle the correct answer:

1. My boyfriend **eats** / **bites** his nails when he's nervous.
2. Sam **shrugged** / **folded** his shoulders when the teacher asked him a question he didn't know.
3. You must be exhausted because you can't stop **scratching** / **yawning**.
4. Tom went into the room and **shook** / **winked** hands with the interviewer.
5. I hate it when people **stare** / **raise** at me when I am on a bus or on the underground.
6. She **waved** / **frowned** at me from the other side of the street to get my attention.
7. Jessie gave her hair a quick **clap** / **comb** and put her coat on to go out.
8. When you have a cold, you spend most of your time **blowing** / **chewing** your nose.
9. He exclaimed it was very easy and at the same time he **snapped** / **sounded** his fingers.
10. Try not to **fold/bend** your arms when you speak in public.

Exercise 8

Complete these idioms with a suitable part of the body. Try to guess their meaning.

1. I need to tell somebody about it and GET IT OFF MY _____.
2. Are you serious or are you PULLING MY _____?
3. I can't remember the correct word, but it's ON THE TIP OF MY _____.
4. I shouldn't be nervous because of the exam, but even so, I've GOT BUTTERFLIES IN MY _____.

5. Can you please GIVE ME A _____ with it? I can't do it alone.
6. I don't agree vocabulary should be LEARNT BY _____. I think new words must be always in context.
7. You PUT YOUR _____ IN it when you said she was the ex-girlfriend of one of his best friends.
8. I'm not sure about diving today. I'm starting to GET COLD _____.
9. He BROKE HER _____ when he left her.
10. I can't GET that song OUT OF MY _____! I keep whistling it all day.
11. I've got MY HEAD _____ ON.
12. I'm KEEPing MY _____ clean.
13. My _____ UP and my _____ TO THE WHEEL.
14. My _____ IS IN THE RIGHT PLACE.
15. I'm PUTting MY BEST _____ FORWARD.
16. It's not so important—try to put on your best _____.
17. I'm the worse in my class—I'm _____ OF THE CLASS.

SECTION B: Bones and Joints**Exercise 9**

Have a look at the vocabulary. Locate each part in the picture.

1. Backbone / Spine / Spinal cord / Spinal column / Vertebral column
2. Breastbone / Sternum
3. Cheekbone / Zygomatic
4. Collarbone / Clavicle
5. Fibula
6. Forearm bone / Ulna / Elbow bone
7. Hip girdle / Pelvis
8. Jaw / Mandible
9. Kneecap / Patella (Meniscus)
10. Radius
11. Shinbone / Tibia
12. Shoulder blade / Scapula
13. Skull / Cranium
14. Thighbone / Femur
15. Upper arm bone / Humerus



Exercise 10

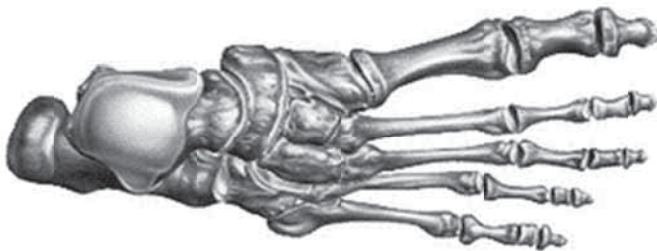
Have a look at the vocabulary. Locate each part in the pictures.

HAND:

1. Capitate
2. Carpus
3. Hamate (unciform)
4. Lunate / Similar
5. Metacarpus / Metacarpal bones
6. Phalanx / Phalange
7. Triquetral
8. Pisiform
9. Scaphoid
10. Trapezium
11. Trapezoid

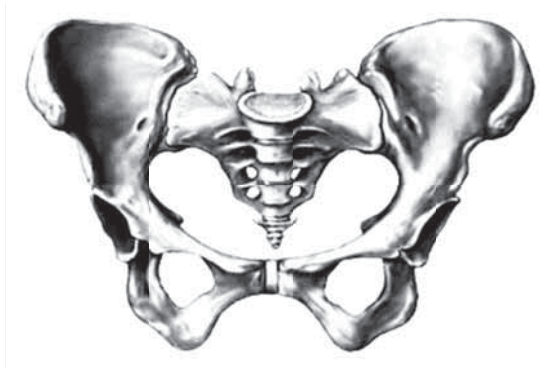
**FOOT:**

1. Anklebone/talus bone/astragalus
2. Calcaneus
3. Cuboid bone
4. Cuneiform bones—medial, intermediate, lateral
5. Metatarsus / Metatarsal bones
6. Navicular
7. Phalanx
8. Tarsus



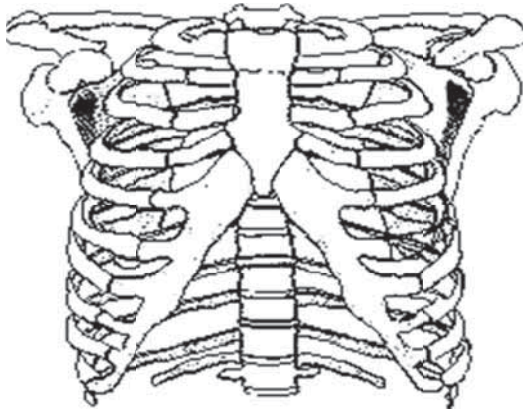
PELVIS:

1. Tailbone / Coccyx
2. Ilium
3. Ischium
4. Pubis / Pubic bone



RIBS:

1. False ribs
2. Floating ribs
3. True ribs



SKULL:

1. Frontal bone
2. Hyoid bone
3. Maxilla
4. Temporal bone
5. Cheekbone / Zygomatic
6. Occipital bone
7. Parietal bone

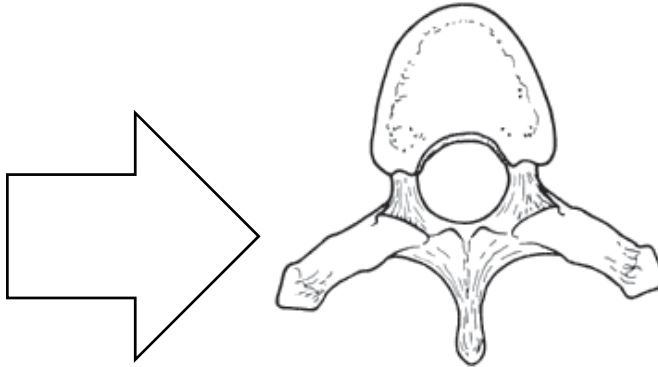
**SPINAL CORD:**

1. Cervical vertebrae (atlas / axis)
2. Thoracic or dorsal vertebrae
3. Lumbar vertebrae
4. Sacrum / Sacral vertebrae



VERTEBRA:

1. Articular process
2. Body
3. Spinal cord / Medulla
4. Spinous process
5. Transverse process

**Exercise 11**

Now make a list with some words from the previous exercises, and give it to your partner. How many can your classmate remember?

Exercise 12

Match the types of fracture with the descriptions and then fill in the gaps.

1	Open	A	It occurs in a young, soft bone in which the bone bends and breaks.
2	Displaced	B	The bone breaks into fragments which are pushed together and driven into each other.
3	Greenstick	C	There is a break in the skin.
4	Comminuted	D	It results in more than two separate bone components.
5	Impacted	E	The bone snaps into two or more parts and moves so that the two ends are not lined up straight. The broken pieces are separated.

1	
2	
3	
4	
5	

Exercise 13

Complete the text with the appropriate word from the box.

Fracture; Reduction; Dislocation; Unite;
Malunion; Non-union; Complication; Incidence

- A _____¹ is a partial or complete break in the bone.
- A _____² is a surgical procedure to solve a fracture or _____³ by returning the bones to the correct alignment.
- If a fracture is allowed to heal in a displaced position, the fracture will _____⁴.
 - _____⁵ means that a fracture has healed in a less than optimal position.
 - _____⁶ is permanent failure of healing following a broken bone. It is a serious _____⁷ and may occur when the fracture moves too much, has a poor blood supply, or gets infected. Patients who smoke have a higher _____⁸ of non-union.

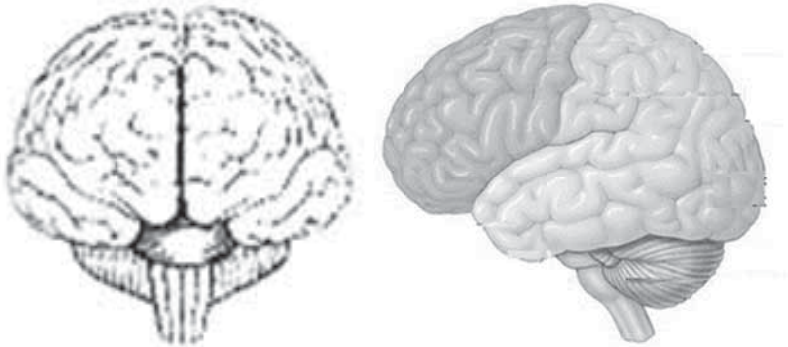
Source: Adaption of real texts taken from Mercier 2017

SECTION C: Organs, Membranes and Glands**Exercise 14**

Have a look at the vocabulary. Locate each part in the picture.

BRAIN:

1. Brain 2. Brainstem 3. Cerebellum 4. Cortex 5. Frontal lobe
6. Medulla oblongata 7. Occipital lobe 8. Parietal lobe
9. Temporal lobe

**Exercise 15**

Describe the main functions of these glands.

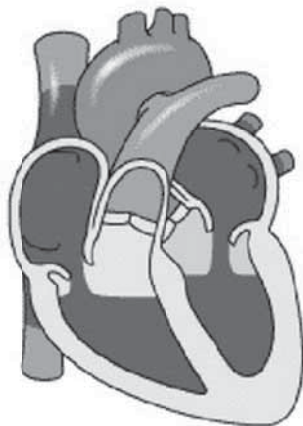
Pineal gland	
Pituitary gland / Hypophysis	
Thymus gland	
Thyroid gland	

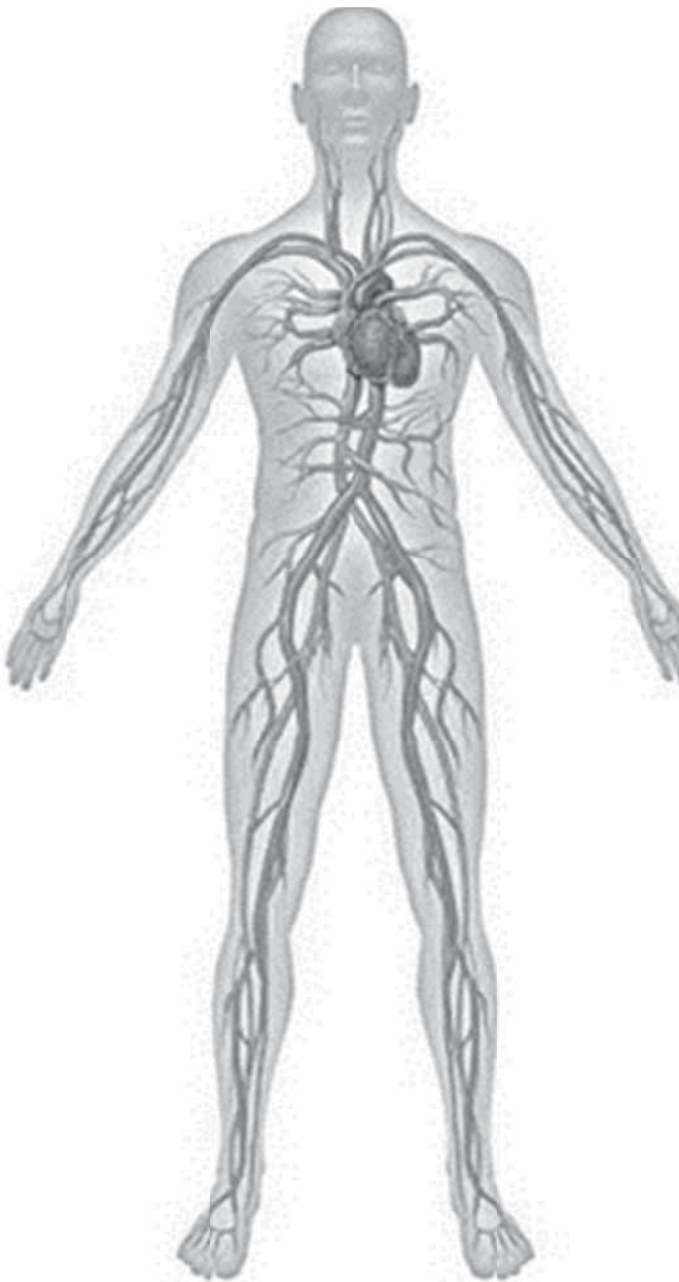
Exercise 16

Have a look at the vocabulary. Locate each part in the pictures.

CIRCULATORY SYSTEM:

1. Abdominal aorta 2. Anterior tibial artery 3. Aorta (artery) 4. Axillary artery 5. Axillary vein 6. Brachial artery 7. Brachial vein 8. Cephalic vein 9. Common carotid artery 10. Common iliac artery 11. Common iliac vein 12. Deep femoral artery 13. External and internal carotid artery 14. External iliac artery 15. External iliac vein 16. Femoral artery 17. Femoral vein 18. Great saphenous vein 19. Heart 20. Inferior vena cava (IVC) 21. Internal iliac artery 22. Internal iliac vein 23. Internal jugular vein 24. Interventricular septum 25. Left atrium 26. Left ventricle 27. Median cubital vein 28. Peroneal artery 29. Peroneal vein 30. Popliteal artery 31. Popliteal vein 32. Posterior tibial artery 33. Pulmonary artery 34. Radial artery 35. Renal artery 36. Renal vein 37. Right atrium 38. Right ventricle 39. Subclavian artery 40. Subclavian vein 41. Superior vena cava (SVC) 42. Ulnar artery



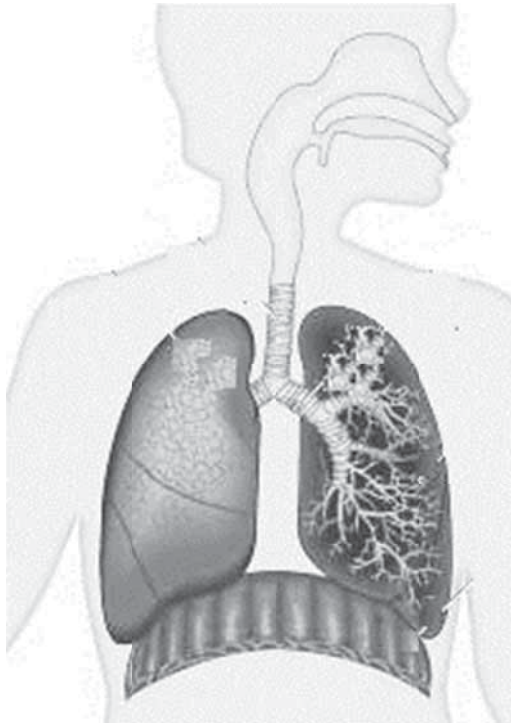


Exercise 17

Have a look at the vocabulary. Locate each part in the picture.

RESPIRATORY SYSTEM:

1. Airways / Respiratory tract 2. Alveolus (plural: alveoli) 3. Bronchioles
4. Bronchus (plural: bronchi) 5. Diaphragm 6. Lobes 7. Lungs
8. Pleura 9. Throat / Pharynx 10. Thyroid / Thyroid gland 11. Voice box / Larynx
12. Windpipe / Trachea

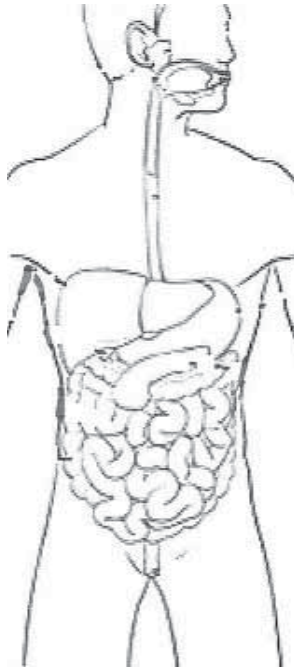


Exercise 18

Have a look at the vocabulary. Locate each part in the picture.

DIGESTIVE SYSTEM:

1. Anus 2. Appendix 3. Ascending / Descending / Ileo or pelvic/sigmoid) colon 4. Back passage (= rectum + anus) 5. Bowels / Intestines (Great omentum / Omentum jaus / Gastrocolic omentum / Epiploon; Small omentum / Lesser Omentum / Omentum minos /Gastrohepatic omentum 6. Cecum 7. Duodenum 8. Gallbladder / Biliary vesicle / Cholecyst 9. Gullet / Oesophagus 10. Large bowel / Large intestine 11. Liver 12. Pancreas 13. Peritoneum 14. Rectum 15. Salivary glands 16. Small bowel / Small intestine 17. Spleen 18. Stomach 19. Throat / pharynx 20. Tongue



Exercise 19

Have a look at the vocabulary. Locate each part in the picture.

EXCRETORY SYSTEM:

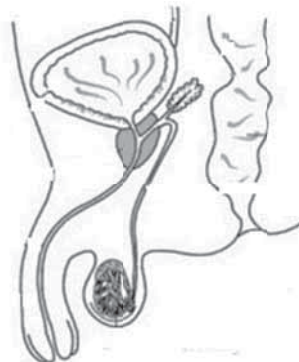
1. Adrenal glands / Suprarenal glands
2. Bladder / Urinary bladder
3. Kidneys
4. Renal artery
5. Urethra
6. Urinary meatus / External urethral orifice
7. Ureter

**Exercise 20**

Have a look at the vocabulary. Locate each part in the picture.

Reproductive system (Genitals)

1. Cervix
2. Endometrium
3. Epididymis
4. Fallopian tube
5. Ovary
6. Penis
7. Prostate gland
8. Seminal vesicle
9. Testicle (plural: testes)
10. Vagina
11. Vas deferens / Ductus deferens
12. Womb / Uterus



Exercise 21

Now make a list with some words from the previous exercises, and give it to your partner. How many can your classmate remember?

Exercise 22

As you have seen, in medical English, two terms frequently exist that refer to the same concept, being the Latin one and the formal one. For example, “femur” and “thighbone”. Please fill in the gaps in the table with the matching equivalent.

	FORMAL WORD	COMMON WORD		FORMAL WORD	COMMON WORD
1	Abdomen		11	Scapula	
2	Axilla		12	Pelvis	
3	Carpus		13	Humerus	
4	Coxa		14	Coccyx	
5	Cubit		15	Thorax	
6	Mamma		16	Oesophagus	
7	Patella		17	Laryngeal prominence	
8	Clavicle		18	Larynx	
9	Sternum		19	Windpipe	
10	Tibia		20	Umbilicus	

Exercise 23

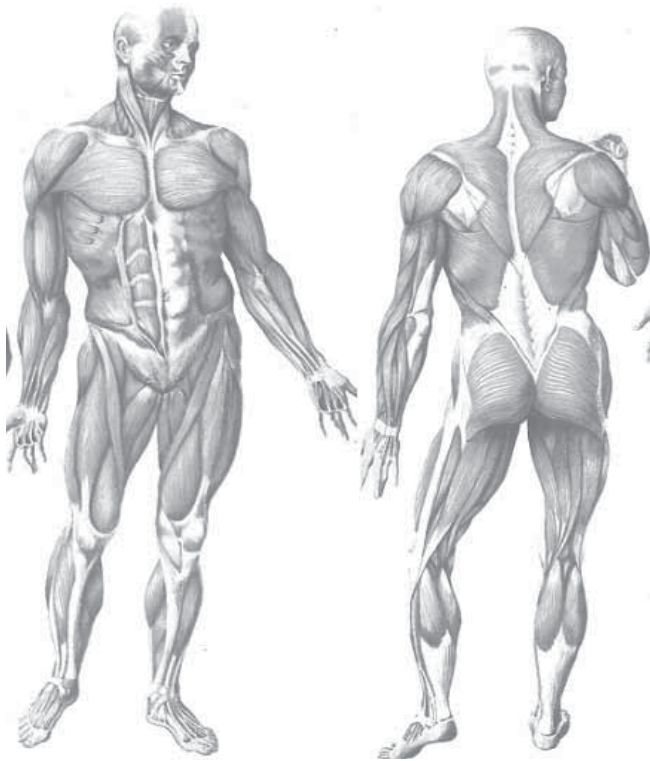
This not only happens with the parts of the body but with diseases, disorders, signs, symptoms, etc. Please write the medical term a health professional should use when talking to their patient.

1	Inguinal region	
2	Abdominal pain	
3	Periumbilical rash	
4	Thoracic pain	
5	Enlarged axillary node	
6	Mandibular pain	
7	Paraesthesia	
8	Productive cough	
9	Anaesthesia	
10	Retrosternal chest pain	
11	Orthopnoea	
12	Stress incontinence	
13	Dysmenorrhoea	
14	Dyspepsia	
15	Oedema	
16	Intermittent claudication	
17	Insomnia	
18	Dyspnoea	
19	Pharmaceutical preparations	
20	Therapy	
21	Alopecia	
22	Extremities	
23	Cerebrovascular accident	
24	Myocardial infarction	
25	Epistaxis	
26	Tinea pedis	
27	Furuncles	
28	Septicemia	
29	Tumour	
30	Abortion	

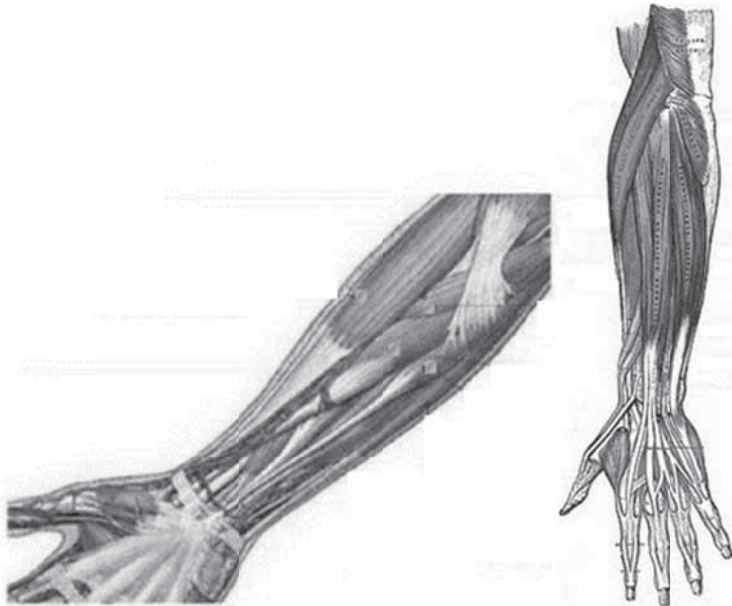
SECTION D: Muscles, Ligaments and Tendons***Exercise 24***

Have a look at the vocabulary. Locate each part in the pictures.

1. Anconeus muscle
2. Biceps brachii muscle
3. Biceps femoris
4. Brachioradialis
5. Deltoid muscle
6. Fibularis / Peroneus (brevis, longus)
7. Frontalis muscle / Frontal belly / Occipitofrontalis
8. Gastrocnemius muscle / Calf
9. Gluteus (maximus, medius and minimus)
10. Gracilis
11. Hamstring
12. Latissimus dorsi
13. Masseter
14. Oblique muscles of the abdomen / Abdominal oblique muscles
15. Orbicularis oculi muscle and Orbicularis oris muscle
16. Pectoralis major and Pectoralis minor
17. Quadriceps femoris / Quadriceps / Quadriceps extensor / Quads
18. Rectus abdominis muscle / Abs / Lower abdominals
19. Rhomboid muscles / Rhomboids
20. Sartorius muscle
21. Scalene muscles
22. Semimembranosus
23. Semitendinosus
24. Serratus
25. Soleus
26. Sternocleidomastoid muscle / Sternomastoid (SCM)
27. Sternohyoid muscle
28. Subclavius
29. Temporal muscle / Temporalis
30. Tensor fasciae latae
31. Teres major muscle and Teres minor muscle
32. Tibialis (anterior / posterior)
33. Trapezius
34. Triceps brachii muscle



1. Adductor pollicis longus 2. Brachioradialis / Venke's muscle 3. Dorsal interossei 4. Extensor carpi radialis longus 5. Extensor carpi ulnaris 6. Extensor digitorum communis 7. Extensor pollicis longus 8. Extensor / Flexor digitorum 9. Flexor carpi radialis 10. Flexor carpi ulnaris 11. Hypothenar muscles 12. Palmaris longus 13. Palmar or volar interossei 14. Pronator teres 15. Thenar eminence



Exercise 25

There are some deep muscles which cannot be seen in the pictures above. Find the equivalents in your own language:

Adductor	
Cervical paravertebral muscles	
Coracobrachialis	
Dorsal paravertebral muscles	
Flexor / Extensor brevis	
Iliopsoas	
Infraspinatus muscle	
Intercostal muscles	

Levator scapulae	
Omohyoid muscle	
Pelvic soil	
Plantaris	
Quadratus lumborum	
Splenius capitis	
Splenius cervicis / Splenius Colli	
Subscapularis	
Supraspinatus muscle	
Transversus abdominis muscle / Transverse abdominus / Transversalis muscle / Transverse abdominal muscle	

Exercise 26

Now make a list with some words from the previous exercise and give it to your partner. How many can your classmate remember?

Exercise 27

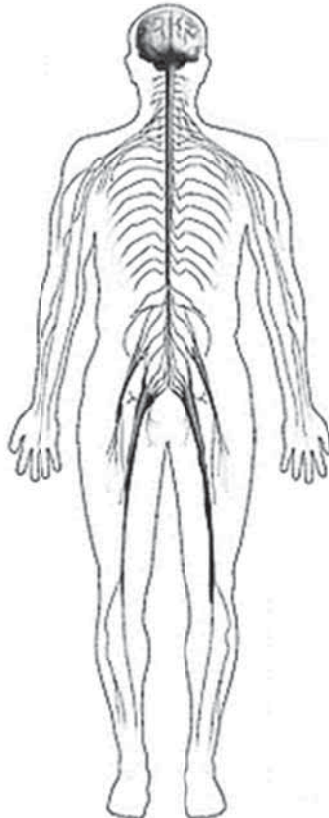
Here you have the name of some common ligaments, tendons, and cavities. Find the equivalents in your language:

Achilles tendon / Heel cord / Calcaneal tendon	
Anterior cruciate ligament	
Articular cartilage	
Infrapatellar bursa	
Lateral collateral ligament	
Medial collateral ligament	
Medial meniscus	
Patellar ligament / Patellar tendon	
Prepatellar bursa	
Posterior cruciate ligament	
Synovial (joint) cavity	
Synovial membrane	

SECTION E: Nerves**Exercise 28**

Have a look at the vocabulary. Locate each part in the picture.

1. Brachial plexus 2. Common fibular nerve / Common peroneal nerve / External popliteal nerve / Peroneal nerve / Lateral popliteal nerve
3. Femoral nerve 4. Gluteal nerve 5. Intercostal nerve 6. Long or internal saphenous nerve 7. Lumbar plexus 8. Medial brachial cutaneous nerve / Lesser internal cutaneous nerve / Medial cutaneous nerve or arm
9. Median nerve / Superficial fibular nerve 10. Radial nerve 11. Sacral plexus 12. Sciatic nerve 13. Spinal cord 14. Tibial nerve 15. Ulnar nerve



Exercise 29

Now make a list with some words from the previous exercise and give it to your partner. How many can your classmate remember?

SECTION F: Regions, Cavities, Tissues, and Quadrants**Exercise 30**

Please fill in the gaps with a suitable word.

REGIONS, SPACES AND AREAS

1. The region of the sacrum is the _____ region.
2. The region of the waist is the _____ region.
3. The region of the neck is the _____ region.
4. The region of the tailbone is the _____ region.
5. The _____ region is the area below the umbilicus, and the _____ region is the area above the stomach.
6. The area of the navel is the _____ region.
7. The space between the lungs is the _____.
8. _____ areas are the areas near the groin.
9. LLQ stands for _____.
10. RUQ stands for _____.
11. RLQ stands for _____.
12. L5-S1 refers to the space between _____.
13. C3-C4 refers to the space between _____.
14. The space behind the knee is the _____.

TISSUES

1. A collection of fat cells forms the _____ tissue.
2. The surface cells covering the outside of the body and lining internal organs form the _____ tissue
3. The _____ is the nervous tissue within the spinal cavity.
4. The spinal column is the _____ tissue surrounding the spinal cavity.
5. An intervertebral disk is a pad of _____ between each vertebra.
6. The tissue of the bones is the _____.

7. The _____ is a kind of animal tissue that supports, connects, or separates different types of tissues and organs of the body.
8. In humans, _____ is located beneath the skin (subcutaneous fat), around internal organs (visceral fat), in bone marrow (yellow bone marrow) and in the breast tissue.
9. Epithelium or _____ line the cavities and surfaces of structures throughout the body.

CAVITIES

1. The cavity surrounded by the neck is the _____ cavity.
2. The cavity in the chest surrounded by the ribs is the _____ cavity.
3. The cavity below the chest containing the stomach, liver, and gallbladder is the _____ cavity.
4. The cavity surrounded by the hip bones is the _____ cavity.
5. The cavity surrounded by the bones of the lower back is the _____ cavity.
6. The diaphragm is a muscle separating the _____ and _____ cavities.
7. The _____ cavity is the space surrounding each lung.

Exercise 31

Now make a list with some words from the previous exercises and give it to your partner. How many can your classmate remember?

SECTION G: Other Basic Vocabulary**Exercise 32**

Give the opposites of the following terms.

1. Deep:
2. Proximal:
3. Supine:
4. Medial:
5. Dorsal (posterior):
6. Superior (cephalic):
7. (Mid)sagittal / Medial:
8. Vertical:
9. Longitudinal:

Exercise 33

Extra vocabulary. Please go through this vocabulary and then test your classmates.

- | | |
|--------------------------------------|---|
| 1. Allergy | 19. Pain |
| 2. Asthma | 20. Plaster |
| 3. Blister | 21. Sore |
| 4. Bloating | 22. Stomach (or gastric) ulcer |
| 5. Blood pressure | 23. Stools / Faeces |
| 6. Breath | 24. Stroke |
| 7. Bruise | 25. Tingling / Pins and needles / Paraesthesia |
| 8. Congested | 26. To admit |
| 9. Dizzy | 27. To assess |
| 10. Dull pain | 28. To bite |
| 11. Exhausted | 29. To bleed |
| 12. Faint / Weak | 30. To break |
| 13. Flu (bad dose of flu) | 31. To breathe |
| 14. Food poisoning | 32. To breathe in / To inhale / To take a breath in |
| 15. Heart attack | 33. To breathe out / To exhale |
| 16. Illness / Disease / Disorder | 34. To bring about a remission of ... / To be in remission / To go into |
| 17. Numbness / Peripheral neuropathy | |
| 18. Overweight | |

- remission / To remain in complete remission
35. To burn
36. To burp
37. To chew
38. To come down / up (the fever)
39. To cough
40. To cry
41. To cut
42. To discharge
43. To dislocate
44. To faint
45. To feel nauseous
46. To get better / To improve
47. To get over an illness / To make a recovery / To recover
48. To get worse / To deteriorate
49. To have (the) chills
50. To have (the) hiccups (= hiccough)
51. To have a backache
52. To have a bloody nose
53. To have a cavity
54. To have a cold
55. To have a cough
56. To have a fever (or a temperature) / To run a fever (or a temperature) / To be feverish
57. To have a headache
58. To have a period / To menstruate
59. To have a rash
60. To have a runny nose
61. To have a sore throat
62. To have a stiff neck
63. To have a stomach ache
64. To have sunburn
65. To have a toothache
66. To have a virus
67. To have a wart
68. To have earache
69. To have an infection
70. To have chest pain
71. To have cramps
72. To have diarrhoea
73. To have laryngitis
74. To have shortness of breath
75. To heal
76. To hurt
77. To itch
78. To move one's bowels / To open one's bowels / To pass stools / To pass faeces / To defecate
79. To operate
80. To pass water / To pass urine / To urinate / To micturate / To tinkle (colloquial) / To piddle (colloquial) / To pee (colloquial)
81. To refer
82. To relapse
83. To scrape
84. To scratch
85. To shake
86. To sneeze
87. To snore
88. To sprain
89. To swallow
90. To sweat
91. To swell
92. To throw up / To vomit
93. To treat
94. To twist
95. To wheeze

Exercise 34

Fill in the gaps with an appropriate word from the box.

Aches; Bleeding; Blister; Burn; Cough; Fainted;
Pain; Plaster; Rash; Sneezing; Stiff; Swollen;
Temperature

1. Do you have a _____? I've just cut my finger.
2. He has broken his arm and now he will have a _____ for some weeks.
3. She started to feel a bit dizzy, and then she _____.
4. Don't touch that—it's too hot and you'll _____ yourself.
5. After he took his medicine he got a _____ all over his body. He must be allergic to it.
6. I sprained my ankle yesterday. It is very _____.
7. He has a terrible _____ because he smokes 30 cigarettes a day.
8. I fell asleep on the journey and now I've got _____ in my neck. In fact, it is quite _____.
9. The child fell off and his leg is _____.
10. The baby is 39 degrees. He's got a high _____.
What can I do to bring it down?
11. I think she has the flu. She's been _____ all day.
12. Her back _____ a lot.

Exercise 35

Choose the correct word in each sentence.

1. His condition _____ (*deteriorated / improved*) and he died after two days.
2. He _____ (*relapsed / recovered*) completely.
3. The cause of sleeping _____ (*illness / sickness*) is a parasitic disease.
4. That patient made a full _____ (*remission / recovery*).
5. He's been in _____ (*poor / good*) health lately, but now he's much better.
6. It was a long illness—it took me a month to _____ (*get it over / get it better*).
7. They seem to be rather _____ (*unhealthy / unwell*)—their diet is bad and they never do exercise.
8. Regrettably, the patient _____ (*got worse / worst*).

Exercise 36

Match the sentences.

1	He has a sore throat.	A	He's breathing but his eyes are closed and he can't hear or feel anything.
2	He has diarrhoea.	B	It hurts when he talks or swallows food.
3	He feels dizzy.	C	There were so many people in the shopping centre that he lost consciousness.
4	He fainted.	D	He wants to be sick / throw up / vomit.
5	He's unconscious.	E	He feels that everything is spinning round.
6	He feels sick.	F	He's been to the toilet several times this morning.

1	
2	
3	
4	
5	
6	

Exercise 37

Fill in the gaps with an appropriate word from the box.

Bandage; Injection; Medicine; Operation;
Rest; Specialist / Consultant; Stitches; X-ray

Your GP may tell you ...

1. Stay at home and _____.
2. Take some _____ (e.g. antibiotics or painkillers).
3. If you get worse, go to the hospital and see a _____.

In the hospital or A&E, you may have to ...

4. Have an _____. That means to put a drug into your body through a needle.
5. Have an _____ or scan to see if a bone is broken.
6. Have _____ if you have a very deep cut.
7. Have a _____ on to keep a wound clean.
8. Have an _____ when a part of your body is cut open to remove or repair a damaged part.

Phonetics: Sounds of English

THEORY

Consonant sounds can be classified according to the PLACE and MANNER of articulation.

<i>Manner of articulation</i>	<i>Place of articulation</i>								
	Bilabial	Labiodental	Dental	Alveolar	Palatoalveolar	Palatal	Velar	Glottal	
Plosive	p b			t d			k g		
Fricative		f v	θ ð	s z	ʃ ʒ			h	
Affricate					tʃ dʒ				
Nasal	m			n			ŋ		
Lateral				l					
Approximant	w				r	j			

The same happens with vowels:

<i>Manner of articulation (position of the tongue)</i>	<i>Place of articulation</i>		
	Front	Central	Back
Close	i: ɪ		u: ʊ
Close-mid / Open-mid	e	ɜ: ə	ɔ: ɒ
Open	æ	ʌ	ɒ ɑ:

Here you can find some useful resources to practice the articulation of these sounds:

- ✓ <https://www.bbc.co.uk/worldservice/learningenglish/grammar/pron/sounds> (here you can find a video tutorial about the pronunciation of English phonemes.)
- ✓ <https://www.dictionary.cambridge.org> (here you can select and listen to the pronunciation of the main English words.)

PRACTICE

Exercise 1

Transcribe these words and pronounce them properly.

1. Bandage
2. Bone
3. Finger
4. Medicine
5. Muscle
6. Recover
7. Sacral
8. Stomach
9. Windpipe
10. Wrist

Exercise 2

Transcribe as many words as possible from other exercises and check your answers in the dictionary or ask your teacher.

For further information and extra practice on English phonetics please refer to Mott 2005, Hewings 2007, Hancock 2009 and Roach 2009.

UNIT 2

MODAL VERBS, LINKING WORDS; COMMUNICATION WITH PATIENTS; PRONUNCIATION OF REGULAR PAST TENSES AND MORPHEMIC “-S”

Grammar: Modal Verbs and Linking words

THEORY

Here you can find a summary of the most frequent uses and meanings of modal verbs, as well as some basic notes about them.

✚ CAN

- Asking / Giving permission (the speaker is almost sure that the answer will be positive.)
 - *Can I leave my bag here?*
- Making requests (the speaker is sure that the answer will be positive.)
 - *Can you pass me the bread?*
- Making offers
 - *Can I / we help you to cook dinner?*
- Ability (Only in present and past simple tense. Other tenses: BE ABLE TO)
 - *I can swim. (= I am able to swim)*
 - *After the swimming course, I will be able to swim.*
- Negative deductions (with certainty)
 - *This letter can't be from Steven because this is not his handwriting.*

Have a look at the structure of sentences containing modal verbs:

(+) *You can swim / He can swim.*

- (-) *You can't swim / He can't swim.*
 (?) *Can you swim? / Can he swim?*
 (Y/N) *Yes, I can. No, I can't. / Yes, he can. No, he can't.*

✚ **COULD**

- Asking / Giving permission (polite) (the speaker is not so sure that the answer will be positive.)
 - o *Could I borrow your car?*
- Making requests (polite)
 - o *Could you tell me where the station is?*
- Making offers (polite)
 - o *I could lend you some money. (Also: I can / I will lend you some money.)*
- Making suggestions (the speaker is not very sure of what the other person's answer will be.)
 - o *We could cycle today. What do you think?*
 - o *You could start looking for a job (= advice)*
- Ability (COULD: for repeated actions in the past; not for momentary actions in the past.) (COULDN'T: for both, repeated and momentary actions in the past)
 - o *I could / was able to swim when I was 3.*
 - o *She was able to come / ~~couldn't come~~ to the meeting but she couldn't / wasn't able to stay for lunch.*
- Deductions (possible)
 - o *The parcel could be from Tony. He knows my address.*
- Negative deductions (quite certain)
 - o *This letter couldn't be from Steven because it comes from the USA and I think Steven is in England now.*
- Future (possible)
 - o *James could go out to see Steven in Australia next month.*

The structure is exactly the same for all modal verbs (please refer to “Can” to see the structure of sentences containing modal verbs).

✚ **MAY**

- Asking / Giving permission (polite and formal)
 - o *May I sit here?*
- Written notices
 - o *You may borrow six books from the library.*
- Deductions (very probable)

- *The parcel may be from Tony, because he said he would send me something.*
- Negative deductions (very certain)
 - *This letter may not be from Steven because it comes from the USA and I’m completely sure he is in England now.*
- Future (very probable)
 - *James may go out to see Steven in Australia next month—he told me yesterday that he wants to buy the flight ticket this week.*

As previously pointed out, the structure is exactly the same for all modal verbs (please refer to “Can” to see the structure of sentences containing modal verbs).

⚡ **MIGHT**

- Deductions (possible/probable)
 - *The parcel from Australia might be from Tony, because he has moved to Australia recently.*
- Negative deductions (possible/probable)
 - *This letter might be from Steven but also from John, both of them told me they would send me one in the next few weeks.*
- Future (possible/probable)
 - *James might go out to see Steven in Australia next month—he must talk to his boss first.*

⚡ **MUST** (ONLY IN THE PRESENT TENSE)

- Internal order
 - *I must go now.*
 - *I must stop eating so much chocolate.*
 - *You must tell me everything.*
- Mustn’t (= don’t do it! It’s forbidden.)
 - *You mustn’t park here.*
- Positive deductions with certainty
 - *The lights are on, he must be at home.*

⚡ **HAVE TO**

- External order
 - *You have to pay if you wish to park your car here.*
- Habits
 - *I have to get up early to cook breakfast.*
- Other tenses (“must” only in present)

- *I'll have to go soon.*
- *If I got the job, I would have to buy a car.*
- Don't have to: not necessary
 - *You don't have to stay at school until you're 18, you can leave it when you are 16.*

✚ SHOULD

- Right thing to do
 - *I shouldn't spend so much time watching TV.*
- Expectation
 - *He should email us soon.*
- Should have + past participle (it refers to an action in the past)
 - *We shouldn't have lent her that mine.*

✚ OUGHT TO

- Right thing to do
 - *She ought to be more thoughtful.*
 - *They oughtn't to talk so much in here.*
- Ought (not) to have + past participle (it refers to an action in the past)
 - *We ought to have gone to that party—they really had a great time.*

✚ HAD BETTER

- Advice
 - *You'd better start looking for a job.*
 - *I'd better not upset her today.*

✚ WOULD

- Making requests (polite)
 - *Would you lend me your camera?*
- Making suggestions
 - *Would you like to have dinner out tonight?*

✚ SHALL (I/WE)

- Making offers
 - *Shall I / we clean the car for you?*
- Making suggestions
 - *Shall I /we go cycling today?*

⚡ **WILL**

- Making requests (the speaker is certain that the answer will be positive)
 - *Will you get me some stamps from the post office?*
- Making offers
 - *I'll lend you some money. (Also: I can / could lend you some money.)*

⚡ **NEED**

- Modal verb (only in present tense) (only in negative sentences and questions)
 - I needn't come (= I don't need to come) (= I don't have to come)
 - Need I come with you? (Do I need to come with you?)

NOTE: There are two forms with the verb “need” which are frequently confused, but they have different meanings. Have a look at these examples and notice the difference in meaning:

- *When I was at the college, I didn't need to buy a new computer. (We don't know whether the speaker has finally bought one or not.)*
- *At the college, there are a lot of computers for students—I needn't have bought one, but I prefer to have my one. (The speaker has bought one.)*

⚡ **WHY DON'T**

- Making offers
 - Why don't I carry that bag for you?
- Making suggestions
 - Why don't I / we go cycling today?

NOTE: There are different ways to make a suggestion:

- *Why don't we go cycling today?*
- *Shall we go cycling today?*
- *Let's go cycling today!*
- *How about cycling today?*
- *What about cycling today?*

LINKING WORDS

Linking words are words that link ideas and sentences. Here you have some of the most frequent ones.

Sequence	Addition	Contrast	Result
After	Also	Although	As a consequence
Before	And	But	As a result
Finally	As well as	Despite	Consequently
First / Firstly	Furthermore	Even though	Due to (the fact)
In conclusion	In addition	However	Hence
Last	Moreover	In comparison	So
Next	Not only ... but also	In contrast to	Then
Second / Secondly	Too	In spite of	Therefore
Third / Thirdly		Instead of	
To summarise		Nevertheless	
		Nonetheless	
		On the contrary	
		On the one hand / On the other hand	
		Still	
		Though	
		Yet	
		While	
		Whereas	

Reason	Comparison	Emphasis	Example
As	Compare	Admittedly	For example / e.g.
Because (of)	Compared to / with	Clearly	For instance
Due to (the fact that)	Just as	Especially	Including
For	Just like	Generally	Namely
For that reason	Like	Importantly	Such as
Since	Likewise	Indeed	That is / i.e.
Thus	Same as	In fact	That is to say
	Similarly	Obviously	That means
	Similar to	Particularly / In particular	
		Undoubtedly	

Purpose
In order to
So as to
So that
To

PRACTICE**Exercise 1**

Match the beginnings and endings of these sentences.

A	Do they need ...	1	wear some kind of protection when cycling.
B	Should you ...	2	to take any money with them or is it free?
C	We don't need ...	3	to ask the doctor before starting the treatment.
D	Need I ...	4	buy sandwiches at school because their mum's preparing their lunch.
E	Gary should ...	5	to call them again because they already know about our plans.
F	Robert needs ...	6	fill in my application form now? I'm busy at the moment.
G	They needn't ...	7	spend so much time watching TV programmes.
H	I shouldn't ...	8	carry that heavy suitcase after your recent operation?
I	How about / What about ...	9	passing urine? Do you have any problems?

A	
B	
C	
D	
E	
F	
G	
H	
I	

Exercise 2

Use the words to complete the sentences.

Possibility, possible, might, will, probably, should, may (x2), can (x3), may not, won't

- a. Some people get blurred vision, but it _____¹ happen to you.
- b. This _____² cause low blood pressure, but you _____³ _____⁴ have any problems.
- c. This pill _____⁵ cause some pigmentation problems.
- d. It _____⁶ bring a fleeting headache on, but it doesn't mean you _____⁷ get one.
- e. There's a strong _____⁸ that this will upset your stomach. In fact, it _____⁹ make you throw up.
- f. Swelling of the ankle is not common, but it is _____¹⁰ _____¹¹ it _____¹¹ happen.
- g. This _____¹² make you feel dizzy, so you _____¹³ be careful when you drive.

Exercise 3

Fill in the gaps in these sentences with a suitable modal verb.

- a. Excuse me, _____¹ you tell me where the Rheumatology section is?
- b. _____² I keep this watch for the X-ray?
- c. _____³ you get that surgical tape down from the shelf for me, please? I can't quite reach it.
- d. I'm sorry to bother you. _____⁴ I have a quick look at your timetable to see if you have a gap to see a patient at the end of the afternoon, please?
- e. _____⁵ you turn the radio down, please? I need to use the phone.
- f. _____⁶ I put these dressings here?
- g. I _____⁷ post this parcel on my way home if you want.
- h. _____⁸ we go jogging this evening when we finish work?
- i. You _____⁹ have replied to your boss with that tone.
- j. I am sorry, I am afraid I won't _____¹⁰ go to work tomorrow.

Exercise 4

Rewrite these sentences using the correct form of *must*, *need*, *should*, or *have to*.

1. The inpatient turned the music down to avoid disturbing the patient next door, but he'd already been dismissed.
The inpatient _____
2. The surgeon was getting ready to go into the operating room to perform a caesarean section when he was told the baby had already been born in the delivery room.
The surgeon _____
3. It's essential for medical students to buy a handbook.
Medical students _____
4. It was wrong of the trainee student to arrange a visit with a new patient without asking the doctor.
The trainee student _____
5. The patient doesn't expect the doctor to phone him before next visit.
The doctor _____
6. It's Johanna's fault that Brad's got angry with her because she used to be quite unfriendly with him.
She _____
7. The doctor is wrong to make promises that she doesn't keep.
The doctor _____
8. If you wish, you can give him a present but it is not necessary.
You _____
9. Smoke is not allowed in the hospital.
Nobody _____
10. Help me with all the work.
You _____

Exercise 5

Daniel runs his own business. He’s opened his own physiotherapy clinic, but he isn’t very tidy, leaves everything on the floor, arrives late, forgets his appointments, etc. Give him some advice to succeed in his business.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Exercise 6

Fill in the gaps with a suitable linking word:

On Monday evening Tom, a 56-year-old man, was working in the garden _____¹ bent down in a very uncomfortable position. At night, he felt something pull in his back, _____² he took a painkiller _____³ an anti-inflammatory _____⁴ be able to sleep well. On Tuesday morning, _____⁵, he had such a pain in his lower back that he could not walk straight. He rang the health centre _____⁶ he wanted to ask if the doctor could visit him at home. _____⁷ that was not possible _____⁸ the doctor was very busy that day, Tom called a taxi _____⁹ went to the doctor’s office. _____¹⁰ explaining to the doctor what had happened to him, he pointed out that, _____¹¹ he had suffered from back pain before, it had never been so acute as this time. The doctor examined him _____¹² did not find anything important. _____¹³, _____¹⁴ the pain was so acute, he asked a nurse to get him an injection. _____¹⁵, the doctor recommended him to use an electric blanket every four hours, _____¹⁶ insisted that it was important to keep active. _____¹⁷, the doctor told him to take ibuprofen every eight hours _____¹⁸ told him that he should come back if the pain persisted after two weeks.

_____¹⁹, after two weeks, Tom got better, he still felt pain in his back. He had difficulties moving _____²⁰ the treatment administered by the doctor _____²¹ the complete rest that he had been taking. _____²², he came back to the doctor, who advised him to go to a physiotherapist

_____ ²³ receive some physical treatment. The physio gave him a massage _____ ²⁴ treated him with some machines. He _____ ²⁵ pointed out the importance of being active _____ ²⁶ taking complete rest, _____ ²⁷ explained to Tom that it was essential to avoid dangerous positions. _____ ²⁸, he said that if Tom followed his pieces of advice, he would make the recovery process much shorter _____ ²⁹ would avoid the pain becoming chronic, _____ ³⁰ that the pain lasts forever. Back pain improves _____ ³¹ with drugs, _____ ³² (and more importantly) with the exercises that one can do, _____ ³³ with daily exercise. _____ ³⁴, the physio taught Tom some exercises, _____ ³⁵ explained to him how he had to move and position for daily activities (such as working in the garden, making the bed, bending down, etc. This would help him, _____ ³⁶, to improve the flexibility of the spine, and, _____ ³⁷, to gain more strength in his muscles.

Tom did as he was ordered and after three weeks he was a new man. He finally understood that, _____ ³⁸ the pain, it was very important _____ ³⁹ to have an active life, and _____ ⁴⁰ to avoid dangerous positions for his back.

Health Sciences: Communication with Patients

THEORY

Here are some questions from the health professional (doctor, nurse, physiotherapist, etc.) to the patient asking for their condition:

Personal details

- What’s your name?
- How old are you?
- What’s your job? / What do you do?
- Where do you live?
- Are you married?
- Do you smoke?
- How many cigarettes do you smoke a day?
- Do you drink any alcohol?

Matter

- What’s brought you along today?
- What can I do for you?
- How can I help you?
- What seems to be the problem?

Painful area

- Whereabouts is the pain?
- Where does it hurt?
- Where is it sore?
- Show me where the problem is.
- Why part of your body is affected?
- Where do you get the pain?

Time

- How long has it been bothering you?
- How long have you had it?
- When did it start?
- When did you first notice the pain?

Features of the pain

- What’s the pain like?
- What kind of pain is it?

- Can you describe the pain for me?
- Can you tell me what the pain is like?
- Have you had the pain before?
- What seems to bring it on?
- What brought this on?
- What caused this?
- Was there anything that started it off?
- Is there anything which brings it on?
- Does anything make it better or worse?
- Is there anything that makes it better or worse?
- Does lying down help the pain?
- Does it come on at any particular time?
- Is it bad enough to wake you up at night?
- Does the pain wake you up at night?
- Does it affect your daily life?
- Is the pain constant?
- Is it continuous or does it come and go?
- Does the pain spread anywhere else?
- Does it stay in one place or does it go anywhere else?
- How long does it last?
- Have you noticed any numbness or tingling in your fingers?

To get additional information about the patient's condition

- Have you taken / had anything for it?
- Did painkillers / tablets / pills help?
- Apart from this, are there any other problems?
- How have you been keeping up to now?
- Have you ever been admitted to hospital?
- Have you had this problem before?
- Does anyone else in your family suffer from this problem?
- What is your breathing like?
- Do you have any pain when you cough? / Do you have any pain when coughing?
- Do you have any difficulty with your speech?
- Do you have any trouble swallowing?
- Is your vision / sight normal?
- Do you have any problems (in / with) passing water?
- What's your appetite like?
- Have you noticed any blood in your stools?

- Do you ever suffer from headaches?
- Does light bother you?
- What about coughs or wheezing or shortness of breath?
- Have you noticed any weakness or tingling in your limbs?
- Are your stools black?
- Do you have a cold?
- Have you had a cough at all?
- Is there any blood in it?
- Do you suffer from double vision?
- Any pain in your muscles?
- Have you lost any weight?
- Have you had any pain in your chest?

Procedure

- I'll just check your heart beat
- I'm just going to ...
- I'd just like to ...
- Now I'm going to ...
- It won't take long.
- It won't be sore.
- You may feel a bit uncomfortable.
- Does it bother you?
- What I'd like to do is examine you standing up.

Instructions

- Slip off your coat.
- Would you strip to your waist, please?
- Would you strip down, please?
- Could you strip from your waist (up), please?
- Take off your top clothes, please.
- Could you strip down, please?
- Could you take your clothes/shoes off, please?
- Could you strip naked, please?
- Could you strip to your underclothes / underwear, please?
- Could you roll up your sleeve?
- Could you just lie (down) on the couch (on your stomach/tummy/back)?
- Lie perfectly still.
- Let me see you standing.
- Stand straight / Stand up.

- Pop on the couch.
- Lie on the couch / Lie down (on the couch). / Lie on your side or back.
- Sit / Sit down / Sit up.
- Now I just want to see you walking.
- Squat / Crouch.
- Go on all fours. / Crawl.
- Get down on your knees. / Kneel down.
- Can you put your hands on your hips for me, please?
- Could you bend down and touch your toes, please?
- Lift it up as far as you can (go), will you?
- Can you please lean forwards and backwards?
- Try to go as far as you can.
- Could you bend forward as far as you can?
- If you could cross your arms in front of your chest.
- Could you just turn to your side?
- Turn over onto your stomach / belly / tummy.
- Roll onto your back / front / Roll over.
- Move towards the edge of the couch.
- Stand with your feet together.
- Could you please breathe in / out?
- Could you please take deep breaths in and out?
- Bend your head to the left and try to touch your ear with your shoulder.
- Tilt your head back and then put it down, try to touch your chest with your chin.
- Try to touch your right shoulder with your right ear. Then do the same with your other side.
- Touch your shoulder with your chin.
- Turn your head to the left / Turn your head on your side.
- Stand with your arms stretched out to the sides. / Stand with your arms outstretched.
- Could you please touch your back / neck?
- Place your hands behind your neck / at the back of your neck.
- Place your hands behind your lower back.
- Raise your arm above your eyes and keep it straight.
- Lean forward.
- Don't move your feet and lean backwards.
- Slide your left hand along your left thigh with your knees / legs firm / straight.
- Turn to the right and keep your feet steady.

- Try to touch your toes with your fingers without bending your knees.
- Bend your knees.
- Keep your right leg straight and bend your left knee.
- Lift / Raise your left leg, keeping both legs straight.
- Lie on your stomach, place your hands on your lower back, and lift your chest off the floor with your legs straight.
- Lie on your stomach, place your hands on your back, and lift your right leg without bending your knee.
- Now lift your legs and swing your body forwards and backwards.
- Now lift your right arm and your right leg at the same time.
- Lie on your tummy and bend your right knee slightly.
- Now bend it as far as you can.
- Stand up and straighten your arms. Now bend your elbows to touch your shoulders. Repeat this exercise several times.
- Straighten your arms over / above your head.
- Keep your knees straight and turn your right ankle in and out.
- Move / Bend your foot forwards and backwards. / Straighten and shrink your instep.
- Bend down.
- Curl up.
- Walk on your heels.
- Walk on the edges of your feet.
- Stand up and keep balance.
- Hop. Then do the same with the other leg.
- Leap / Jump.
- Let your wrist go floppy.
- Pull / Push as hard as you can.
- Look straight ahead.
- Follow my fingertip with your eyes / Look at my fingertip.
- Close your eyes.
- Open your mouth.
- Poke out your tongue.
- Point to the thing that moves.
- Show me what movements you can manage.
- Tell me if it hurts.
- Relax.

Description of pain

- Aching / An ache (a general pain; often in muscles and joints)
- Acute / Sharp
- A dull sort of ache (a background pain; opposite to sharp)
- A feeling of pressure
- Background pain
- Boring (like a drill)
- Burning pain (with heat)
- Colicky (an intermittent pain which varies in intensity, it comes and goes in waves)
- Cramping / Cramp (an involuntary spasmodic muscle contraction)
- Crushing (a feeling of pressure)
- Dull / Persistent / Vague
- Excruciating / Thunderclap
- Extremely severe / Intense
- Gnawing / Biting
- Gripping (a feeling of tightness)
- I am wracked with pain
- I can't bear it
- It feels raw inside
- It is so bad it makes me double up
- It's really sore
- Like a tight band around my head
- Piercing / Goring
- Scalding (like boiling water)
- Shooting
- Spasmodic
- Stabbing (like a knife)
- Stinging (sharp, burning, like an insect sting)
- Terrible
- Throbbing (with a pulse or beat)
- Very sore

Health professionals must often give instruction to their patients, for example to examine them better or recommend some exercises. You can read some real examples taken from HEP2go.



ANKLE PUMPS - AP

Bend your foot up and down at your ankle joint as shown.



BICEP CURLS - ALTERNATING

Bend your elbow and move your forearm upwards. As you lower back down, begin bending the opposite elbow upwards.



HEEL SLIDES - SUPINE

Lying on your back with knees straight, slide the affected heel towards your buttock as you bend your knee.

Hold a gentle stretch in this position and then return to original position.



SEATED HEEL SLIDES

While in a seated position and foot forward and rested on the floor, slowly slide your foot closer towards you.

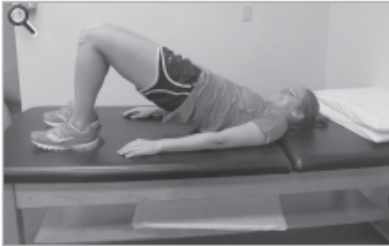
Hold a gentle stretch and then return foot forward to original position.



CLAM SHELLS

While lying on your side with your knees bent, draw up the top knee while keeping contact of your feet together.

Do not let your pelvis roll back during the lifting movement.



Bridge

Lie on your back with your knees bent and feet flat on the mat. Then, press up leaving your feet and shoulders on the table.



Prone trunk extension

Lie on your stomach and lift your chest off of the table without using your arms (leaving legs on the table).



Chicken Wing

Place both hands behind your head with your arms in the same plane as your body. Then, leaving your hands behind your head, bring your elbows together.





Hand Heel Rock

Start by getting on your knees and hands. Next, rock backwards, trying to get your buttock as close to your heels as possible. Return to starting position. Then, lean forward keeping your legs straight.



Wall walk abduction

Standing with the wall on your involved side, place forearm on the wall.

Walk your arm up the wall as shown in picture



Prone trunk extension

Lie on your stomach and lift your chest off of the table without using your arms (leaving legs on the table).

PRACTICE

Exercise 1

Role play with your partner: one is the health professional and the other is the patient. Imagine it is the patient’s first visit. Please try to use some of the expressions studied in this unit.

Exercise 2

This is part of a referral letter that a GP has sent to a consultant. Please write the questions that the GP has asked the patient in order to get that information.

Dear Dr Smith,

I would be grateful for your opinion and advice with regards to HARRIS, Tom¹. This 39-year-old² cyclist³ had a severe⁴ attack of central chest pain⁵ five months ago⁶, which lasted 10 minutes⁷ and was relieved by rest⁸. This has recurred⁹ several times after exercise¹⁰. His father died¹¹ aged 52¹² of a myocardial infarction¹³. Physical examination was normal and I refer him to you for further assessment in view of his activity and family history. Thank you for seeing him.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

10. _____

11. _____

12. _____

13. _____

Exercise 3

Read about these three situations. Decide which of the options would be the correct thing to do. Discuss it with your partner:

SITUATION 1

If a person has a nosebleed, they must:

- a. Put some ice on their nose.
- b. Put some toilet paper or cotton in their nose.
- c. Pinch the soft part of their nose for five minutes.
- d. Lie down for a while.

SITUATION 2

The car in front of you has an accident.

- a. You don't stop. It wasn't your fault.
- b. You stop and phone the police immediately.
- c. You go to the car and try to help the people inside.
- d. You stop other cars asking for help.

SITUATION 3

You are in the mountains with a friend. You do not have reception on your mobile phone. Suddenly, your friend faints. You:

- a. You don't leave your friend and wait until somebody comes.
- b. You leave them alone in the forest and run to the nearest town to ask for help
- c. You try to carry them to the nearest town.
- d. You try to bring them around.

SITUATION 4

A cyclist has been run over on a street near the hospital and is unconscious.

- a. You take the cyclist yourself to the hospital.
- b. You call an ambulance.
- c. You stop somebody in the street to get help.
- d. You do a cardiorespiratory massage on the cyclist.

SITUATION 5

When cooking or ironing you burn your hand. It hurts a lot and you have blisters on your skin. You must:

- a. Pour cold water on your hand and then cover with a sticking plaster.
- b. Cover the burn with toothpaste.
- c. Cover the burn with oil or sun cream.
- d. Break the blisters and put on some cream.

SITUATION 6

Your two-year-old child starts playing with the plastic cap of a bottle and puts into their mouth. It gets stuck in their throat. You can see that they can't breathe normally.

- a. You open their mouth and try to catch the plastic cap with your thumb and forefinger.
- b. You do the Heimlich manoeuvre.
- c. You place two fingers in the middle of their breastbone just below nipple level and give five quick thrusts.
- d. You make a hole in their throat with a knife, so that they can breathe.

Exercise 4

Student A reads text 1. Student B reads text 2. Then student A summarises text 1 to student B and vice versa.

Text 1

Yesterday my family and I were in a restaurant. We were having dinner together because it was my father's birthday. At the table next to us there was a couple. They were having a salad and a steak. Suddenly, the woman stood up and started to move frantically as if she were very nervous. She had swallowed a piece of meat and found that she couldn't breathe.

Her husband hit her hard on the back, but the piece of steak remained stuck in her throat. She turned pale and was starting to panic. His husband shouted out desperately. “Can anyone help my wife? She’s choking!”

At another table in the restaurant there was a big group. There were all doctors—they had come for a conference and that was precisely their conference dinner.

They rushed over to try to help. One of them stood behind the wife and put his arms around her waist and then pulled hard inwards and upwards three times ...

Text 2

I was driving home when suddenly a bee flew into the car. Now I know that I am allergic to bees, but by then I didn’t know it. The bee was very boring and I was trying to take it out but I couldn’t. Because of my hand movements, I think that the bee became more nervous and stung me. It hurt me but I could bear it. After a few minutes I started to feel very bad. I got dizzy, my sight was getting blurred, and I felt a cold sweat. I don’t know how, but I changed direction and drove to the hospital.

Once there, I fainted and I can’t remember anything else. I just remember that when I woke up I was lying on a couch and the doctor came and told me I had been very lucky, because I was allergic to bees.

If I hadn’t driven to the hospital I might have died! Now I always bring a pill with me, which I have to take if a bee stings me.

Exercise 5

Choose the appropriate word:

- A. Hello, Ms Jackson. What’s **brought** / **come**¹ you along today?
- B. Good morning, Dr Johnson. The reason for coming here is that I am down in the **depression** / **dumps**² lately.
- A. Have you had any problem recently?
- B. No, not really.
- A. Maybe a big change in your life?
- B. Well, the company where I used to work had a good **change** / **shake up**³, and some of the **staff** / **stuff**⁴ were sacked. I’m trying to get used to my new life at the same time that I am looking for another job.
- A. I see. What’s your appetite like?
- B. I have no **taste** / **appetite**⁵ and I’ve lost five kilos in the last few weeks. And I do not why, but when I eat solid food, I have to **bite** / **chew**⁶ it for a long time before I can **swallow** / **eat**⁷ it.

- A. Alright. And when did you last *have / pass*⁸ a period?
- B. It was 35 days ago. It *is / has been*⁹ being a bit irregular lately. The last months were quite stressful because of this situation, and I think they’ve had a bad influence on me.
- A. I see. Have you noticed any other change in your habits or behaviour?
- B. Yes, I think I am losing some of my senses. I think my *sense / sensation*¹⁰ of smell has disappeared. I realised this when I was cooking last week. The food burnt, everybody said there was a horrible smell in the house but I couldn’t smell anything at all.
- A. Alright, Ms Smith. At this point I am going to examine you. Let’s start with a basic examination, and then we’ll try to find the real problem. Take a deep *breathe / breath*¹¹ in and out ...

Exercise 6

After examining a patient with acute lower back pain, explain to them what the problem might be and how you are going to proceed.

- The cause of the pain (if the pain was brought on exertion, if you think there’s any impingement, a torn muscle, etc.).
- How you are going to proceed (if you are going to use a machine, how long the treatment will last, if it is normal that the patient feels pain for a few days, etc.)
- Describe the exercises you recommend the patient should do.
- Clarify what things the patient should avoid (e.g. carrying weights, jumping, etc.).
- Answer any possible questions the patient may have.

Exercise 7

What do you think each patient in might be complaining of?

Images taken from

<http://www.kids-pages.com/folders/flashcards/Illnesses/page1.htm> and

<https://www.fotolia.com/id/106733815?by=serie>

1.



4.



2.



5.



3.



6.



7.



10.



8.



11.



9.



12.



Exercise 8**Complete the instructions using suitable verbs.**

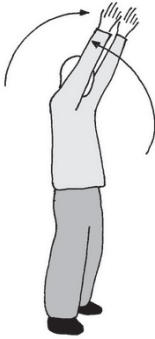
1. _____ straight ahead and _____ your nose with your right forefinger. Then do the same with your left hand.
2. Could you just _____ on your left side for me?
3. _____ on the edge of the couch and _____ your legs hang loosely.
4. _____ your eyelids tightly.
5. _____ all your clothes, down to your underwear.
6. If you could just pop _____ your clothes and then ...
7. _____ your shirt.
8. I'd like you to stand _____ for me, please.
9. _____ your chest with your chin.
10. _____ your head slowly and look over your left shoulder.
11. _____ onto your side.
12. Just _____ your legs _____ to your chest, and then relax.
13. _____ looking at me.
14. Can you just _____ your knees towards your chin and _____ your neck?
15. _____ your sleeve.
16. _____ the pin, not the light.

Exercise 9

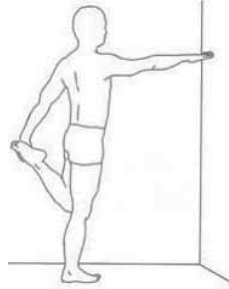
Write the instruction that describes the movement in each picture.

Images taken from <http://www.pinsdaddy.com>, <https://es.pinterest.com>, and <http://www.bellezaysaludtotal.com>.

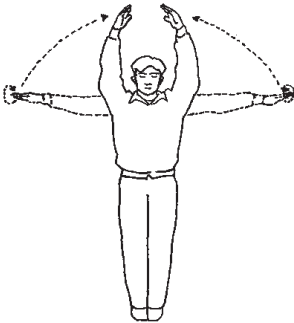
1.



4.



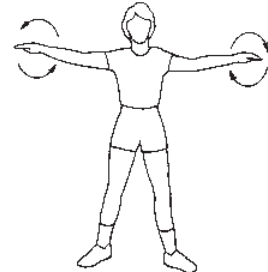
2.



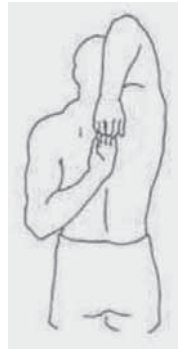
5.



3.



6.



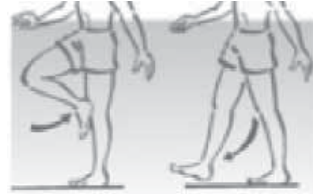
7.



9.



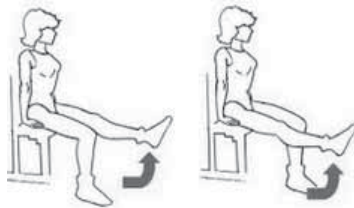
10.



8.



11.



12.



16.



13.



17.



14.



18.



15.



19.



21.



22.



20.



Exercise 10

Role play. Use the instructions and vocabulary that you have just learnt and recommend some exercises to a patient who suffers from sciatica.

Exercise 11

Role play. Instruct a patient to take up the correct position in the following situations:

- Making the bed
- Picking something up from the floor
- Carrying shopping bags from the supermarket

Exercise 12

Role play. Student A is a health professional and Student B is a patient. The patient is suffering from acute pains in the spine. Student A needs to examine the patient in different positions (e.g. when standing, lying down, sitting, bending, walking) to determine the correctness of the position and the point at which the pain comes. The health professional must give instructions to the patient to examine them. Then, they must recommend some exercises that the patient can do at home to help the pain and avoid further damage to the patient's spine.

Exercise 13

Role-play. Student A is a health professional and Student B is a patient. The health professional is going to test the patient's reflexes (in the wrist, elbow, foot, and knee). Explain to your patient how you are going to proceed before each movement. Change roles.

Exercise 14

Role play. Student A is a health professional and Student B is a patient. The patient, who is an athlete, fell when training and has broken their thigh bone. They are very worried and interested in getting more information about the problem and recovery. The patient asks a lot of questions and the health professional must try to explain the situation so that the patient can understand it easily. Here are some examples:

1. How long should I have plaster cast?
2. Will I need an operation?
3. How long will I be unable to run?
4. Could I get permanently disabled / lame?
5. What could the consequences be?
6. Can this have any effect on my knee, hip, or ankle?
7. Is it a complete or partial fracture? Would it be better if it were the other way round?
8. Are there any exercises I can do?
9. When will I be able to run again?
10. Will I need physiotherapy? How long will it last? What will the treatment be?

Phonetics: Pronunciation of Regular Past Tenses and Morphemic “-s”

PRONUNCIATION OF -ED

The ending -ed in regular verbs can be pronounced as /t/, /d/, or /ɪd/, but never /ed/.

- /t/: if the last sound is voiceless (e.g. *stopped*)
- /d/: if the last sound is voiced (e.g. *played*)
- /ɪd/: if the last sound is /t/ or /d/ (e.g. *painted* or *discarded*)

Exercise 1

Classify these verbs in the correct column according to the pronunciation of their past tense:

created, suffered, changed, laughed, loved, stopped, decided, enjoyed, opened, mixed, died, hated, refused, disappeared, introduced, disappointed, promised, agreed, expected, pronounced, reached, watched, remembered, tried, wished, hoped, fixed, kissed, worked

/t/	/d/	/ɪd/

UNIT 3

CONDITIONAL SENTENCES, WISHES, AND THE PASSIVE VOICE; COMMUNICATION AT THE WORK CENTRE; WORD STRESS AND RHYTHM

Grammar: Conditional Sentences, Wishes, and the Passive Voice

THEORY

CONDITIONAL SENTENCES

Conditional sentences have a “main clause” and an “if-clause”. If the “if-clause” appears before the main clause, a comma separates both sentences:

- Main clause + if-clause
- If-clause, + main clause

There are different types of conditional sentences, which are distinguished by the tense in each of their components, and by the meaning and probability they utter.

⚡ ZERO CONDITIONAL

It usually refers to general truths, and the structure is “present + present”.

For example:

- *If you heat water up to 100°C, it boils.*
- *Water boils if you heat it up to 100°C.*

⚡ 1ST CONDITIONAL

This refers not only to a possible action, but to a probable one. Its structure is “present + future”.

For example:

- *If you study, you'll pass the exam.*
- *You'll pass the exam if you study.*
- *Study and you'll pass the exam.*

‡ 2ND **CONDITIONAL**

This refers to possible actions which are quite unlikely to happen. The structure is “past tense + would”.

For example:

- *If you studied, you would pass the exam.*
- *You would pass the exam if you studied.*

In British English, the form “were” is preferred for all subjects when used in conditional sentences:

For example:

If I were you ... / If he were here ... (However: I was happy and he was sad).

‡ 3RD **CONDITIONAL**

This refers to impossible actions, i.e. actions which happened in the past and we can't change. The structure is “past perfect + would have”.

For example:

- *If you had studied, you would have passed the exam.*
- *You would have passed the exam if you had studied.*

‡ **MIXED CONDITIONALS**

Sometimes the aforementioned conditional types can be mixed, depending on the meaning uttered.

For example:

- *If my boyfriend gave me diamonds, I would have married him by now.*

Second and third conditionals are mixed here. Consider the difference between this sentence and “if my boyfriend had given me diamonds ...”. In the latter, the action of “giving diamonds” refers to the past only, whereas in the former the action goes on in the present.

- *Lesley wouldn't have missed the bus if she were better organised. Third and second conditional are mixed again here. The fact of not being organised is a permanent fact. However, if the sentence had read "... if she had been ...", that action would have been understood as something momentary.*

NOTES:

- "Unless" is another way of saying "if ... not". For example:
 - *We're going to the mountains on Saturday unless the weather gets much worse.*
- "In case" means "because of a possibility of something happening, being needed" (Cambridge Dictionary definition). For example:
 - *You have my phone number in case you miss the bus.*
 - *He took his surfboard in case they went to the beach.*

Consider the difference in meaning between these two sentences:

- *I'll cook a meal in case Sarah comes over tonight (= I am going to cook now).*
- *I'll cook a meal if Sarah comes over tonight (= I am not going to cook now; I'll only cook if Sarah comes).*
- "Provided that", "Providing that", "As long as", and "So long as" are other expressions which can introduce conditional sentences.
 - *As long as we all stay together, we'll have a great time.*
 - *Provided that it doesn't snow too heavily, I'll see you here at six o'clock.*

WISHES

There are different forms of expressing wishes. Have a look at their structure and the differences in meaning:

✚ I WISH + PAST PERFECT

This is used to regret the past and wish it had been different.

- *I wish I had come to the hospital sooner (=but I was late).*

✚ I WISH + PAST TENSE

This is used to wish a present situation were different, but which cannot be changed or is unlikely to change.

- *I wish I was / were taller (= I can't change it).*
- *I wish you had a good sense of humour (= I can't make it happen).*
- *My mum wishes she could speak English better.*

✚ I WISH + WOULD

This is used to wish a present situation were different, and it annoys us. Please note, this form can only be used when referring to another person, but not when talking about yourself.

- *I wish you would give up smoking. I hate the smell of your clothes.*
- *I wish the bus would come soon. I'm freezing!*
- *I wish it would stop raining. It's depressing!*

PASSIVE VOICE

How is the passive voice built?

To build the grammatical structure of the passive voice, one must remember the following basic rules:

- The object of the active sentence becomes the subject of the passive sentence.
- The verb TO BE must be changed to the appropriate tense and be followed with a past participle of the lexical verb.
- The main verb (i.e. the lexical verb) must be in past participle.

Here you can see an example:

ACTIVE SENTENCE

They build houses.

PASSIVE SENTENCE

Houses are built.

As you can see, “houses”, which is the object in the active voice, becomes the subject in the passive voice. “Build” is the main verb in the active voice and is in present simple. Therefore, in the passive voice the verb TO BE must be changed into that same tense (present simple) and followed by the past participle of the verb TO BUILD (i.e. are built).

Here are some sentences in which the verb TO CURE appears in different tenses. They have been turned into the passive so that you can see the different constructions of the verb TO BE in the passive voice.

	<i>SENTENCES WITH THE VERB TO BE IN ACTIVE VOICE</i>	<i>SENTENCES WITH THE VERB TO BE IN PASSIVE VOICE</i>
5	The nurse is curing the patient.	The patient is being cured .
6	The nurse cures 100 patients a day.	100 patients a day are cured .
7	This new drug will cure that disease.	That disease will be cured by this new drug.
8	I am sure you are going to cure a lot of patients during your stay in Burundi.	I am sure a lot of patients are going to be cured during your stay in Burundi.
9	She has cured 10 patients in one hour.	10 patients have been cured in one hour.
10	They cured me.	I was cured .
11	I was curing the child's wound, when she fell asleep.	The child's wound was being cured , when she fell asleep.
12	When the mother got the hospital, the doctors had already cured the boy.	When the mother got the hospital, the boy had already been cured .
13	If you went to Malaysia, you would cure many children.	If you went to Malaysia, many children would be cured .
14	If the doctor had seen the patient, the doctor would have cured him.	If the doctor had seen the patient, the patient would have been cured .
15	I have to cure the wound before putting the arm in a plaster cast.	The wound has to be cured before putting the arm in a plaster cast.

Unconjugated forms can also be in the passive voice. However, as these verbs are not conjugated forms, they don't have a subject and therefore cannot be turned into the passive and keep the same meaning. Here are some examples:

1	Antibiotics are good to cure infections.	The patient needs to be cured as soon as possible.
2	He claims to have cured millions of people.	These are the patients who seemed to have been cured of the virus.
3	The importance of curing (from the doctor's or nurse's perspective).	The importance of being cured (from the patient's perspective).
4	Having cured the wound, the nurse washed her hands.	Having been cured , the patient left the hospital.

Please note that the passive voice is only possible with transitive verbs (i.e. verbs that may have an object). Intransitive sentences cannot be turned into personal passive sentences because there is no object to be changed into the subject. Here is an example:

ACTIVE SENTENCE

I raise something.

(Transitive sentence)

The sun rises.

(Intransitive sentence)

PASSIVE SENTENCE

Something was raised (by me).

—

The sentence “the sun rises everyday” cannot be turned into the passive because the verb TO RISE is an intransitive verb (i.e. it cannot have an object).

Some sentences have two objects (a direct and an indirect one). For example, “*A close relative gave the GP essential information about the patient*” (which can also be said as “*A close relative gave essential information about the patient to the GP*”). The first object is “the GP”. The second object is “essential information about the patient”. Either object can be the subject of the passive sentence:

- *The GP was given essential information about the patient by a close relative.*
- *Essential information was given to the GP by a close relative.*

As you may have noticed in some of the previous sentences, if the person who did the action is important, we introduce them with “by”. For example, *The main square was mended by the neighbours*. However, when the subject is an unspecified subject because we don't know who did the

action (such as “somebody”, “they”, etc.) or when it is an obvious subject, no agent is included. Have a look at the following sentences:

ACTIVE SENTENCE

Somebody stole my car.

The police arrested the thief.

PASSIVE SENTENCE

My car was stolen.

The thief was arrested.

In the cases above, the passive sentence seems to be more accurate because the action is more important than who did it.

But when is the passive voice used? As we have just seen, the passive voice is used very frequently in English in these situations:

- When we don't know who did something.
- It is obvious who did it.

But the passive is also used in a third situation: when we want to focus on the action rather than the agent (who or what did the action), because the action is more important than who did it. For example: *The paper was finally published* (the focus is on the fact of publishing and not the author) or *My wallet was stolen* (we focus on the fact that the object was stolen and maybe we do not know who the thief was).

Finally, sometimes we use the passive when we want to sound more polite. For example, in the sentence *A mistake has been made*, we focus on the fact that a mistake has been made, but we do not blame anybody.

Finally, we will refer to other ways to form the passive. Here, three different structures will be mentioned:

✚ We use the form *To have something done* when we ask someone else to do something for us. For example:

- *I've had my hair cut.*
- *I'm having my room painted.*
- *He needs to have his car fixed by tomorrow.*

✚ Another frequent way of building a sentence into the passive is by starting with impersonal structures, such as “It is said that ...”, “it is believed that ...”, “it is thought that ...”, etc. For example:

- *It is thought that he has committed a crime.*

This impersonal passive is not very common in English. In English, this structure is only possible with verbs of perception (**SAY**, **THINK**,

KNOW). Now, the subject of the clause can also become the subject of the main sentence. In this case, the verb of the clause is changed to the infinitive:

- *He is thought to have committed a crime.*

✚ The verb TO GET can also be used to form the passive in some cases. For example:

- *Be careful with the TV. It **might get broken**.*
- *Tom **got hurt** in a crash.*

PRACTICE

Exercise 1

Put the verbs in brackets into the correct form.

1. Brendan wouldn't have a cough if he _____ (smoke) so many cigarettes.
2. Read the email and we _____ (see) what the boss _____ (want) us to do.
3. If they _____ (not expect) traffic jams, they _____ (not set off) so early.
4. You wouldn't be so sleepy now if you _____ (sleep) at night.
5. The thief would have gone to prison if there _____ (be) more evidence.
6. If he _____ (care) about other people's marks, he'd be happier.
7. If the temperature _____ (fall) below freezing, water turns to ice.
8. Your boss _____ (be) furious if he'd found out what you were up to.
9. I would work harder if I _____ (not be) so tired.
10. You _____ (need) to study if you want to pass the exam.
11. If you studied harder, you _____ (pass) the exam.
12. The boss would be more popular if he _____ (take) himself so seriously.
13. You _____ (never succeed) if you don't learn to control your nerves.
14. If I _____ (know) you were a physiotherapist, I _____ (come) to your clinic.

15. You _____ (sprain) your ankle if you _____ (not be looking) where you were going.
16. You _____ (finish) your degree this year if you _____ (start) four years ago.
17. Take your pullover in case it _____ (get) cold.
18. I _____ (go punting) if I finish college early.

Exercise 2

Fill in the gaps

1. I wish I _____ (have) curly hair!
2. Richard's always wearing the same clothes. I wish he _____ (buy) some new ones.
3. I wish I _____ (spend) all my money last night—now I'm broke.
4. I wish patients _____ (be) more understandable when there are delays.
5. She wishes her parents _____ (live) nearer to help her with the children.
6. He wishes the GP _____ (come) to see him yesterday.
7. Mary wishes she _____ (know) how to perform the Heimlich manoeuvre.
8. Yesterday a person choked in the restaurant where I was having dinner. I wish I _____ (know) how to perform the Heimlich manoeuvre, I could have saved him
9. I wish visitors _____ (go away) and leave us in peace.
10. I wish the doctor _____ (give) me good news.

Exercise 3

Write sentences with WISH.

1. I haven't studied at all for my exam.
2. I ignored my parents when they told me I had to go to university.
3. He is always late! It's so exasperating ...
4. I think she should learn to drive, but she doesn't want to.
5. It is so cold in here!

Exercise 4

Fill in the gaps with the correct passive form of the verb in brackets.

1. The medical team still have to decide which treatment _____ (give) to this patient.
2. Today's newspaper points out that a doctor of this hospital _____ (charge) with negligence.
3. The parcel appears to _____ (open) before _____ (delivered).
4. The conferences of yesterday _____ (give) by professional surgeons.
5. It's been a lovely surprise to find out all the washing-up _____ (do) while I was working.
6. The votes for the new director of the hospital _____ (count) right now and we should know the result before midnight.
7. I didn't come here in order to _____ (make) a fool of!
8. As he _____ (send) to prison, he found it hard to get a job.
9. This drug _____ (say) to have plenty of adverse effects.
10. Four people _____ (injure) in the accident.

Exercise 5

Rewrite these sentences.

1. It is said that the new hospital will be opened by the end of the year.
The new hospital ...
2. People think the fault of the accident was the driver's.
It is thought ...
The fault of the accident ...
3. They know that the victim is a local man.
The victim ...
It is thought ...
4. It has been reported that influenza type A has become a pandemic.
Influenza ...

5. Doctors expect the patient to recover soon.
The patient ...
6. It is thought that more than 1,000 billion dollars would be needed to find a treatment against that disease.
More than ...
7. They think that if more money is invested on prevention, the health expense can be drastically reduced.
It is ...
The fact of ...
8. Scientists state that by 2050 there will probably be a cure for some diseases which are incurable today.
It is ...
9. Doctors know that obesity is a risk factor of myocardial infarction.
Obesity ...
It is ...
10. People believe that you will get a cold if you get wet in the rain.
It is ...
11. The patient asked the doctor a question.
The doctor ...
A question ...

Exercise 6

Please change these sentences into passive.

1. The nurse taps the vein and then inserts a needle into it.
2. The nursing assistant cleans the skin and prepares the patient for the intervention.
3. The orderly takes the patient to the operating theatre.
4. The doctor explains the procedure to the patient and then applies gentle pressure to the puncture site.
5. Therapists often perform this procedure.

6. Trainee doctors mustn't perform this emergency procedure.
7. The government has been putting off the approval of new measures to fight unemployment for years.
8. They have opened a new operating theatre.
9. In the past surgeons used to prefer that surgical technique.
10. I know someone is watching me.

Exercise 7

Suggest possible “punishments” to the following topics using sentences such as “I think they should be made ...” or “I don’t think they should be allowed to ...”. Discuss them with your partner.

1. A nurse that comments with their friends on the problems of a particular patient all of them know.
2. A physiotherapist that laughs at their patients.
3. A doctor that signs papers (given by the nurse) without reading them.
4. A surgeon that removes the wrong leg of a patient.
5. A health professional who accesses their neighbour’s history record.

Health Sciences: Communication at the Work Centre

THEORY

Frequent conversations at work

Here you can read some examples of conversations between healthcare professionals in the health environment.

Conversation 1

(An internist, an orthopaedic surgeon, a nurse and a physiotherapist are trying to establish some guidelines for a patient who has just had a car accident. He must be operated on as soon as possible because he has broken his thigh bone, but he must remain under observation for a few days since he has an important contusion in his stomach.)

- *ORTHOPAEDIC SURGEON: Good morning. As you all know, a 36-year-old man who has had a car accident has just been admitted. He has a serious fracture in his femur and needs to be operated on as soon as possible, so we are getting everything ready.*
- *INTERNIST: Yes, I agree that he must be operated on as soon as possible, but we shouldn't forget that he has an important contusion in his stomach and he may have some internal injuries. An ultrasound scan and a blood test have just been taken and the results will be ready in a few minutes. In any case, even if these results are good I think that we should wait a bit to get him operated on. In my opinion, he must be under observation in the ICU for at least 48 hours just to make sure that no organ is seriously damaged.*
- *ORTHOPAEDIC SURGEON: I see your point and I think you are right, we must wait to discard any internal problem. However, it is important to remember that the fracture may bleed and produce an embolism. For that reason, as soon as we are sure that there is no internal problem, I think that he should be operated on. In any case, in the meanwhile he will be administered with some anticoagulant to avoid a clot and we must be particularly careful with a possible fat embolism.*
- *INTERNIST: Yes, absolutely, but we must be particularly careful with that treatment, because it may interfere with any possible damage to his stomach or any other organ.*
- *ORTHOPAEDIC SURGEON: Yes, of course. I will administer him a special drug and I will supervise him carefully. Also, in the*

meanwhile his leg needs to be in traction – the nurse and the physio could help me with it.

- *NURSE: Sure. Also, I am seeing that he will be confined to bed for a few days. I am wondering if a plan to avoid pressure sores should be drafted.*
- *INTERNIST: Absolutely, please. And please take care of to his hygienic cares and change of position. Also, the physiotherapist could provide some mobility guidelines of the healthy parts so that he's prepared for the operation.*
- *PHYSIOTHERAPIST: Sure. And I can draft a plan with exercises—this may help him in the subsequent rehabilitation.*
- *ORTHOAEDIC SURGEON: Yes, that's a good idea. Regarding the rehabilitation ... remember that in the two first weeks after the operation he must be very careful when putting weight on that leg.*
- *PHYSIOTHERAPIST: OK, no problem. We will start with basic exercises in bed and then I will help him stand but without putting weight on that leg. By the way, is there anything else I should be particularly careful with during the first weeks of his rehabilitation?*
- *ORTHOAEDIC SURGEON: Not particularly, but we can discuss the situation after the operation when we have more details.*

Conversation 2

(A GP and a consultant are discussing a patient's condition based on the results obtained from a blood test and an ultrasound scan.)

- *GP: Hey, Jimmy, I wanted to ask you about this patient. He's a 42-year-old man and there was a substantial rise in his liver's parameters in the blood test, but the ultrasound scan looks completely normal ...*
- *CONSULTANT: Mmm ... interesting ... Have you checked his pancreas and gallbladder?*
- *GP: the parameters in the blood test are a little different, but the examination was normal.*
- *CONSULTANT: Was there any other abnormal parameter in the blood test?*
- *GP: Well, he has anaemia, although he is taking some drugs for it.*
- *CONSULTANT: I would recommend you perform an MRI. It seems that something is not right ... When you have the results, come and talk to me if you wish and we can have a look at it together.*
- *GP: Ok, I will do that. Thank you very much for your help.*

- CONSULTANT: I am going to ask a college of mine if he has ever had a similar case.

Conversation 3

(A surgeon discusses with a nurse the operation they are going to perform and asks for the materials and instruments they will use in the operating theatre.)

- *SURGEON*: We are going to perform a transvenous implantation of a pacemaker for an 80-year-old woman. I will need a scalpel to make the cut. Then remember to prepare the wires of the pacemaker—I mean the pacing leads that I will introduce into the vein. Make sure that the X-ray scanner works properly because we will need it to guide the pacing leads along the vein into the correct chamber of the heart. Of course, don't forget to prepare the intravenous line and medication to keep the patient relaxed during the procedure. Please talk to the anaesthetist and remind him that only local anaesthetic will be required. I will talk to him later, in any case.
- *NURSE*: OK. No worries, I will have everything ready. How long will it take?
- *SURGEON*: It won't take long. About an hour.
- *NURSE*: OK. And how long will the patient stay in hospital?
- *SURGEON*: If there is no unforeseeable inconvenience, she will need to stay overnight and have a day's rest after the procedure.
- *NURSE*: OK. Perfect.
- *SURGEON*: Oh, also, prepare the defibrillator just in case we have any complications during the procedure.
- *NURSE*: I will.
- *SURGEON*: Oh, and by the way, remember to prepare an extra pair of gloves—you know I usually have problems with them.
- *NURSE*: Sure.

Conversation 4

(A doctor is giving some instructions in an ambulance to a registered nurse about a patient.)

- DOCTOR: We have a serious problem with this patient. I am not sure what is wrong. He got worse, he has just lost consciousness. He is breathing with difficulty and his pulse is weak. We have to do something and quickly. Give me the oxygen mask and the torch, I'm going to check his pupils and reflexes.
- NURSE: Here you are. Shall I phone the hospital?

- DOCTOR: Yes please, phone them and tell them to prepare the MRI and the operating theatre. I am afraid he has suffered a cerebrovascular accident.

Conversation 5

(A doctor in a small village is preparing the urgent transfer of a patient to a hospital in the nearest city. He's on the phone with the doctor of the target hospital.)

- *Doctor 1: Hello, it's Dr. Barrett. I am phoning you because we have a patient who requires urgent neurologist care, which can't be provided here. He's quite weak and delicate, I think he will require an operation.*
- *Doctor 2: Alright, we will prepare everything here. Please send a fax with a full diagnosis, so that the consultant can have a look at it before the patient gets here.*
- *Doctor 1: OK, no worries, I will do it as soon as possible.*
- *Doctor 2: Remember to make sure the ambulance has enough oxygen masks and oxygen canisters. Also, you can administer him some relaxing drug, it is important that he does not get anxious or nervous, and the journey may alter him.*
- *Doctor 1: OK, perfect. We'll check that.*
- *Doctor 2: Also, it is important that the doctor that accompanies him in the ambulance checks his pulse every 10 minutes, and that the patient doesn't lose consciousness. If the accompanying doctor has any difficulties, tell him to phone us here—we'll do our best.*
- *Doctor 1: OK. Thank you very much again for your guidance and help.*

List of health professionals

In this unit we have referred to “health care professionals”. To widen your vocabulary, here is a list of the different health professionals that you may find at a hospital or health centre.

Conditional Sentences, Wishes, and the Passive Voice;
Communication at the Work Centre; Word Stress and Rhythm

Allergist / allergologist	Dermatologist	Midwife	Orderly	Psychiatrist
Anaesthetist / anaesthesiologist	Dietician	Nephrologist	Orthopaedic surgeon	Psychologist
Cardiologist	ENT specialist (ear, nose, throat specialist), otolaryngologist, otorhinolaryngologist	Neurologist	Paediatrician	Radiologist
Chiroprapist / Podiatrist	General practitioner (GP)	Nurse	Physiotherapist / Physical therapist	Rheumatologist
Consultant / Specialist	Gynaecologist	Oncologist	Pneumologist / Pulmonologist	Speech and language therapist / Logopedist
Dentist	Internist	Ophthalmologist	Proctologist	Urologist

Due to the fact that science develops very quickly, healthcare professionals must constantly read scientific papers to stay up to date. Many of these professionals even belong to research groups and publish their own findings. For that reason, here are some guidelines on scientific papers, abstracts, and references.

Reading 1 – Scientific papers

Scientific papers are for sharing your own original research work with other scientists or for reviewing the research conducted by others. As such, they are critical to the evolution of modern science, in which the work of one scientist builds upon that of others. To reach their goal, papers must aim to inform, not impress. They must be highly readable — that is, clear, accurate, and concise. They are more likely to be cited by other scientists if they are helpful rather than cryptic or self-centred.

Scientific papers typically have two audiences: first the referees, who help the journal editor decide whether a paper is suitable for publication; and second the journal readers themselves, who may be more or less knowledgeable about the topic addressed in the paper. To be accepted by referees and cited by readers, papers must do more than simply present a chronological account of the research work. Rather, they must convince their audience that the research presented is important, valid, and relevant to other scientists in the same field. To this end, they must emphasize both the *motivation* for the work and the *outcome* of it, and they must include just enough evidence to establish the validity of this outcome.

Papers that report experimental work are often structured chronologically in five sections: first, *Introduction* then *Materials and Methods*, *Results*, and *Discussion* (together, these three sections make up the paper's body); and finally *Conclusion*.

- The *Introduction / Background* section clarifies the motivation for the work presented and prepares readers for the structure of the paper.
- The *Materials and Methods* section provides sufficient detail for other scientists to reproduce the experiments presented in the paper. In some journals, this information is placed in an appendix, because it is not what most readers want to know first.
- The *Results* and *Discussion* sections present and discuss the research results, respectively. They are often usefully combined into one section, however, because readers can seldom make sense

of results alone without the accompanying interpretation—they need to be told what the results mean.

- The *Conclusion* section presents the outcome of the work by interpreting the findings at a higher level of abstraction than the *Discussion* and by relating these findings to the motivation stated in the *Introduction*.

Papers reporting something other than experiments, such as a new method or technology, typically have different sections in their body, but they include the same *Introduction* and *Conclusion* sections as described above. Although the above structure reflects the progression of the most research projects, effective papers typically break the chronology in at least three ways to present their content in the order in which the audience will most likely want to read it. First and foremost, they summarize the motivation for, and the outcome of, the work in an abstract, located before the *Introduction*. In a sense, they reveal the beginning and end of the story—briefly—before providing the full story. Second, they move the more detailed, less important parts of the body to the end of the paper in one or more appendices so that these parts do not stand in the readers' way. Finally, they structure the content in the body in theorem-proof fashion, stating first what readers must remember (for example, in the first sentence of a paragraph) and then presenting evidence to support this statement.

In the *Introduction* section, state the motivation for the work presented in your paper and prepare readers for the structure of the paper. Write four components, probably (but not necessarily) in four paragraphs: *context*, *need*, *task*, and *object of the document*.

- First, provide some context to orient those readers who are less familiar with your topic and to establish the importance of your work.
- Second, state the need for your work, as an opposition between what the scientific community currently has and what it wants.
- Third, indicate what you have done in an effort to address the need (this is the task).
- Finally, preview the remainder of the paper to mentally prepare readers for its structure, in the object of the document.
[...]

Most *Materials and Methods* sections are boring to read, yet they need not be. To make this section interesting, explain the choices you made in your experimental procedure: What justifies using a given compound,

concentration, or dimension? What is special, unexpected, or different in your approach? Mention these things early in your paragraph, ideally in the first sentence. If you use a standard or usual procedure, mention that up front, too. Do not make readers guess: make sure the paragraph's first sentence gives them a clear idea of what the entire paragraph is about. If you feel you cannot or need not do more than list items, consider using a table or perhaps a schematic diagram rather than a paragraph of text.

The traditional *Results* and *Discussion* sections are best combined because results make little sense to most readers without interpretation. When reporting and discussing your results, do not force your readers to go through everything you went through in chronological order. Instead, state the message of each paragraph up front: convey in the first sentence what you want readers to remember from the paragraph as a whole. Focus on what happened, not on the fact that you observed it. Then develop your message in the remainder of the paragraph, including only that information you think you need to convince your audience.

In the *Conclusion* section, state the most important outcome of your work. Do not simply summarise the points already made in the body—instead, interpret your findings at a higher level of abstraction. Show whether, or to what extent, you have succeeded in addressing the need stated in the *Introduction*. At the same time, do not focus on yourself (for example, by restating everything you did). Rather, show what your findings mean to readers. Make the *Conclusion* interesting and memorable for them.

Source: <https://www.nature.com/scitable/nated/topicpage/scientific-papers-13815490>

NOTE: For further recommendations on how to write a research paper, please visit:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3178846>.

Reading 2 – Abstracts

The first part of a scientific paper is the abstract. It is a brief summary of a scientific article (approximately 150–200 words) that includes the key information of the paper and appears before the main body of the article. Different fields may include different elements, and different journals may specify different patterns (elements to be included, word number, etc.). The abstract has two purposes: to help readers decide whether they want to read the full paper, and to prepare them for the information presented in that paper.

Scientific papers (and thus abstracts) are written in academic English, which is the type of English used in research and academia. It differs from everyday language. These are some of the features of Academic English:

- It has a more formal register.
- It has a formal tone.
- It is objective and impartial.
- The style is usually impersonal.
- Passive structures are frequently used.
- There are several references to other experts.
- Texts are well structured and linked with suitable linking words.
- Contractions are avoided.
- Phrasal verbs are restricted.
- Modal verbs are frequent, such as *may*, *could*, *might*, etc.
- It deals with complex, and even abstract, ideas.
- It includes specialised vocabulary.

There are two kinds of abstract: descriptive and informative. A descriptive abstract basically outlines the research work it is linked to. It highlights the kind of information found without making reference to the results or conclusions. An informative abstract, on the other hand, goes beyond a mere description to present the main arguments and results of the scientific output. Since an abstract is usually read before the full paper, it should present the information that the readers are primarily interested in (i.e. what they want to know first and most of all).

Here is an example of an abstract (Monticone et al. 2013) structured following the requirements of a research paper: objective, methods, results, and conclusions.

Objective

To evaluate the effect on disability, kinesiphobia, pain, and the quality of life of a long-lasting multidisciplinary program based on cognitive-behavioural therapy and targeted against fear-avoidance beliefs in patients with chronic lower back pain.

Methods

Study design: parallel-group, randomized, superiority controlled study. Ninety patients were randomly assigned to a multidisciplinary program consisting of cognitive-behaviour therapy and exercise training

(experimental group, 45 patients) or exercise training alone (control group, 45 patients). Before treatment (T1), five weeks later (instructive phase, T2), and 12 (posttreatment analysis, T3) and 24 months after the end of the instructive phase (one-year follow-up, T4), all of the patients completed a booklet containing the Roland-Morris Disability Questionnaire Scale (primary outcome), the Tampa Scale for Kinesiophobia, a pain numerical rating scale, and the Short-Form Health Survey. A linear mixed model for repeated measures was used to analyse each outcome measure, and the reliable change index/clinically significant change method was used to assess the clinical significance of the changes.

Results

The linear mixed model analysis showed a remarkable group, time, and interaction effect for group * time in all of the primary and secondary outcomes (P always <0.001). The majority of the patients in the experimental group achieved a reliable and clinically significant improvement, whereas the majority of those in the control group experienced no change.

Conclusions

The long-lasting multidisciplinary program was superior to the exercise program in reducing disability, fear-avoidance beliefs and pain, and enhancing the quality of life of patients with chronic lower back pain. The effects were clinically tangible and lasted for at least one year after the intervention ended.

Reading 3 – References

It is extremely important to keep a good record of the sources mentioned in the body of work. These references appear as a list at the end of your work, which is called the reference list. It must not be confused with a bibliography, which is a list of the sources consulted in the research and which are not necessarily cited in the body of the work.

In-text citations may be direct (quoting) or indirect (paraphrasing) references. A direct quotation reproduces the exact words of another writer

and is displayed in quotation marks or as a block quotation (if it is a long quotation). A paraphrase, on the other hand, renders another writer's words in a new way (i.e. another author's findings can be rephrased or summarised).

Every source listed in the body of your work needs to be cited in the body of your paper. It is also important to be consistent with the predefined style of referencing or citation systems, which differ across disciplines or fields of study. For example:

- The Vancouver system is mainly used in scientific fields.
- Humanities frequently use the Chicago, the Harvard, or the MLA (Modern Language Association) system.
- The APA (American Psychological Association) system is frequently used in Social Sciences.

As we are dealing with the medical context, the fundamentals of the Vancouver system will be provided here: the Vancouver system is a numeric referencing style (either numbers in brackets, or superscript), according to which the in-text references are numbers that refer to the reference list. You can see an example here, which is taken from <https://intranet.birmingham.ac.uk/as/libraryservices/library/referencing/icite/referencing/vancouver/intext.aspx>:

Parkinson's disease is a degenerative disease of the basal ganglia of the brain, characterised by muscular rigidity, tremor, and a shuffling gait. (1) It was first described in 1817 by James Parkinson after whom the condition was later named. (2)

Patients with Parkinson's disease have a higher risk of developing dementia than other subjects (3) and some studies have found that Parkinson's disease patients are more depressed than medically ill patients with a similar level of disability. (4)

The reference list at the end of the work is ordered chronologically, and the sources must comply with these specifications:

- *Research paper*: Authors. Title of the paper. International abbreviation of the journal. Year; Volume (Issue number): pages.
For example:
Kanneganti P, Harris JD, Brophy RH, Carey JL, Lattermann C, Flanigan DC. The effect of smoking on ligament and cartilage

surgery in the knee: a systematic review. *Am J Sports Med.* 2012; 40(12):2872–2878.

- *Book*: Authors. Title of the book. Edition. Place of publication: Publishing company; year. For example:
O'Campo P, Dunn JR, editors. *Rethinking social epidemiology: towards a science of change.* Dordrecht: Springer; 2012.
- *Book chapter*: authors of the chapter. Title of the chapter. In: Editor of the book. Title of the book. Edition. Place of publication: Publishing company; year. pages. For example:
Halpen-Felsher BL, Morrell HE. Preventing and reducing tobacco use. In: Berlan ED, Bravender T, editors. *Adolescent medicine today: a guide to caring for the adolescent patient.* Singapore: World Scientific Publishing Co.; 2012. 307–317.

Source: based on

<https://guides.lib.monash.edu/citing-referencing/vancouver>

Reading 4 – Reference management programmes

A reference management programme can be used to manage sources and references while writing a scientific paper. It will help you gather references from several databases in just one place, track your references, create a reference list, draft references according to the citing system you wish to use, and create publication lists. The most popular reference management software programmes are:

- Cite this for me (free online): <https://www.citethisforme.com>
- EndNote: <https://endnote.com>
- Mendeley (free online): <https://www.mendeley.com>
- RefWorks: <https://www.refworks.com>
- Zotero (free online): <https://www.zotero.org>

MEDLINE® and PubMed®

If you are researching in the medical field, you should become familiar with MEDLINE® and PubMed®. MEDLINE® contains journal citations and abstracts for international biomedical literature. PubMed® provides free access to MEDLINE® and may include links to full text articles. You can access PubMed here: <https://www.ncbi.nlm.nih.gov/pubmed>. If you want to get started with PubMed, you can read the FAQs and do the

PubMed Quick Start (https://www.ncbi.nlm.nih.gov/books/NBK3827/#pubmedhelp.PubMed_Quick_Start).

Reading 5 – Health systems in the United Kingdom and the United States

How much do you know about the British and the American healthcare systems? We encourage you to read about them:

The British Health System (NHS, National Health System)

The NHS was launched in 1948. It was born out of a long-held ideal that good healthcare should be available to all, regardless of wealth—one of the NHS's core principles. With the exception of some charges, such as prescriptions, optical services, and dental services, the NHS in England remains free at the point of use for all UK residents. This currently stands at more than 64.6 million people in the UK, with 54.3 million people in England alone.

The NHS in England deals with over one million patients every 36 hours. It covers everything, including antenatal screening, routine screenings (such as the NHS Health Check), treatments for long-term conditions, transplants, emergency treatment, and end-of-life care.

Responsibility for healthcare in Northern Ireland, Scotland, and Wales is devolved to the Northern Ireland Assembly, the Scottish Government, and the Welsh Assembly Government, respectively.

In 2014, the Commonwealth Fund declared that, in comparison with the healthcare systems of 10 other countries (Australia, Canada, France, Germany, Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United States) the NHS was the most impressive overall. The NHS was rated as the best system in terms of efficiency, effective care, safe care, co-ordinated care, patient-centred care, and cost-related problems. It was also ranked second for equity.

The NHS employs more than 1.5 million people, putting it in the top five of the world's largest workforces, together with the US Department of Defence, McDonald's, Walmart, and the Chinese People's Liberation Army.

The NHS in England is the biggest part of the system by far, catering to a population of 54.3 million and employing around 1.2 million people. Of

those, the clinically qualified staff includes 150,273 doctors, 40,584 general practitioners (GPs), 314,966 nurses and health visitors, 18,862 ambulance staff, and 111,127 hospital and community health service (HCHS) medical and dental staff. The NHS in Scotland, Wales, and Northern Ireland employs 161,415, 84,000, and 66,000 people, respectively.

Funding for the NHS comes directly from taxation. Since the NHS transformation in 2013, the NHS payment system has become underpinned by legislation. The Health & Social Care Act 2012 moved responsibility for pricing from the Department of Health to a shared responsibility for NHS England and NHS Improvement. When the NHS was launched in 1948, it had a budget of £437 million (roughly £15 billion at today's value). For 2015–16, the overall NHS budget was around £116.4 billion. NHS England is managing £101.3 billion of this.

The American health system

The United States has no single nationwide system of health insurance. Health insurance is purchased in the private marketplace or provided by the government to certain groups. Private health insurance can be purchased from various for-profit commercial insurance companies or from non-profit insurers. About 84% of the population is covered by either public (26%) or private (70%) health insurance. Approximately 61% of health insurance coverage is employment related, largely due to the cost savings associated with group plans that can be purchased through an employer. Employers voluntarily sponsor the health insurance plans. Rather than purchasing an insurance policy from an external party (commercial insurance company), employer and employee premiums sometimes fund an internal health insurance plan. The fully self-insured firm assumes all the risk for its employees' healthcare costs. A partially self-insured firm limits the risk it assumes by purchasing "stop loss" insurance coverage, which protects it from incurring costs over a specified maximum amount. In either case, the firm usually contracts with a third party to administer the health insurance program.

In addition to private health insurance, nearly 26% of the US population is covered by public health insurance. The two major types of public health insurance, both of which began in 1966, are Medicare and Medicaid. Medicare is a uniform national public health insurance program for aged and disabled individuals. Administered by the federal government, Medicare is the largest health insurer in the country, covering about 13% of the population. The Medicare plan consists of two parts. Part A is

compulsory and provides health insurance coverage for inpatient hospital care, very limited nursing home services, and some home health services. Part B of the voluntary or supplemental plan provides benefits for physician services, outpatient hospital services, outpatient laboratory and radiology services, and home health services. Part A of Medicare is funded by a Medicare tax that is similar to the Social Security tax, and Part B is financed by monthly premiums (25%) and general taxes (75%). The Medicare patient is also responsible for paying a deductible and a co-payment for most part B services and for long-term hospital services under part A. Many Medicare recipients also choose to purchase Medigap insurance, a private health insurance plan offered by commercial insurance companies that pays for medical bills not fully reimbursed by Medicare.

The second type of public health insurance program, Medicaid, provides coverage for certain economically disadvantaged groups. Medicaid is jointly financed by the federal and state governments and is administered by each state. The federal government provides state governments with a certain percentage of matching funds ranging from 50 to 77%, depending on the per capita income in the state. Coverage under Medicaid varies because states have established different requirements for eligibility. Individuals who are elderly, blind, disabled, or members of families with dependent children must be covered by Medicaid for states to receive federal funds. Additionally, although the federal government stimulates a certain basic package of healthcare benefits (e.g. hospital, physician, and nursing home services), some states are more generous than others. Following that, individuals in certain states receive a more generous benefit package under Medicaid than those in others. Medicaid is the only public program that finances long-term nursing home stay. Medicaid covers approximately 12% of the population.

Sources:

*<https://www.nhs.uk/NHSEngland/thenhs/about/Pages/overview.aspx>
and <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3633404>*

PRACTICE

Exercise 1

Answer these questions about the text:

1. What is the main aim of scientific papers?
2. What is their audience?
3. What parts should be present in a scientific paper?
4. Under what sections must the research results be presented and discussed?
5. Can the information be presented in a chronological order?
6. Do you think that all journals have the same guidelines or are there specific guidelines for each journal?

Exercise 2

Please have a look at these tutorials and discuss them with your partner:

PubMed Tutorial

<https://www.nlm.nih.gov/bsd/disted/pubmedtutorial/cover.html>

PubMed for Nurses Tutorial

<https://www.nlm.nih.gov/bsd/disted/nurses/cover.html>

Exercise 3

Go to PubMed and select one paper:

1. Identify the main parts of the article.
2. Imagine that you are in a conference and that you have to hold a presentation on the same topic of the article. Create a PowerPoint presentation and show it to your classmates. You might find these guidelines for conference presentations useful:
 - (a) *<https://www.academic-conferences.org/policies/presentation-guidelines>*
 - (b) *<https://go.owu.edu/~dapeople/ggpresnt.html>*
 - (c) *<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1857815>*

Exercise 4

In groups of four, write an abstract. These guidelines might help:

- (a) How to write an abstract that will be accepted for presentation at a national meeting: <https://www.ncbi.nlm.nih.gov/pubmed/15447804>
- (b) How to write a good abstract for a scientific paper or conference presentation:
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3136027>
- (c) Structured abstracts:
https://www.nlm.nih.gov/bsd/policy/structured_abstracts.html
- (d) Abstract guidelines for papers: <https://www.academic-conferences.org/policies/abstract-guidelines-for-papers>
- (e) Guidelines to the writing of case studies:
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2597880>

Exercise 5

Read the following text and discuss the questions below with your partner.

Top five technologically advanced hospitals

No one wants to end up in the hospital. Bad food, cramped quarters, and the prospect of a major surgery make most people desperate to do anything they can to avoid the hospital at all costs. The truth is, however, that most Americans will spend at least one night in a hospital in the course of their lives. Many will need a longer stay in order to address larger issues. Thankfully, advances in modern technology are making many procedures less invasive and more effective, which means that patients can move to the outpatient ward as quickly as possible.

Take hernia surgery as an example. Its original recorded form in the era of ancient Rome involved not only cutting a patient open, but often cutting off their testes or scrotum as well, then leaving the open wound to heal on its own—and leaving it open to infections. The dark ages destroyed such basic knowledge, and while the nineteenth and early twentieth centuries showed significant advancements in surgical techniques, many were still done under tension, resulting in pain for the patient and a high likelihood of recurrence at the site of the hernia.

Today, hernia surgery itself takes less than an hour and patients can be back to running, lifting weights, and their old lives in just over a month with the new mesh composites that are being used. Technology has made this procedure not only faster to complete but allows for a far quicker healing time. This has made the procedure for individuals a minor outpatient procedure that requires only a few hours in the hospital.

On a larger scale, those hospitals with advanced medical equipment or on the cutting edge of medical research are often able to provide relief in a variety of areas to large groups of people. Here are five of the most advanced in the world:

1) *The El Camino Hospital in Mountain View, CA, USA*

In partnership with Nucletron, a research-based cancer treatment company, El Camino is the site of the most advanced brachytherapy technology in the country. Brachytherapy is a site targeted high-dose radiation approach to cancer treatment which lowers the risk of radiation contamination to healthy cells around a cancer site, and gets people back to their normal lives as quickly as possible.

2) *Upper River Valley Hospital in Waterville, NB, Canada*

In addition to being environmentally friendly, the technological advancements at this hospital make clinical reporting faster, and mean shorter wait times for patients. This New Brunswick facility was created to be entirely paperless, meaning that doctors and nurses are able to create and manage patient charts and information without ever picking up a pen or wasting paper.

3) *Hackensack University Medical Centre in Hackensack, NJ, USA*

Along with technology company Citrix, this New Jersey hospital has implemented a wireless data system that allows doctors and nurses to access patient care information and create prescriptions from a PC, tablet, or any mobile device connected to the network. No running for charts and getting on-the-fly condition updates means better working conditions for staff and greater safety for patients.

4) *Legacy Salmon Creek Hospital in Clark County, WA, USA*

The hospital has recognized that one of the most critical facets of timely and effective patient care is to have the right equipment on hand at the

right time. Legacy Salmon Creek has joined with Agility Health Care Solutions to invest in AgileTrac, a radio frequency identification (RFID) system that is designed to identify and track crucial pieces of hospital equipment no matter where they are in the facility.

5) *Vale Hospital in Hensol, South Wales, UK*

This hospital has gained a reputation as one of the best and brightest in the UK, thanks in no small part to the two state-of-the-art operating theatres that are within its walls. Both theatres feature ceiling suspended equipment along with high resolution HD technology that allows surgeons a better view of just what is going on inside their patients. In addition, the system permits streaming video signals to be sent to other devices in the hospital and surgeons can display X-rays and other patient documents in the operating theatre at the push of a button.

This makes surgeries not only easier but far more streamlined. No matter the facility and no matter the types of procedures that are carried on within its walls, technology can be used to improve not only the quality of patient care, but the ability of a hospital to take on and treat as many patients as possible. Procedures such as cancer treatments, paediatric procedures, complicated surgeries, or even just the simple day-to-day business of hospital administration can all be streamlined.

Although not every hospital can afford to purchase the latest technology and many were built long before eco-friendly technological options existed, a number of facilities have chosen to upgrade whatever technology they are able to on an ongoing basis.

For some, this can mean the purchase of a new piece of equipment, such as an EKG machine, stress system, or electro surgical unit. Other hospitals choose to purchase refurbished units that have been thoroughly tested and approved and that add to the suite of procedures they are able to offer. From the smallest patient monitor to the largest diagnostic unit, hospitals have seen the benefit of purchasing the technology they can afford in order to maximize their efficiency.

As medical advancements continue, hospitals will continue to upgrade the equipment they have and integrate new and unique ways to both manage patient safety and streamline staff and document management. The rise of wireless internet technology and high-quality video options, in addition to paperless reporting systems and radio tracking initiatives, has made the hospital world a safer place. It has also made it one in which patients can

expect to spend a minimum amount of time both in surgery and recovering before they can be sent home. Though the stigma around hospitals will never be fully dispelled, the right technology can make it weigh far less heavily on the minds of patients.

Source:

<https://www.akwmedical.com/blog/top-5-technologically-advanced-hospitals>

Please discuss these questions with your partner.

1. What is the most impressive hospital for you? Justify your reasons.
2. Compare these five hospitals with the hospital of your town and suggest improvements. Mention the limitation of your project.
3. Discuss this sentence with your partner:

No matter the facility and no matter the types of procedures that are carried on within its walls, technology can be used to improve not only the quality of patient care, but the ability of a hospital to take on and treat as many patients as possible.

Exercise 6

Complete the following text with suitable words:

Prosthetists and orthotists are two different specialists, but what is the difference between them?

On the one hand, a prosthetist is a health professional who measures, designs, fabricates, fits, or services a _____¹ for patients who do not have a _____². It may be congenital (i.e. they were born without it) or it may be due to an _____³.

On the other hand, orthotists design, manufacture and apply _____⁴, which are externally applied devices used to modify the structural and functional characteristics of the neuromuscular and skeletal system. Orthotists usually work in a clinic as part of an outpatient service and alongside other health _____⁵ to give the patients under their care the best possible _____⁶.

In other words, a prosthesis replaces a part of the body (e.g. when an elderly person breaks their hip and has to be operated on), whereas an orthosis does not _____⁷ a part of the body but helps it to heal, to

_____ ⁸ pain, or perform the function of the body which was impaired (e.g. a person with cerebral palsy may require _____ ⁹ to walk, and an elderly person may require special shoes or insoles to correct a _____ ¹⁰).

Exercise 7

**Do you know much about the United Kingdom's healthcare system?
Try to guess the answer to these questions about the United Kingdom:**

1. What is the difference between an "outpatient" and an "inpatient"?
2. Is treatment completely free in the United Kingdom?
3. What is a referral and when does it take place?
4. Who forms the "practice team"?

Exercise 8

Complete the sentences by using a word or phrase from the box below:

Bother
Can I just
Clear
Come and have
Dealing
Do you think
Excuse me
I can see
Is it OK
Opened / Open
Reached
Sorry to
Stick
Use
Would you mind
Write

1. _____ I could possibly _____ your office?
2. I'm _____ you, but could you please give me a hand?
3. _____, could you please _____ a look at this medical record?
4. _____ that you are busy now, but _____ check something with you so that I can _____ up my notes?
5. _____ if I _____ your things off your desk?
6. _____ if I _____ the window?
7. Please, _____ to the point. What do you mean? We don't have much time.
8. I see your point but an agreement must be _____ by the end of today.
9. I'm sorry, I don't want to meddle, I don't like _____ with conflicts.

Exercise 9

Deciding how to approach different people for help or to offer help in another language can be tricky. Try to be polite in the following situations:

- a. Ask a group of colleagues if you can open the window / door.
- b. Ask a colleague if you could use their laptop / computer.
- c. Ask someone you do not know very well if you could borrow their notepad / notebook / notes. Justify why you are asking.
- d. You are a GP and you ask a colleague (a consultant / specialist) about a patient you referred to him last week.
- e. Interrupt two colleagues chatting who you do not know well and ask them for help with a patient.
- f. Interrupt a colleague you know quite well and ask them to make a request.
- g. Offer help to a colleague who has just joined the team.

Exercise 10

In groups, role play the following situations:

1. A physiotherapist, a nurse, and a doctor are trying to establish some guidelines for a patient who has just suffered from an ictus and has mobility problems.
2. Later on, these three professionals have a meeting with the patients' wife to explain to her the care that her husband needs as well as the exercises that he has to do daily.

Exercise 11

Discuss the following topics with your partner:

- a. The importance of doing exercise daily and the problems of a sedentary lifestyle.
- b. The risks and benefits of exercise.
- c. Ways in which a person could do more exercise in their daily life.

Exercise 12

Can you say what these people do?

1. An allergist or allergologist is ...
2. An anaesthetist or anaesthesiologist is ...
3. A cardiologist is ...
4. A chiropodist or podiatrist is ...
5. A consultant or specialist is ...
6. A dentist is ...
7. A dermatologist is ...
8. A dietician is ...
9. An ENT specialist (i.e. ear, nose, throat specialist), or an otolaryngologist, or an otorhinolaryngologist is ...
10. A GP, which stands for "general practitioner", is ...
11. A gynaecologist is ...
12. An internist is ...
13. A midwife is ...
14. A nephrologist is ...
15. A neurologist is ...
16. A nurse is ...
17. An oncologist is ...

18. An ophthalmologist is ...
19. An orderly is ...
20. An orthopaedic surgeon is ...
21. A paediatrician is ...
22. A physiotherapist or a physical therapist is ...
23. A pneumologist or pulmonologist is ...
24. A psychiatrist is ...
25. A psychologist is ...
26. A radiologist is ...
27. A rheumatologist is ...
28. A speech and language therapist or a logopedist is ...
29. An urologist is ...

Exercise 13

Have a look at this short abstract (Wu et al. 2017) and highlight the different parts that we've studied in the unit (Background/Introduction); Materials and Methods; Results/Discussion; and Conclusion).

The aim of the study was to determine whether applying an assistance force to the pelvis and legs during treadmill training can improve walking function in children with cerebral palsy.

Twenty-three children with cerebral palsy were randomly assigned to the robotic or treadmill-only group. For participants who were assigned to the robotic group, a controlled force was applied to the pelvis and legs during treadmill walking. For participants who were assigned to the treadmill-only group, manual assistance was provided as needed. Each participant trained three times/wk for six wks. Outcome measures included walking speed, six-min walking distance, and the clinical assessment of motor function, which were evaluated before and after training, and eight wks after the end of training, and were compared between two groups.

Significant increases in walking speed and six-min walking distance were observed after robotic training ($P = 0.03$), but no significant change was observed after treadmill-only training. A greater increase in six-min walking distance was observed after robotic training than that after treadmill-only training ($P = 0.01$).

Applying a controlled force to the pelvis and legs, for facilitating weight-shift and leg swing, respectively, during treadmill training may improve walking speed and endurance in children with cerebral palsy.

Exercise 14

This is an extract from a specialised paper on lower back pain. Fill in the gaps using the words and expressions below.

acute
all
at least
burden
by
came into
disabled
estimates
for
former
leading
of
of
on how LBP
prevalence
provided
recurrent
reportedly
seek
seeking
self-limiting
sole
sought
suggests
surveyed
undertake
while
with

Lower Back Pain

(1) _____ of the prevalence and incidence of LBP vary widely, depending (2) _____ is defined and the populations studied. The available data (3) _____ that between 49% and 90% of people in developed countries will experience (4) _____ one episode of LBP during their lifetime.⁵⁻⁹ As back pain is often more (5) _____ than (6) _____ and (7) _____, and its management can be complex and costly for the individual, the healthcare system, and society. In the United States, back problems are associated with nearly one-quarter of all lost work days.⁸ Back pain is now the second (8) _____ cause of work absenteeism, and approximately 2% of American adults are either temporarily or chronically (9) _____ by LBP.⁸ Canadian data^{10,11} indicates that the prevalence (10) _____ and clinical course for LBP are similar in Canada as in other developed countries. The significant economic burden to society consists largely (11) _____ the indirect costs associated with employee absenteeism and disablement.^{6,12}

In Alberta and Saskatchewan, close to 40% of patients with back pain (12) _____ help from a healthcare provider.⁹ Primary-care physicians (13) _____ the initial evaluation in 65% of LBP cases and are often the (14) _____ care provider for these patients.^{10,13} It has been estimated that 2% of patients with acute LBP initially seek PT services;¹⁴ the same study found that those initially (15) _____ PT services for acute LBP typically present (16) _____ higher baseline disability scores.¹⁴ A recent telephone survey (17) _____ MPT students at the University of Alberta asked participants who had experienced LBP about their care-seeking behaviour. Only 38% of participants had (18) _____ medical attention for their last episode of LBP.¹⁵ PT was (19) _____ used by 3% of those (20) _____, (21) _____ 31% sought care from a medical doctor, and 28% sought care from a chiropractor.¹⁵ In 2008, the province of Alberta began working to amalgamate the nine existing health regions into one provincial health region, now called Alberta Health Services. This amalgamation officially (22) _____ effect on June 1, 2009. Data from one of the (23) _____ rural Alberta health regions indicate that LBP was the primary complaint (24) _____ approximately 15% of patients seen in publicly funded outpatient PT departments.¹⁶ Data (25) _____ by a former urban health region in Alberta suggest that LBP was the chief complaint for between 20% and 31% of the population receiving publicly funded musculoskeletal PT services.¹⁷

The (26) _____ of LBP, the (27) _____ it places on people and their families, and the varied strategies used to manage this condition (28) _____ underscore the importance of informing primary-care practitioners about the best evidence in the management of LBP.¹⁸

Source: G. Cutforth, A. Peter, and P. Taenzer. 2011. “The Alberta Health Technology Assessment (HTA) Ambassador Program: the Development of a Contextually Relevant, Multidisciplinary Clinical Practice Guideline for Non-specific Low Back Pain: a Review.” *Physiother Can.* 63 (3): 278–86.

Phonetics: Word stress and Rhythm

WORD STRESS

In English, syllables of a word are not pronounced with equal force. One syllable is more prominent than the others. For example, in the word “muscle”, the first syllable is stressed /'mʌsəl/. Please note that stress is represented with a vertical upper mark which is placed right before the stressed syllable.

The second syllable of “muscle” remains unstressed. It is a weak syllable. “Schwa” is the most common weak vowel of English. For example, the first syllable of “about” /ə'baʊt/ is weak, as are the second and third syllables in “medicine” /'medəsən/.

Placing the stress in the correct place is important, because otherwise:

- The word can be very difficult to understand.
- The meaning or type of the word can change (the *transport*, vs. to *transport*).

Primary stress patterns

There are patterns in word stress in English but we can't say there are fixed rules, since many exceptions can be found. Here are some guidelines that can help you understand where to put the stress, but bear in mind that there are many exceptions.

1. Two-syllable nouns are usually stressed on the first syllable (e.g. *import*, *export*, *increase*, *transport*, *contract*, *object*, *present*, etc.), whereas two-syllable verbs are usually stressed on the second one (e.g. *import*, *export*, *increase*, *transport*, *contract*, *object*, *present*, etc.).
2. Two-syllable adjectives are frequently stressed on the first syllable (e.g. *current*, *clever*, *happy*, etc.)
3. Derivative words have different patterns depending on the suffix added.
 - a. Some suffixes don't change the stress.
 - (1) -er: *driver*
 - (2) -free: *carefree*

- (3) -ful: *thoughtful*
- (4) -less: *careless*
- (5) -ous: *courageous*
- b. Some suffixes move the stress to a different syllable.
 - i. For example, these suffixes put the stress on the penultimate syllable.
 - (1) -ic: *graphic, geographic, artistic, economic, magnetic*
 - (2) -sion: *television*
 - (3) -tion: *revelation, intuition*
 - ii. These suffixes put the stress on the ante-penultimate syllable.
 - (1) -cy: *democracy*
 - (2) -ty: *possibility*
 - (3) -phy: *geography*
 - (4) -gy: *geology*
 - (5) -al: *critical, natural*
- c. Some suffixes take the stress onto themselves.
 - (1) -ette: *cigarette*
 - (2) -ee: *referee*
- 4. Regarding compounds, the following rules can be stated (although there are several exceptions):
 - a. For compound **nouns**, the stress is on the **first** part (e.g. *blackboard, greenhouse*)
 - b. For compound **adjectives**, the stress is on the **second** part (e.g. *bad-tempered, old-fashioned*)
 - c. For compound verbs, the stress is on the second part (e.g. *understand, overview*)

For a few words, native English speakers don't always "agree" on where to put the stress. For example, some people say *teleVISION* and others say *TELEvision*. Another example is: *CONtroversy* and *conTROversy*, *kiloMETre* and *kiLOmetre*, *Aristocrat* and *arISTocrat*.

Secondary stress

Long words and compounds usually have a secondary stress. This is a stress which is less prominent than the primary stress. The symbol for secondary stress is a short vertical line preceding and at the foot of the secondarily stressed syllable. For example:

- ‚Afterˈnoon
- ‚Euroˈpean

RHYTHM

As happens with syllables in a word, in a sentence, words are not equally stressed. Some words are more prominent than others. Words that receive stress are called **CONTENT words**. They express the main meaning of the sentence. They are usually *nouns, verbs, adjectives, adverbs, and pronouns* (demonstrative, possessive, reflexive, and interrogative).

On the other hand, **FUNCTION words** are weaker and shorter. They are less important in expressing the meaning of the sentence. They are *auxiliary verbs, prepositions, conjunctions, determiners, and possessive adjectives or pronouns*.

Some languages have a syllable-timed rhythm and others have a stressed-timed rhythm. In **SYLLABLE-TIMED LANGUAGES** (like Spanish), the *syllables have the same length* (consequently, the number of syllables determines the length of time required to utter something). In **STRESSED-TIMED LANGUAGES** (like English), speakers try to leave the *same amount of time between the stressed syllables*. If there are many unstressed syllables in the middle, they will be spoken faster (so that the speaker can keep the rhythm). The time it takes to say something depends on the number of stressed syllables (not the number of syllables).

Examples (please note the stressed words):

- *I have never liked the colour orange.*
- *Bicycles can be dangerous to drive or ride on.*
- *When are you coming to dinner?*
- *Not everyone likes fish pudding, but I do.*

For rhythmical reasons (in order to avoid two stresses together), sometimes stress shift may be required. In a word with two stresses (a primary stress preceded by a secondary stress), the primary stress moves to the position in which the secondary stress was.

- ‚Afterˈnoon + ˈtea = ˈafternoon ˈtea
- ‚Euroˈpean + ˈactors = ˈEuropean ˈactors

Pronunciation of auxiliary verbs and modal verbs in a sentence

Modal verbs and auxiliary verbs are always weak in affirmative sentences, but stressed in negative sentences. Compare these sentences:

- *I can go. (Unstressed)*
- *I can't go. (Stressed)*
- *Can I go? (Stressed)*
- *How can I go? (Unstressed)*

Careful with the pronunciation of compound auxiliary verbs. Practise saying these sentences and make sure that “have” remains weak:

- *I should have stayed at home.*
- *I would have gone.*

The particle in phrasal verbs is always stressed:

- *I get up at 7 am every day.*
- *Does anything bring it on?*

PRACTICE

Exercise 1

Mark the stress in these words:

Specialised words

1. Biceps:
2. Bronchioles:
3. Colonoscopy:
4. Coracobrachialis:
5. Cuneiform:
6. Duodenum:
7. Endoscope:
8. Endoscopic:
9. Endoscopy:
10. Mediastinum:
11. Metacarpus:
12. Pectoralis:
13. Prominence:
14. Saphenous:

15. Spinal cord:
16. Tracheostomy:
17. Upper arm:
18. Urinary:
19. Vasectomy:
20. Vertebrae:
21. Windpipe:

Frequent derivative words

1. photograph
2. photography
3. photographer
4. photographic
5. pain
6. painful
7. nature
8. natural
9. effort
10. effortless
11. courage
12. courageous
13. alcohol
14. alcoholic
15. invincible
16. invincibility
17. engine
18. engineer
19. refer
20. referee

Exercise 2

Read these sentences aloud keeping the same rhythm in all of them:

She's bought a dress.

She's bought a dress for his birthday.

She's bought a dress for his birthday today.

She's bought a dress for his birthday today in a new shop.

Exercise 3

Please read aloud these sentences. Pay special attention to weak forms. (Source: Baker, Ann. 2006. *Ship or Sheep? An intermediate pronunciation course*. Cambridge: CUP)

1. OO

Ann, Tom

2. OoO

Ann and Tom

3. OooooOo

Annabelle and Tomas

4. OooooO

There's Annabelle and there's Tomas

5. ooOooooOo

Well there's Annabelle and then there's Tomas

6. oooOooooooooOo

Well first there's Annabelle and then there's also Tomas

7. oooooOooooooooooooOo

Well, first of all, there's Annabelle and then you know there's also Tomas.

Exercise 4

Read these sentences with an appropriate rhythm.

1. *What time did you say she arrived?*
2. *How will she know where to find him?*
3. *If I rented a house in Germany in the summer, would you come and stay a weekend?*
4. *Do you think you'll be able to fix it soon?*
5. *Will it be a problem if we stay for lunch and dinner?*

Exercise 5

Underline the stressed syllables in these sentences. Read them stressing the correct syllable, and remember to distress (and shorten) the weak syllables.

1. *What's your name?*
2. *When did the pain come on?*
3. *How long has it been bothering you?*
4. *Have you had the pain before?*
5. *What seems to bring it on?*
6. *What about coughs or wheezing or shortness of breath?*
7. *Apart from that, are there any other problems?*
8. *Does lying down help the pain?*
9. *Does it come on at any particular time?*
10. *Would you strip to your waist, please?*
11. *Could you bend down and touch your toes, please?*

For further information and extra practice on English phonetics please refer to Mott 2005, Hewings 2007, Hancock 2009 and Roach 2009.

UNIT 4

INFINITIVE VS. GERUND, REPORTED SPEECH; OBJECTS, DEVICES AND MATERIALS; INTONATION

Grammar: Infinitive vs. Gerund and Reported Speech

THEORY

GERUNDS AND INFINITIVES

Some verbs are followed by an infinitive, whereas others are followed by a gerund. The following are some guidelines.

Verbs followed by an infinitive	Verbs followed by a gerund (remember the spelling rules for gerunds, explained in Unit 1)
After adjectives: <i>It is important to know the reason.</i>	When the verb is the nucleus of the subject: <i>Smoking is bad for you.</i>
After the preposition “to” (except after “look forward to”): <i>To be or not to be.</i> <i>I look forward to hearing from you.</i>	After prepositions (except “to”): <i>Before going to bed, I brush my teeth.</i>
After certain verbs (afford, agree, ask, choose, decide, demand, expect, forget, help, hope, learn, manage, need, offer, plan, prepare, pretend, promise, refuse, remember, seem, try, wait, want, would hate, would like, would love):	After certain verbs (admit, appreciate, avoid, can’t help, can’t stand, consider, delay, deny, discuss, dislike, enjoy, fancy, feel like, finish, hate, keep, like, love, mind, miss, postpone, practise, prefer, recommend, risk, spend time, stop, suggest):

<i>I want to go.</i>	<i>I enjoy reading. He enjoys not working.</i>
To show purpose: <i>I came to England to study English. He decided not to go.</i>	

Some verbs are used in the infinitive WITHOUT “to”:

- After modal verbs: *I can jump.*
- After “let”, “make” and “help”: *Don’t make me cry.*
- After verbs of perception (see, watch, here, notice, feel, sense): *I saw them walk away.*
- After expressions with “why”: *why study English?*

Some verbs can be followed by a gerund or an infinitive without a change in meaning. For example:

- Some people prefer getting up early in the morning.
- Some people prefer to get up early in the morning.

Some verbs can be followed by the gerund or infinitive but with a change in meaning. Here you have some examples:

Try + to <i>Try to take this pill (it is very big, I don’t know if you’ll manage).</i>	Try + ing <i>Try taking this pill (and let’s see the results).</i>
Remember + to <i>I remembered to phone him (and I did).</i>	Remember + ing <i>I remembered phoning him last year (= having phoned).</i>
Advised + to <i>I advised him to do the exercise (to a specific person).</i>	Advised + ing <i>I advised doing the exercise (in general).</i>
Like + to <i>I like to fasten my seat belt even when I drive in the city.</i>	Like + ing <i>I like travelling (I enjoy it).</i>
Stop + to <i>I stopped to do a different thing.</i>	Stop + ing <i>Stop sleeping! You’re at work!</i>

REPORTED SPEECH

Reported speech is used to report what another person has said. When the reporting verb (said, told, etc.) is in the past tense, the tense of the verb in the reported sentence changes.

Tense in direct speech	Example	Tense in reported speech	Example <i>He said that ...</i>
Present Simple	I like carrots.	Past Simple	... she liked carrots.
Present Continuous	I am living in Paris.	Past Continuous	... he was living in Paris.
Past Simple	We bought a car.	Past Perfect	...they had bought a car.
Past Continuous	I was walking along the Street.	Past Perfect Continuous	...she had been walking along the street.
Present Perfect	You haven't seen Julie.	Past Perfect	... they hadn't seen Julie.
Present Perfect Continuous	I have been waiting for you for ages.	Past Perfect Continuous	...he had been waiting for me for ages.
Past Perfect	He had taken English lessons before.	Past Perfect	... he had taken English lessons before.
Past Perfect Continuous	Before going to bed, he had been watching a film on TV.	Past Perfect Continuous	...before going to bed, he had been watching a film on TV.
Future (Will)	I'll see you later.	Conditional (Would)	... she would see me later.
Conditional (Would)	We would help, but we can't.	Conditional (Would)	... they would help but they can't.
Perfect Conditional (Would have)	If I had known that, I would have told you.	Perfect Conditional (Would have)	...if he had known that, he would have told me.

Can	I can speak perfect English.	Could	... he could speak perfect English.
Could	They could swim when they were four- she said.	Could	... they could swim when they were four.
Shall	I shall come later.	Would	... she would come later.
Should / Ought to	We should call our mother.	Should / Ought to	... they should call their mother.
May	He may come.	Might	...he might come.
Might	I might be late.	Might	... she might be late.
Must	I must study at the weekend.	Had to	...she had to study at the weekend.

Remember that pronouns may be required to be changed according to the context. In addition, if we report what someone said on a different day or place, some words may change. For example:

- “I will check *your* blood pressure *now* and *tomorrow* I will take *you* an X-ray here”, *the doctor* said.
The doctor said *he* would check *my* blood pressure *then* and *the following day* he would give *me* an X-ray.
- “I have broken *my* leg”, Anne said
She said that *she* had broken *her* leg.
- “We don’t like *you*”, *they* said.
They said that *they* didn’t like *you / her / him / them*. (The selection of the pronoun here depends on the person addressed by the speaker.)

If the situation has not changed since the speaker said the sentence, no changes may be required. For example:

- “I will go to London tomorrow”, I declared.
I declared that I will go to London tomorrow (for example, if I report the sentence just five minutes after saying it).

Here you have some of the most frequent changes:

Direct Speech	Reported Speech
now	then / at that time
today	yesterday / that day
yesterday	the day before yesterday / the day before / the previous day
last night	the night before
last week	the week before / the previous week
tomorrow	today / the next day / the following day
next week	the following week
last week	the previous week / the week before
ago	before
here	there
this	that

There are different introductory verbs. Remember that after “said”, a person or object pronoun cannot be used. A preposition is required before the pronoun. For example: ~~He said me ...~~ > He said to me.

However, after “told”, a pronoun must always be used. For example: ~~He told to me ...~~ > He told me.

When a different reporting verb is used, there are three possible structures:

TO + INFINITIVE	PERSON + TO + INFINITIVE	-ING FORM
Agree*	Advise	Accuse somebody of
Argue*	Ask	Admit*
Claim*	Convince	Apologize (to somebody) for
Confirm*	Encourage	Blame somebody for
Offer	Invite	Deny*
Order	Persuade	Insist on
Promise*	Remind	Recommend
Refuse	Tell	Regret*
Threaten	Warn	Suggest

* With these verbs, “that + clause” can also be used.

When reporting a question, tenses also change. If it is a WH- question, the WH- particle must be included. If it is a yes/no question, “if” or “whether” must be added.

- What is your name? The doctor asked me.
- The doctor asked me what my name was.

In commands, the verb “told” is used followed by “to”.

- Get up.
- He told me to get up.

PRACTICE

Exercise 1

Fill in the gaps with the appropriate form of the verb.

1. After _____ exercise, I feel great and relaxed. (*do*)
2. She was a hardened smoker, but she gave up _____ two years ago. (*smoke*)
3. I know how important it is for you _____ to that conference, but you must _____ in bed for a few days. (*go / stay*)
4. It is difficult to _____ the cause of the illness. (*determine*)
5. _____ marathons can _____ your joints. (*run / damage*)
6. On Fridays our teacher let us _____ early. (*leave*)
7. _____ is a very good exercise for your back. (*swim*)
8. I came to London to _____ English. (*study*)
9. The taxi driver admitted _____ driven too fast. (*have*)
10. If the children carry on _____ so badly, they may need help. (*sleep*)

Exercise 2

Fill in the gaps with the appropriate form of the verb.

1. The government can't afford _____ a new hospital. (*build*)
2. The surgeon denied _____ on the patient in such a bad condition. (*operate*)
3. Researchers recommend _____ half an hour a day to prevent any cardiovascular diseases. (*walk*)
4. The patient agreed _____ such a treatment. (*undergo*)
5. Do you remember _____ the patient to change her appointment? (*phone*)
6. The nurse prepared the patient _____ on. (*be operated*)
7. The child couldn't help _____ in front of the doctor. (*sneeze*)

8. The doctors expected the patient _____ soon. (*recover*)
9. I delayed _____ her the bad news. (*tell*)
10. The orderly waited outside for the patient _____ ready. (*be*)
11. The nurse enjoys _____ in the paediatric ward because she loves children. (*work*)
12. The hospital director avoided _____ the works in winter because of the flu season. (*start*)
13. The relatives refused _____ the informed consent. (*sign*)
14. The trainee learnt very quickly how _____ the procedure. (*do*)
15. Doctors managed _____ with the problem and cured the patient. (*deal*)
16. The patient was asked _____ from among the different treatments available. (*choose*)
17. It seems that hospital uniforms make children _____. (*cry*)
18. The nurse forgot _____ the drugs to the patient in room 203. (*give*)
19. The patient's relatives hope _____ an answer soon. (*get*)
20. The doctors promised _____ a prognosis as soon as they have the test results. (*give*)
21. Too much time was spent _____ the health professionals how to use the new machinery. (*teach*)
22. The nurse helped the patient _____ on the wheelchair. (*sit*)
23. Mary stopped _____ as soon as she took the syrup. (*cough*)
24. The orthopaedic surgeon keeps _____ a prosthesis might help. (*say*)
25. With this intervention, the surgeon would like _____ the quality of life of the patient. (*improve*)
26. The team suggested _____ for research funds. (*ask*)
27. The physiotherapist was happy because the patient had remembered _____ the exercises. (*do*)
28. The dentist is considering _____ a tooth out. (*take*)
29. The doctor let the patient _____ solid food just two days after the intervention. (*eat*)
30. "Try _____ this pill. I think it can help you." (*take*)

Exercise 3**Change these sentences into the reported speech.**



1. "Take off your clothes from your waist up", the doctor asked the patient.
2. "You must get vaccinated against the flu" her GP advised her.
3. "Would you mind to come tomorrow instead of on Friday?" the receptionist asked me.
4. "Don't carry heavy bags", the physiotherapist recommended me.
5. "Mary broke her arm last year", her father said.
6. "Let's go cycling!", Paul suggested.
7. "You will damage your back if you do this", the grandfather warned the child.
8. "I wouldn't go to that party if I were you. You must stay at home until you are better", my mum told me.
9. "You must cut down on fats because your cholesterol levels are high", my GP told me.
10. "Whereabouts is the pain?", the consultant asked the patient.
11. "Take some painkillers if the pain goes on", the doctor told Anne.
12. "I should not have gone!", Jim regretted.
13. "Would you like to come?", he asked me. "No, thank you", I replied.
14. "You should keep active", the doctor encouraged him.
15. "Why don't you try going to the gym?", the dietician recommended.
16. "In five years' time you will have developed a serious illness if you don't give up smoking now!", the doctor warned the patient.
17. "You won't have any chocolate tomorrow if you don't go to bed", the grandmother threatened the child.
18. "I will always help you", my teacher promised.
19. "Do you want to join us?", Matt said.
20. "Do you need any help?", my colleague asked.
21. "When did you first notice the pain?", the doctor asked.
22. "Open your mouth", the dentist ordered.
23. "Do you usually have headaches?", the neurologist asked.
24. "You should do exercise every day", the doctor recommended.
25. "When did the pain start?", the doctor asked.
26. "Lie on the couch.", the nurse ordered.
27. "Don't breathe", the X-ray technician asked.
28. "Have you fainted?", the doctor asked.
29. "I am afraid you need some antibiotics", the urologist pointed out.
30. "You must drink two litres of water a day", the doctor informed me.




Health Sciences: Objects, Devices and Materials

THEORY

Here you have some objects, devices, and materials frequently used in the medical field. How many can you name?


ELEMENTS IN A DOCTOR'S OFFICE

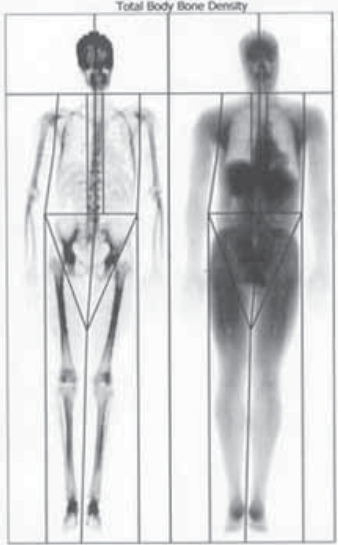
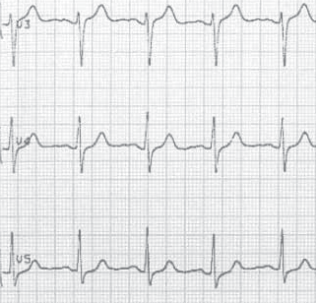

CABINET	 A photograph of a white medical cabinet. It features a sink with a faucet on the left side, a wall-mounted hand sanitizer dispenser above the sink, and several drawers and cabinets below. The cabinet is clean and modern.
COUCH	 A photograph of a medical examination table, also known as a couch. It is a long, adjustable table with a dark, padded surface. The table is mounted on a metal frame with wheels. There is a small table next to it and a stool in front of it.

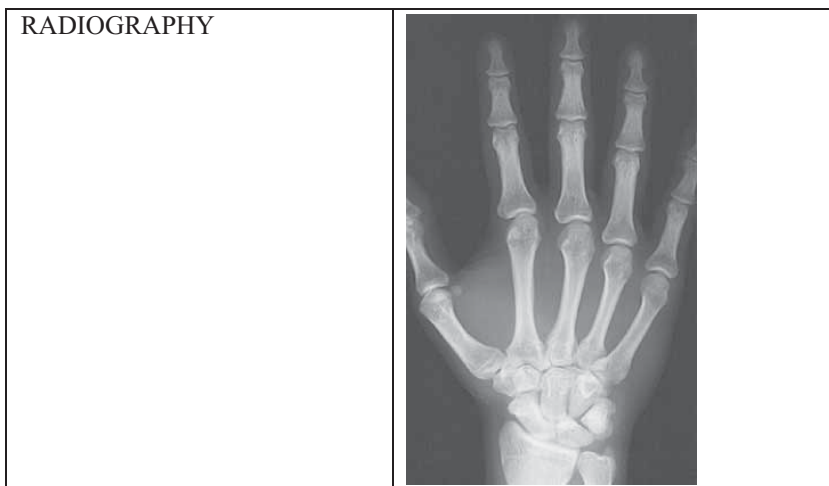
<p>DESK</p>	
<p>FILING CABINET</p>	
<p>GLASS CABINET</p>	

SINK	
STOOL	
STRETCHER	

DIAGNOSTIC TESTS


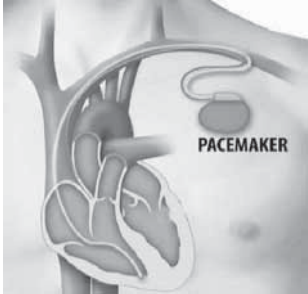

ECHOGRAPHY	
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<p>DENSIOMETRY</p>	 <p>Total Body Bone Density</p> <p>The image shows two side-by-side grayscale scans of a human body. The left scan is a skeletal X-ray, and the right scan is a densitometry scan. Both scans have vertical lines overlaid on the body, indicating the measurement path for bone density. The title 'Total Body Bone Density' is centered at the top.</p>
<p>ELECTROCARDIOGRAM (ECG)</p>	 <p>The image displays three horizontal ECG (heart rate) tracings on a grid background. The top tracing is labeled '03', the middle '04', and the bottom '05'. Each tracing shows a regular rhythm with distinct P waves, QRS complexes, and T waves.</p>
<p>MAGNETIC RESONANCE IMAGING (MRI)</p>	 <p>The image shows a large, circular MRI scanner in a clinical setting. A patient is lying on a table that is positioned inside the scanner's gantry. The room is dimly lit, and the scanner is the central focus.</p>





IMPLANTED MATERIAL OR USED BY A PATIENT



<p>OSTHEOSYNTHESIS</p>	 An X-ray image of a humerus (upper arm bone) showing a locking plate and multiple locking screws used for osteosynthesis. The plate is attached to the shaft of the bone, and the screws are inserted into pre-drilled holes in the bone.
<p>PACEMAKER</p>	 A diagram illustrating a pacemaker implanted in the chest. The pacemaker is shown as a small rectangular device connected to the heart by leads. The word "PACEMAKER" is written in bold capital letters next to the device. The diagram shows the heart and the major blood vessels.
<p>PLASTER CAST</p>	 A photograph of a hand and forearm wrapped in a white plaster cast. The cast covers the entire forearm and extends up to the wrist and down to the base of the hand. The fingers are visible and appear to be in a slightly flexed position.






<p>PROSTHESIS</p>	
<p>SLING</p>	
<p>SPLINT</p>	


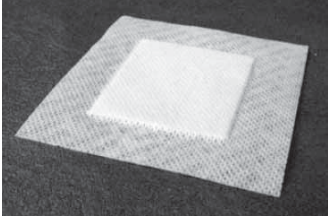


WHEELCHAIR	
WRIST BRACE	




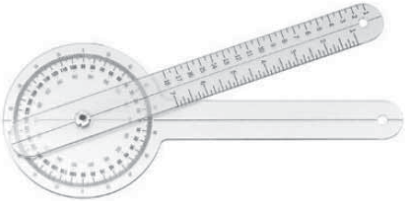

OBJECTS






ALCOHOL	
ANTISEPTIC	






<p>AUTOCLAVE</p>	
<p>BANDAGE (TUBULAR, COHESIVE, ELASTIC, CREPE)</p>	
<p>BEDPAN</p>	
<p>BIN</p>	
<p>BLOOD LANCET</p>	







BLOOD PRESSURE MONITOR	
CENTRAL VENOUS CATHETER	
COTTON	
CUSHION	
DEFIBRILLATOR	




<p>DISPOSAL CONTAINER</p>	
<p>DRESSING</p>	
<p>DYNAMOMETER</p>	
<p>FOLEY CATHETER</p>	

FORCEPS	
GAUZE	
GLUCOSE METRE / GLUCOMETRE	
GONIOMETER	
INSTRUMENTS	

NEEDLE	
TREATMENT TROLLEY / TREATMENT CART	
OFFICE MATERIAL	
OTOSCOPE / AURISCOPE	
PHONENDOSCOPE	




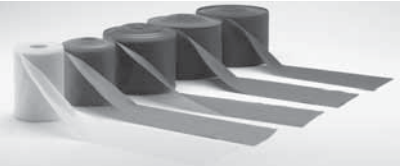
PILLOW	
PODOSCOPE	
RECYCLING CONTAINER	
REFLEX HAMMER	
SCALPEL	




SCISSORS	
SOAP	
STICKING PLASTER	
SYRINGE	
TAPE (PRETAPE, FOAM, SURGICAL TAPE)	
THERMOMETER	






TOURNIQUET	
TOWEL	
VOMIT BOWL / THROW-UP BOWL	






OBJECTS FOR PHYSIOTHERAPY TREATMENT

BALL	
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<p>BOSU BALL</p>	
<p>CERVICAL TRACTION</p>	
<p>ELLIPTICAL BICYCLE</p>	
<p>EXERCISE BANDS</p>	

FINGER LADDER	
GYM BALL	
HAND, WRIST, AND FORARM TABLE (KANAVEL TABLE)	

MEDICINE BALL	
PARAFFIN	
PARALLEL BARS	
QUADRICEPS CHAIR	
RAMP AND STAIRS	

<p>SANDBAG / (CUFF / WRIST WEIGHT - ANKLE WEIGHT – BODY WEIGHT)</p>	 Three cylindrical sandbags are shown in a row. The first is labeled '3KG', the second '4KG', and the third '5KG'. They are dark-colored with lighter-colored bands around the middle.
<p>SHOULDER WHEEL</p>	 A shoulder wheel exercise machine is shown. It features a large white wheel with a central hub and a handle. The machine is mounted on a metal frame.
<p>STATIONARY BICYCLE</p>	 A stationary exercise bicycle is shown. It has a black frame, a silver flywheel, a black seat, and a black handlebar with a digital display. The pedals are black.
<p>STEPS</p>	 A pair of white exercise steps is shown. Each step has a black mat on top and a white frame with four legs. The steps are of different heights.
<p>THERAPY PUTTY</p>	 Three pieces of therapy putty are shown. One is dark grey, one is light grey, and one is white. They are shaped into various forms, including a ball and a flattened disc.

<p>TREADMILL</p>	
<p>UNSTABLE PLATFORMS (WOBBLE BALANCE BOARD; BALANCE BOARD; DYNAIR / BALL CUSHION / STABILITY DISC)</p>	
<p>WALL BARS</p>	

PRACTICE**Exercise 1**

Test your partner. Point at some pictures so that your partner can say the name of each in English.

Exercise 2

Describe one object to your class (uses, features, etc.) so that they can guess what it is.

Exercise 3

Explain the meaning of these words, all of them are related to types of DOCUMENTS:

- Medical history / Case history / Medical record / Health record / Medical chart
- Anamnesis
- Treatment
- Diagnosis
- Procedure
- Intervention
- Diagnostic tests
- Prognosis
- Evolution
- Assessment tests
- Visual Analogue Scale (VAS)

Exercise 4

Classify the following items under “drugs”, “elements to administer drugs”, or “procedures and therapies”:

- Anti-inflammatory
- Corticoid / Corticosteroid
- Diabetes medications
- Electrotherapy (ultrasound therapy, TENS, pulsed short wave therapy, extracorporeal shock wave therapy, pulsed electromagnetic field therapy, microwave, diathermy, interferential [current, IFC])

therapy, iontophoresis, LASER [Light Amplification by Stimulated Emission of Radiation], magnetotherapy, infrared, TENS [Transcutaneous Electrical Nerve Stimulation])

- Hypertension medications / High Blood Pressure Medications
- Inhaler
- Joint mobilization (passive, active, active-assistive, thrust)
- Kinesiotherapy
- Manual therapy
- Mechanotherapy
- Medications used to treat hypercholesterolemia
- Ointment
- Paraffin
- Pill
- Syringe (Injection)
- Tablet
- Taping
- Therapeutic exercise

Exercise 5

What element is being defined in each of these cases? (definitions taken from the Cambridge Dictionary)

- (1) _____: a device used as a circus skill, for recreation, balance training, athletic training, brain development, therapy, musical training and other kinds of personal development.
- (2) _____: a flat dish used as a toilet by people who are too ill to get out of bed.
- (3) _____: a small medical implement used to make punctures and get capillary blood samples.
- (4) _____: a device used to measure blood pressure.
- (5) _____: a long, very thin tube used to take liquids out of the body.
- (6) _____: sticks with a piece that fits under the arm. You lean on that piece for support if you have difficulty in walking because of a foot or leg injury.
- (7) _____: a covering that is put on a cut or an area of damaged skin to protect it.
- (8) _____: a drawing or electronic image made by an electrocardiograph.

- (9) _____: a large piece of furniture in an office, used for holding documents.
- (10) _____: a metal instrument with two handles used in medical operations for picking up, pulling, and holding things.
- (11) _____: a very thin, light cloth, used to make clothing, to cover cuts and to separate solids from liquids, etc.
- (12) _____: a system for producing electronic pictures of the organs inside a person's body, using radio waves and a strong magnetic field.
- (13) _____: an externally applied device used to modify the structural and functional characteristics of the neuromuscular and skeletal system.
- (14) _____: medical device used to look into the ears.
- (15) _____: a piece of equipment used in gymnastics, consisting of two horizontal bars fastened to four poles and used for exercising and competing.
- (16) _____: A stethoscope (an acoustic medical device for auscultation, or listening to the internal sounds of an animal or human body) that intensifies auscultatory sounds.
- (17) _____: a covering made of plaster of Paris that is put around part of someone's body, forming a hard case to protect them while a broken bone repairs itself.
- (18) _____: a chair with different weights to work the quadriceps.
- (19) _____: a bag filled with sand to attach to your wrist or ankle so that you can do exercise with extra weight.
- (20) _____: a very sharp knife that is used for cutting through skin and flesh during an operation
- (21) _____: a bowl that is attached to the wall in a doctor's office in which you wash dishes or your hands, etc.
- (22) _____: a device for supporting a broken or damaged arm in which the arm is held in front of the body in a piece of cloth that is tied around the neck.
- (23) _____: a long, flat object used as a support for a broken bone so that the bone stays in a particular position while it heals.
- (24) _____: a device with saddle, pedals, and some form of handlebars arranged as on a bicycle, but used as exercise equipment rather than transportation.
- (25) _____: a piece of material that you can put over a small cut to the skin in order to protect it and keep it clean.
- (26) _____: a seat without any support for the back or arms.

- (27) _____: a light frame made from two long poles with a cover of soft material stretched between them, used for carrying people who are ill, injured, or dead.
- (28) _____: an occupational therapy tool to improve grip strength, dexterity, and hand strengthening through finger, hand, and wrist resistive exercises.
- (29) _____: an exercise machine that consists of a moving strip or two step-like parts on which you walk without moving forward.
- (30) _____: a multifunction device, made of timber, which is attached to a wall and has different bars to grab and do exercises.

Phonetics: Intonation

Intonation is very important for communication. It is also a largely unconscious mechanism, and as such, it can be considered a complex aspect of pronunciation. Intonation refers to the way we say things, rather than what we actually say.

Intonation is a “suprasegmental” feature of English. This means it is not a property of an individual segment, but it affects several lower-rank units (stresses, syllables, etc.) since it is related to expressions and thoughts.

Intonation can change the meaning of an utterance. There are different patterns of intonation, which utter different meanings. Each intonation pattern usually happens in the last lexical word (i.e. the nucleus of intonation). These patterns are mainly: falling, rising, falling-rising, and rising-falling.

Here are some general guidelines about the main uses of the intonation patterns in English:

- Falling
 - o Statements
 - o Commands
 - o Exclamations
 - o A high fall would mean that we want to be very clear about something.
 - o WH- question
- Rising
 - o Yes / No questions
- Fall-rise
 - o When we are not sure about something
 - o When we are not specifying everything in our statement (we are pondering something).
 - o When we may have more to add
 - o Questions and invitations (they are more polite)
 - o Long subjects
 - o Some adverbials
- Rise-Fall
 - o Irony
 - o Lack of responsibility or implication

There is even a “neutral tone” mainly used by machines or when we speak in a monotonous way).

If the nucleus of intonation falls in any other word different to the last lexical item, the meaning and the implications of the sentence can change drastically. Compare, for example:

- I study **E**nglish. (broad focus: normal sentence)
- I **s**tudy English. (narrow focus: “study” not “speak”)
- I **I** study English. (narrow focus: “I” not “he”)

PRACTICE

Exercise 1

Go to unit 2 and read all those questions using the correct intonation pattern. Remember: use rising intonation for yes/no questions, and falling intonation for WH-questions.

Exercise 2

Read this text aloud and pay special attention to the sounds (particularly the vowel sounds) and to the rhythm and intonation.

- A. I'm just off for a coffee, Neil. Is there anything you need?
B. Let's see ... what day is it?
A. Thursday. Why?
B. Well, I've read that the coffee provider was on strike on Thursday.
A. Oh, I wasn't going to the coffee machine.
B. Where are you going, then?
A. To the coffee shop, which is on the other side of the road.
B. Ah, I see. Bring me a bottle of juice, a sandwich, and a large black coffee, please. I have to be on duty tonight.
A. I will! See you then.
B. See you, and thanks.

Exercise 3

Go to the texts of this book and read them, making sure of:

- Distressing all weak forms (articles, prepositions, conjunctions, auxiliaries, etc.).
- Stressing all strong forms (nouns, verbs, adjectives, adverbs, etc.).
- Using falling intonation at the end of a statement.

Exercise 4

Audiobooks may be very helpful for improving pronunciation, rhythm, and intonation. We encourage you to listen to some BBC podcasts (<https://www.bbc.co.uk/podcasts>) and British Council podcasts (<https://learnenglish.britishcouncil.org/en/professionals-podcasts>) focusing on these issues. Then, you can try to imitate the pronunciation.

For further information and extra practice on English intonation please refer to Mott 2005 and Wells 2006.

KEYS

Unit 1

GRAMMAR

Exercise 1

- | | |
|----------------------------|--------------------|
| 1. Had bought | 10. Had forgotten |
| 2. Was going | 11. Had arrived |
| 3. Received | 12. Ran |
| 4. Were looking forward to | 13. Was filling in |
| 5. Decided | 14. Went |
| 6. Would go | 15. Hurried |
| 7. Got | 16. Caught |
| 8. Were checking in | 17. Enjoyed |
| 9. Had got | |

Exercise 2

- | | |
|---|-------------------------|
| 1. Presented | 6. Rested |
| 2. Located | 7. Hasn't |
| 3. Radiated | 8. Works |
| 4. Has been getting / had
been getting | 9. Smokes |
| 5. Used | 10. Is |
| | 11. Had been prescribed |

Exercise 3

- | | |
|--------------------------|------------|
| 1. Have been carried out | 6. Agree |
| 2. Are still dying | 7. Remains |
| 3. Warn | 8. Says |
| 4. Rose | 9. Marks |
| 5. Refused | 10. Says |

Exercise 4

- | | |
|----------------------|----------------------|
| 1. Have been married | 20. Is |
| 2. Has had | 21. Is not |
| 3. Keeps | 22. Accusing |
| 4. Has | 23. Driving |
| 5. Comes | 24. Was |
| 6. Wash | 25. Turned |
| 7. Dress | 26. Didn't recognise |
| 8. Says | 27. Called |
| 9. Am sleeping | 28. Coming |
| 10. Say | 29. Was |
| 11. Went into | 30. Felt |
| 12. Married | 31. Am |
| 13. Love | 32. Are |
| 14. Don't know | 33. Are |
| 15. Live | 34. Are |
| 16. Is | 35. Has |
| 17. Is | 36. Get |
| 18. Went through | 37. Helped |
| 19. Was | 38. Loved |

Exercise 5

- | | |
|-------------------|-----------------------|
| 1. works | 14. caused |
| 2. is | 15. will look / looks |
| 3. to help | 16. suggest |
| 4. treating | 17. do |
| 5. suggest | 18. relieve |
| 6. improve | 19. give |
| 7. taking | 20. to prevent |
| 8. maintaining | 21. have |
| 9. take | 22. maintaining |
| 10. looking | 23. doing |
| 11. focusing | 24. strengthen |
| 12. being treated | 25. help |
| 13. is | |

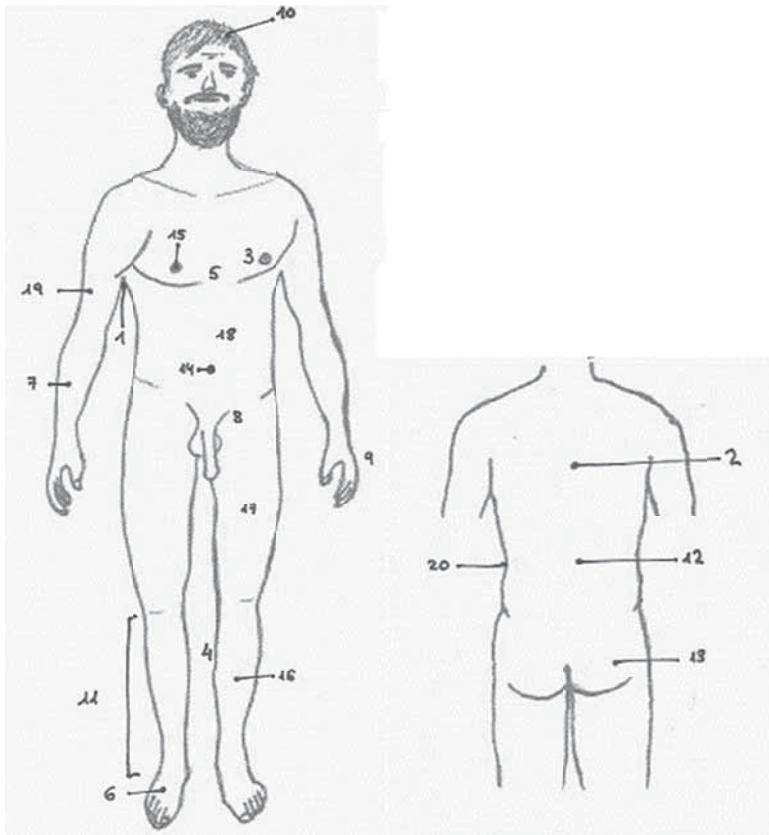
Exercise 6

1. came
2. working
3. had had
4. were
5. came
6. have never left
7. run
8. say
9. working
10. has been
11. are
12. treat
13. are
14. paid
15. knew
16. were
17. wanted
18. could
19. working
20. wasn't
21. says
22. need
23. didn't want
24. wanted
25. had been able
26. knew
27. was
28. has experienced
29. want
30. is
31. value
32. devalues
33. advises
34. have had
35. isn't
36. would be
37. says
38. has been
39. is finding
40. is paying off
41. used
42. have managed
43. refer
44. support
45. work
46. get
47. is / would be
48. haven't had
49. arrived
50. is
51. provides
52. lists
53. applying
54. is

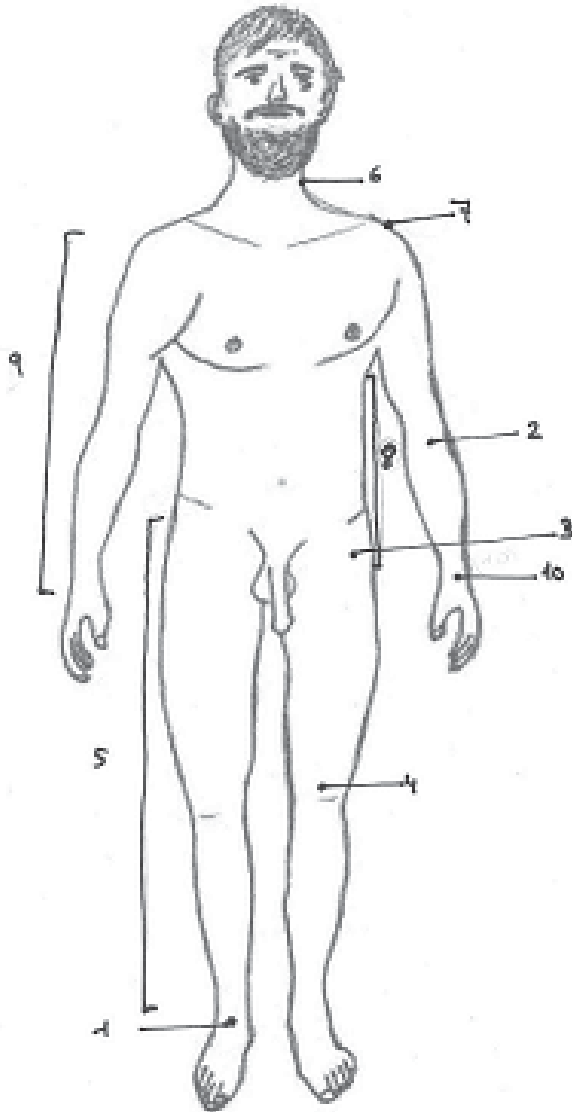
HEALTH SCIENCES

SECTION A

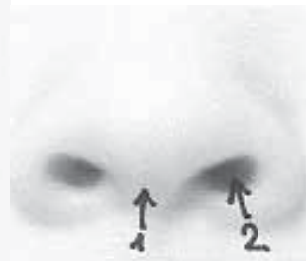
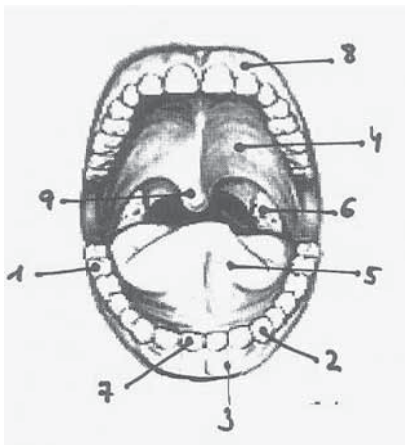
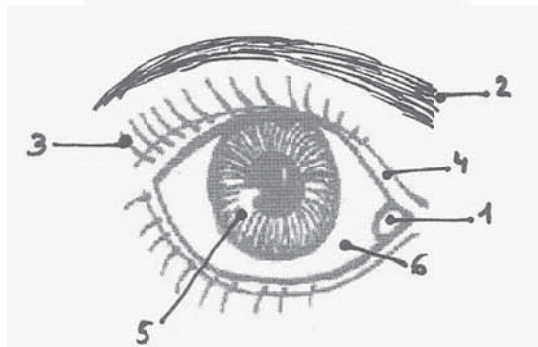
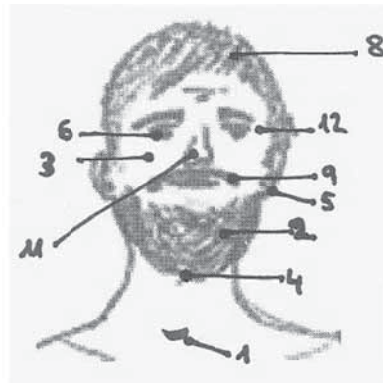
Exercise 1

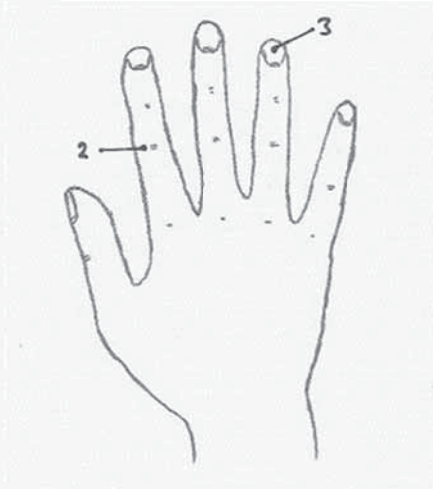
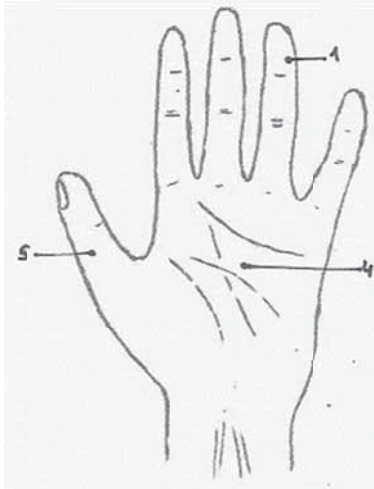
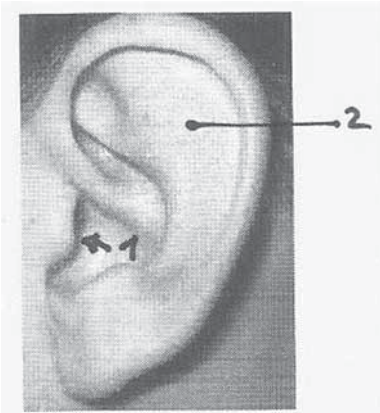


Exercise 2



Exercise 3





Exercise 5

- | | |
|-----------------|---------------|
| 1. nails | 7. hand |
| 2. nose | 8. head |
| 3. teeth / hair | 9. head |
| 4. hands | 10. eyebrows |
| 5. hair | 11. hands |
| 6. arms | 12. shoulders |

Exercise 6

- | | |
|------------------------|--------------|
| 1. Eyes | 7. Hand |
| 2. Mouth / arms – legs | 8. Eyes |
| 3. (Back)teeth | 9. Finger |
| 4. Arms | 10. Forehead |
| 5. Knees | 11. Throat |
| 6. Nails | |

Exercise 7

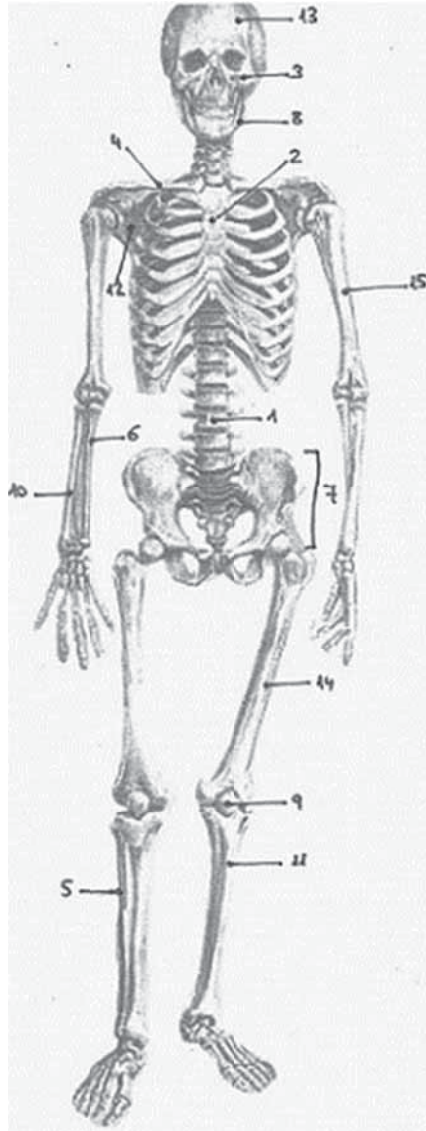
- | | |
|-------------|------------|
| 1. Bites | 6. Waved |
| 2. Shrugged | 7. Comb |
| 3. Yawning | 8. Blowing |
| 4. Shook | 9. Snapped |
| 5. Stare | 10. Fold |

Exercise 8

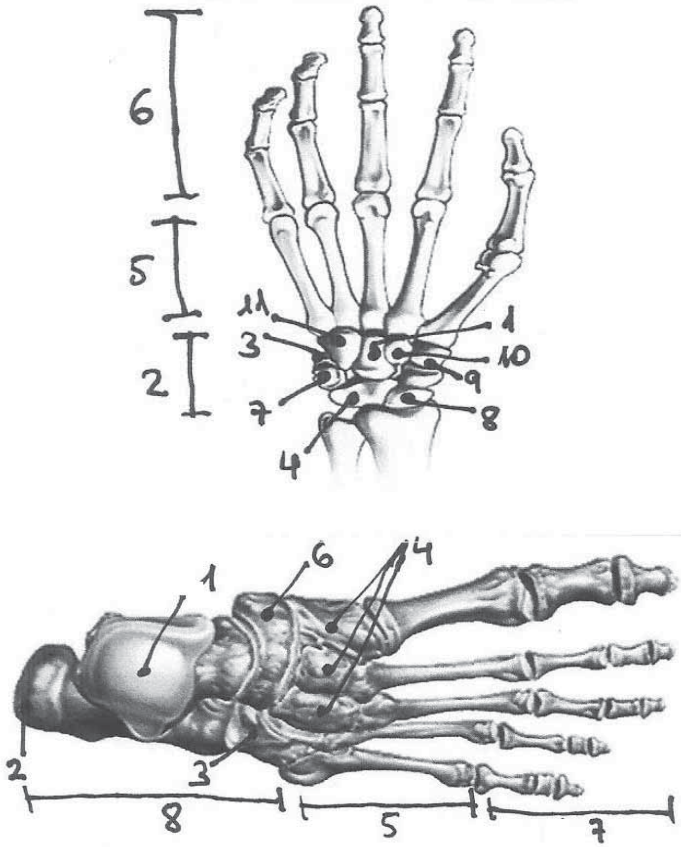
- | | |
|------------|---------------------|
| 1. Chest | 10. Head |
| 2. Leg | 11. Screwed |
| 3. Tongue | 12. Nose |
| 4. Stomach | 13. Chin / shoulder |
| 5. Hand | 14. Heart |
| 6. Heart | 15. Foot |
| 7. Foot | 16. Face |
| 8. Feet | 17. Bottom |
| 9. Heart | |

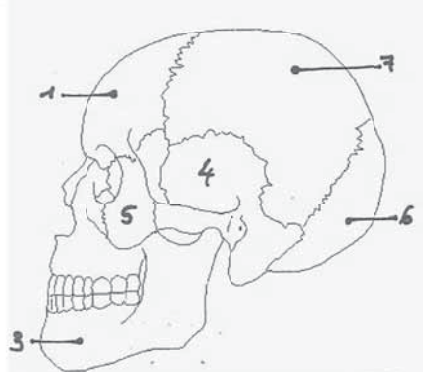
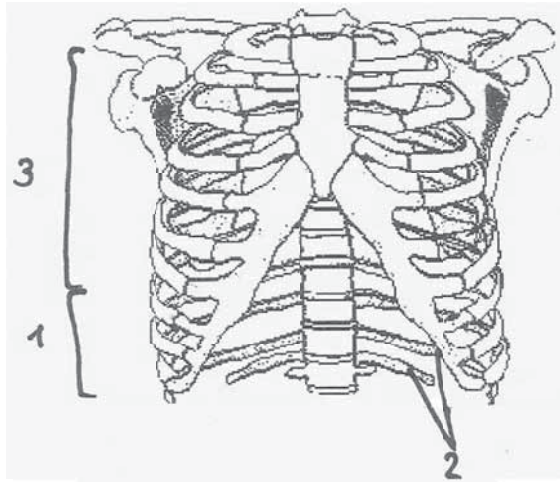
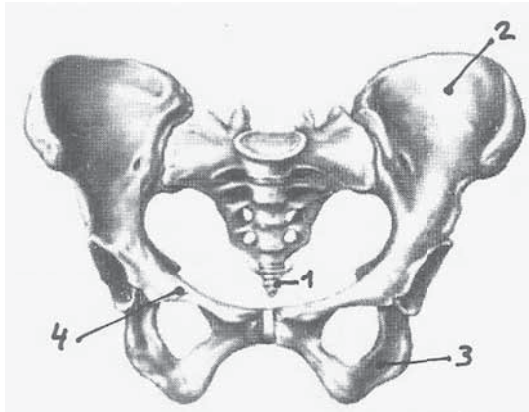
SECTION B

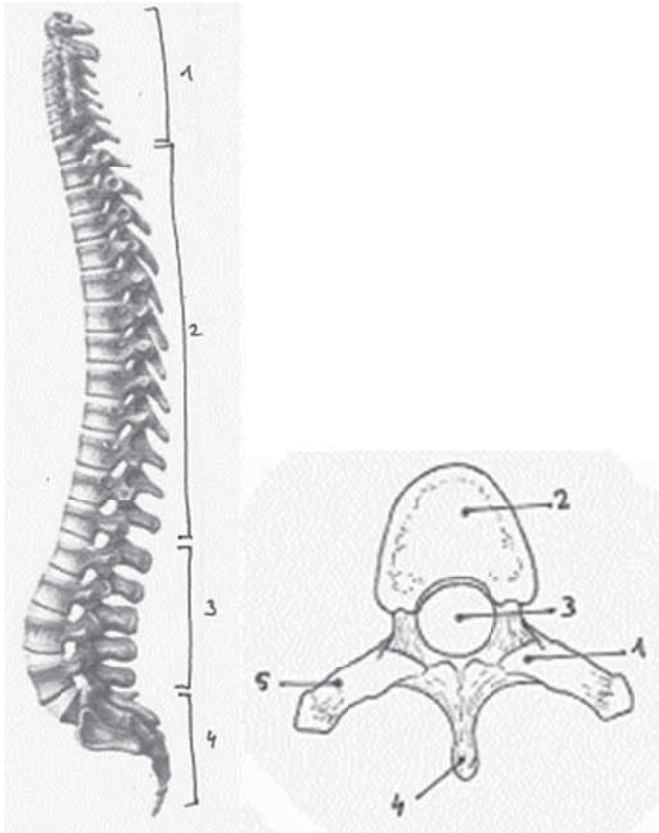
Exercise 9



Exercise 10







Exercise 12

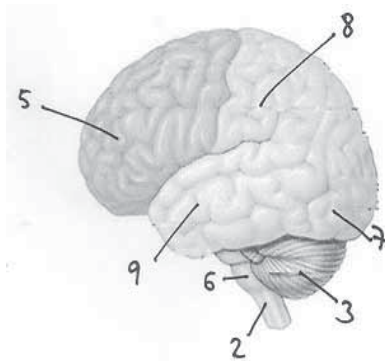
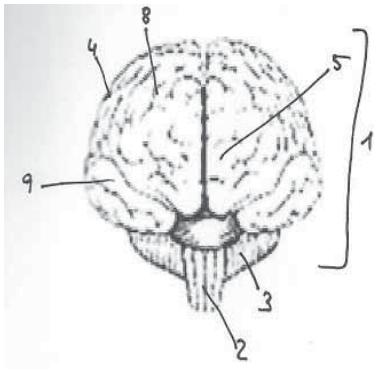
1	C
2	E
3	A
4	D
5	B

Exercise 13

- | | |
|----------------|-----------------|
| 1. Reduction | 5. Malunion |
| 2. Fracture | 6. Nonunion |
| 3. Dislocation | 7. Complication |
| 4. Unite | 8. Incidence |

SECTION C

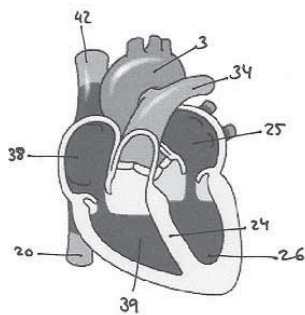
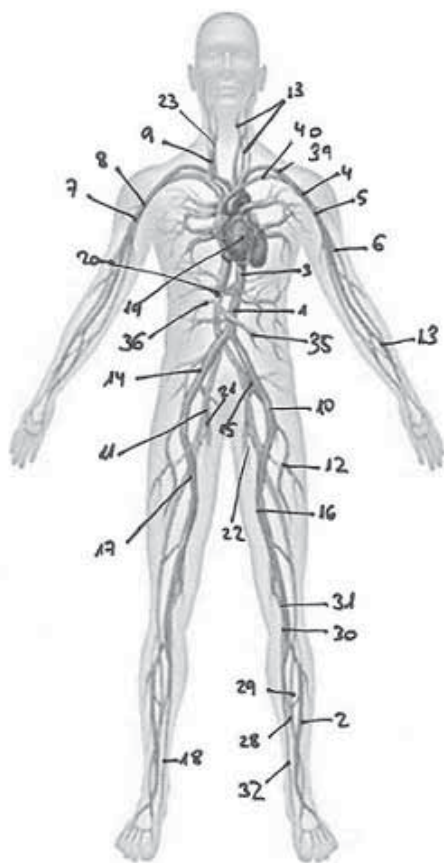
Exercise 14



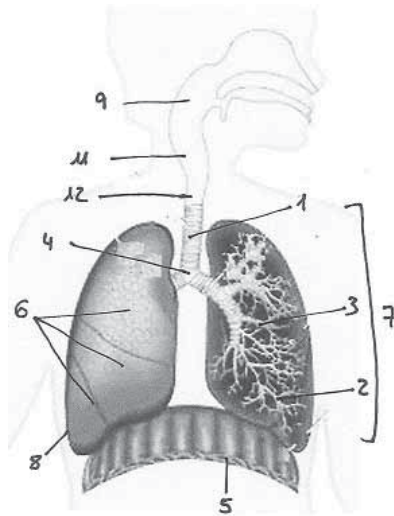
Exercise 15

Pineal gland	It produces melatonin, which modulates sleep patterns in both circadian and seasonal cycles.
Pituitary gland / Hypophysis	It synthesizes and secretes hormones which regulate the appropriate working of most organs of the body.
Thymus gland	Thymocytes mature in this gland into T-cells, which are related to the immune system.
Thyroid gland	It secretes thyroid hormones, which primarily influence the metabolic rate and protein synthesis.

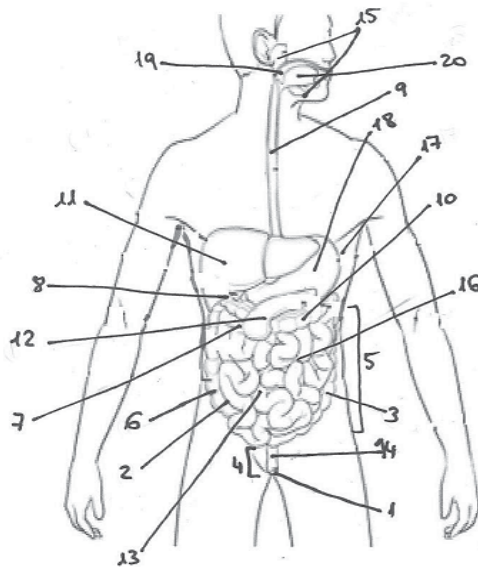
Exercise 16



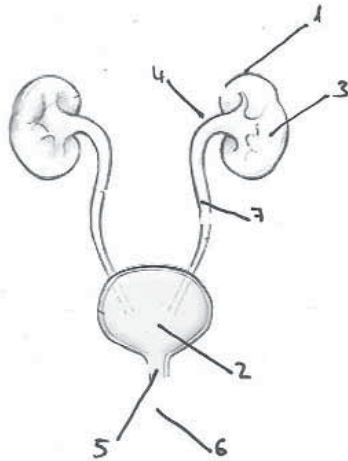
Exercise 17



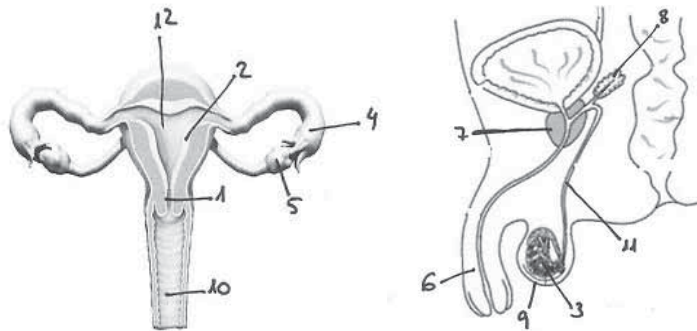
Exercise 18



Exercise 19



Exercise 20



Exercise 22

- | | |
|----------------------------|--------------------|
| 1. Belly / tummy / stomach | 11. Shoulder blade |
| 2. Armpit | 12. Hip girdle |
| 3. Wrist | 13. Upper arm bone |
| 4. Hip | 14. Tailbone |
| 5. Elbow joint | 15. Chest |
| 6. Breast | 16. Gullet |
| 7. Kneecap | 17. Adam's apple |
| 8. Collarbone | 18. Voice box |
| 9. Breastbone | 19. Windpipe |
| 10. Shinbone | 20. Belly button |

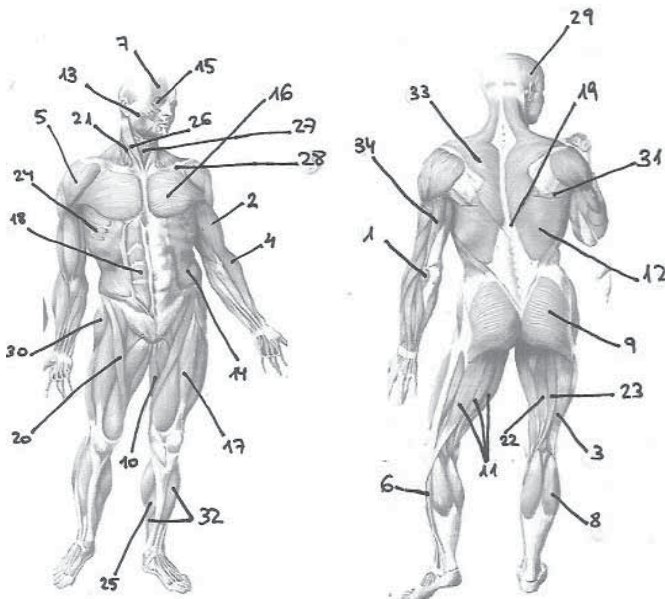
Exercise 23

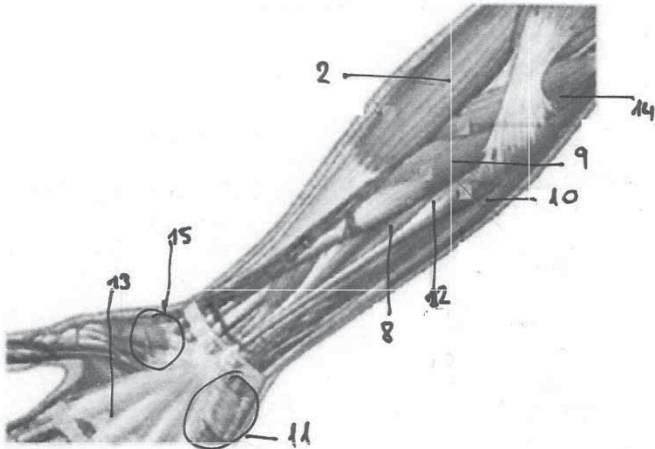
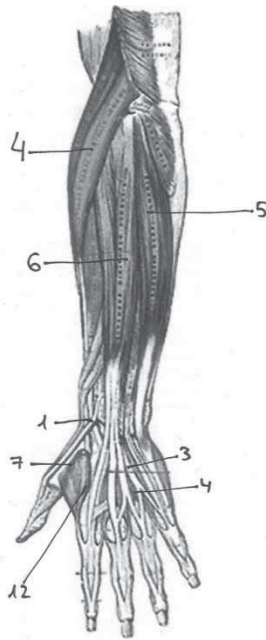
1	Lump in the groin
2	Stomach ache, belly ache, tummy ache
3	Spots around my navel / belly button
4	Pain in the chest
5	Swelling in my armpit
6	Pain in my jaw
7	Pins and needles / tingling
8	Coughing up phlegm or spit
9	Numbness
10	Pain behind the breastbone
11	Shortness of breath when lying down
12	Trouble holding water
13	Painful periods
14	Indigestion
15	Swelling, puffiness
16	Cramp in the leg muscles which comes and goes
17	Sleeplessness
18	Out of breath / out of puff / breathlessness
19	Drugs
20	Treatment
21	Baldness
22	Limbs
23	Stroke
24	Heart attack
25	Bleeding nose / nosebleed

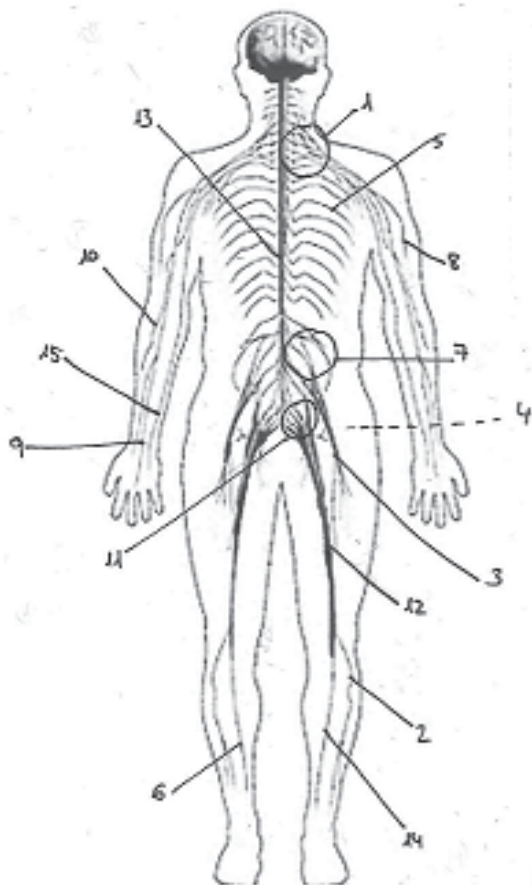
26	Athlete's foot
27	Boils
28	Blood poisoning
29	Cancer
30	Miscarriage

SECTION D

Exercise 24





SECTION E**Exercise 28**

SECTION F**Exercise 30***Regions, spaces and areas*

1. sacral
2. lumbar
3. cervical
4. coccygeal
5. hypogastric / epigastric
6. umbilical
7. mediastinum
8. inguinal
9. left lower quadrant
10. right upper quadrant
11. right lower quadrant
12. the fifth lower vertebra and the first sacral vertebra
13. the third cervical vertebra and the fourth cervical vertebra
14. popliteal fossa, kneepit, poplit, back of the knee

Tissues

1. adipose
2. epithelial
3. spinal cord
4. cartilage
5. bone
6. osseous tissue
7. connective tissue
8. adipose tissue
9. epithelial tissues

Cavities

1. cervical
2. thoracic
3. abdominal
4. pelvic / sacral
5. coccygeal
6. abdominal - thoracic
7. pleural

SECTION G**Exercise 32**

1. Superficial
2. Distal
3. Prone
4. Lateral
5. Ventral (anterior)
6. Inferior (caudal)
7. Frontal (coronal)
8. Horizontal
9. Transverse (cross-sectional)

Exercise 34

- | | |
|------------|-----------------|
| 1. Blister | 7. Cough |
| 2. Plaster | 8. Pain - stiff |
| 3. Fainted | 9. Bleeding |
| 4. Burn | 10. Temperature |
| 5. Rash | 11. Sneezing |
| 6. Swollen | 12. Aches |

Exercise 35

- | | |
|-----------------|----------------|
| 1. Deteriorated | 5. Poor |
| 2. Recovered | 6. Get it over |
| 3. Sickness | 7. Unhealthy |
| 4. Recovery | 8. Got worse |

Exercise 36

1	B
2	F
3	E
4	A
5	C
6	D

Exercise 37

- | | |
|----------------------------|--------------|
| 1. Rest | 5. X-ray |
| 2. Medicine | 6. Stitches |
| 3. Specialist / consultant | 7. Bandage |
| 4. Injection | 8. Operation |

PHONETICS**Exercise 1**

Bandage	'bændɪdʒ
Bone	bəʊn
Finger	'fɪŋgə
Medicine	'medɪsən
Muscle	'mʌsəl
Recover	rɪ'kʌvə
Sacral	'seɪkrəl
Stomach	'stʌmək
Windpipe	'wɪndpaɪp
Wrist	rɪst

Unit 2**GRAMMAR****Exercise 1**

A	2
B	8
C	5
D	6
E	1
F	3
G	4
H	7
I	9

Exercise 2

- | | |
|-------------|----------------|
| 1. May not | 8. Possibility |
| 2. Can | 9. May |
| 3. Probably | 10. Possible |
| 4. Won't | 11. May |
| 5. Might | 12. Can |
| 6. Can | 13. Should |
| 7. Will | |

Exercise 3

- | | |
|----------------------------------|-----------------------|
| 1. Could / would / can | 6. Can / Shall |
| 2. Can / May | 7. Can / Could / Will |
| 3. Will / Can / Could /
Would | 8. Shall / Why don't |
| 4. May / Can | 9. Shouldn't |
| 5. Could / Can / Will | 10. Be able to |

Exercise 4

1. Needn't have turned the music down.
2. Didn't need to go into the operating room to perform a caesarean section.
3. Must buy / Need (to) / Have to buy a handbook.
4. Didn't have to arrange / Shouldn't have arranged a visit with a new patient without asking the doctor.
5. Needn't / Doesn't need to / Doesn't have to phone the doctor before next visit.
6. Should have been friendlier.
7. Shouldn't make promises that she doesn't keep.
8. Don't have to / Don't need to / Needn't give the doctor a present.
9. Must smoke in the hospital.
10. Should help me (to) do all the work.

Exercise 6

1. and
2. so
3. and
4. to / in order to / so as to
5. however
6. because / since
7. As / Since
8. because / because of the fact that / since / due to the fact that
9. and
10. After
11. although / in spite of the fact that / despite the fact that
12. but
13. However / nonetheless / nevertheless
14. as / since / due to the fact that
15. Moreover / in addition / furthermore / also
16. and
17. Moreover / in addition / furthermore / also
18. and
19. Although
20. in spite of / despite
21. and / as well as
22. Thus / Therefore / For that reason / Consequently
23. in order to / so as to / to

24. and
25. also
26. instead of
27. and
28. In addition / Moreover / Furthermore / And / Also
29. and
30. i.e. / that is to say / that means
31. not only
32. but also
33. especially
34. For that reason / Thus / Therefore / Consequently
35. as well as / and
36. on the one hand
37. on the other hand
38. in spite of / despite
39. first / firstly / on the one hand
40. second / secondly / on the other hand

HEALTH SCIENCES

Exercise 2

1. What's your name?
2. How old are you?
3. What do you do?
4. Whereabouts was the pain?
5. Was it severe?
6. When did it first happen?
7. How long did it last?
8. Did anything make it better?
9. Have you had it again?
10. Does anything bring it on?
11. Are your parents alive?
12. How old was your father when he died? / What age was your father when he died?
13. What was the cause of death?

Exercise 5

- | | |
|-------------|-------------|
| 1. Brought | 7. Swallow |
| 2. Dumps | 8. Have |
| 3. Shake-up | 9. Has been |
| 4. Staff | 10. Sense |
| 5. Appetite | 11. Breath |
| 6. Chew | |

Exercise 7

1. He has a headache.
2. He has a pain in his chest. / He has pain in his heart.
3. He has pain in his wrist / arm / forearm. / His wrist / arm / forearm hurts.
4. She has pain in his (lower) back. / She has back pain.
5. She has pain in her knee. / Her knee hurts.
6. Her feet hurt. /She has a pain in her feet.
7. She has a pain in her neck. / Her neck hurts.
8. He has pain in his throat / He has a sore throat. / His throat hurts.
9. He has pain in his stomach / tummy / belly. / He has a stomach ache.
10. He has toothache.
11. He has earache.
12. He has pain in his leg.

Exercise 8

- | | |
|--|-----------------|
| 1. Walk - Touch | 9. Touch |
| 2. Lie / Turn | 10. Turn |
| 3. Sit - Let | 11. Roll |
| 4. Close | 12. Bring up |
| 5. Take off / Strip off | 13. Keep |
| 6. Take off / Put on | 14. Bend - Curl |
| 7. Take off / Roll up / Undo
/ Unfasten | 15. Roll up |
| 8. Up | 16. Look at |

Exercise 9

1. Stand up with your feet shoulder-width apart. Raise both arms straight over your head.
2. Stand up with your feet together. Stretch your arms out to the sides and raise them over your head.
3. Stand up with your feet shoulder-width apart. Stretch your arms out to the sides and make small circles with your shoulders (clockwise and counter-clockwise).
4. Stand up and, keeping your knees together, hold one foot with your hand. Try to bring it up to your buttocks. You can lean on a wall to keep balance.
5. Grasp / Clasp your hands in front of you and try to pull them apart.
6. Try to grasp / clasp your hands behind your back, one arm up and one down.
7. Sit down on a chair, hold your right elbow with your left hand, and at the same time try to move your right arm towards the right shoulder.
8. Stand in front of a wall. Lean on the wall with both hands. Take a small step back with one foot and place the heel on the floor. Bend forward so that the calf (of the back leg) stretches out.
9. Place the front part of the foot on a step and leave your heel hanging over. Put all your weight on the heel (which is not on the floor).
10. Stand up in a swimming pool with the water waist height. Bend the right leg and touch the left knee with your foot. Then do the same with the other leg.
11. Sit down on a chair and, if you wish, with some ankle weights attached, try to bend and straighten your leg. Then do the same with the other leg.
12. Stand in front of a small bench and place the heel of the leg that you want to stretch on it. From this position, bend forwards and try to touch your toes with both hands.
13. On all fours, become round-shouldered while your ribs come towards your hips. Don't move your arms or legs.
14. Lie on your back with your knees bent. Try to touch the floor with the lower part of your back. You must feel a slight contraction in your tummy, so that your ribs come towards your hips.
15. Lie on your back with your knees bent. Try to sit up and bring your hands towards your knees.

16. Lie on your stomach / tummy and lean on your forearms. From this position, straighten your elbows and pull the body/trunk off the floor.
17. Stand with your feet shoulder-width apart and your back against a wall. Bend your knees as if you wanted to sit down. Your back must slide along the wall upwards and downwards.
18. Stand with a foot on a step. Stretch the leg on the step so that the other foot comes off the floor.
19. Stand in front of a door with your elbow by your body and bent 90°. Place your hand by the jamb / frame of the door and press against it. You can do this exercise with both hands, so that you can press in or release depending on your position.
20. Lie on your stomach / tummy on a coach with one arm hanging over the side. From this position, raise your hand towards your head keeping your elbow straight.
21. Lie on your back. Place your hands on your temples and sit up slightly until you feel that your upper back lifts off the floor.
22. Keep your arm straightened by your body with the palm of the hand towards the front. Now bend the arm and try to touch your shoulder. Don't move the arm from your body.

PHONETICS**Exercise 1**

/t/	/d/	/ɪd/
Laughed	Suffered	Created
Stopped	Changed	Decided
Mixed	Loved	Hated
Introduced	Enjoyed	Disappointed
Promised	Opened	Expected
Pronounced	Died	
Reached	Refused	
Watched	Disappeared	
Wished	agreed	
Hoped	Remembered	
Fixed	Tried	
Kissed		
Worked		

Exercise 2

/s/	/z/	/ɪz/
Creates	Suffers	Changes
Laughs	Loves	Mixes
Stops	Decides	Refuses
Hates	Enjoys	Introduces
Disappoints	Opens	Promises
Expects	Dies	Pronounces
Hopes	Disappears	Reaches
Works	Agrees	Watches
	Remembers	Rises
	Tries	Wishes
		Fixes
		Kisses

Unit 3

GRAMMAR

Exercise 1

1. didn't smoke
2. will see - wants
3. didn't expect / hadn't expected – wouldn't set off / wouldn't have set off
4. had slept
5. had been
6. didn't care
7. falls
8. would have been
9. weren't
10. will need / need
11. would pass
12. didn't take
13. will never succeed
14. had known – would have come
15. would have sprained – had not been looking
16. would have finished – had started
17. gets
18. will go punting

Exercise 2

1. had
2. would buy
3. hadn't spent
4. would be
5. lived
6. had come
7. knew
8. had known
9. would go away
10. gave

Exercise 3

1. I wish I had studied for my exam.
2. I will I hadn't ignored my parents when they told me I had to go to university.
3. I wish he wouldn't always be late.
4. I wish she would learn to drive, but she doesn't want to.
5. I wish it wasn't so cold in here!

Exercise 4

1. Will be given
2. Has been charged
3. Have been opened – being delivered
4. Were given
5. Had been done
6. Are being counted
7. Be made
8. Had been sent
9. Is said
10. Got injured

Exercise 5

1. The new hospital is said to be opened by the end of the year.
2. It is thought that the fault of the accident was the driver's. / The fault of the accident was thought to be the driver's.
3. The victim is known to be a local man. / It is thought that the victim is a local man.
4. Influenza type A has recently been reported to have become a pandemic.
5. The patient is expected to recover soon.
6. More than 1,000 billion dollars are thought to be needed to find a treatment against that disease.
7. It is thought that if more money is invested on prevention, the health expense can be drastically reduced. / The fact of investing money on prevention is thought to be able to reduce health expense drastically.
8. It is thought that by 2050 there will probably be a cure for some diseases which are incurable today.

9. Obesity is known to be a risk factor of myocardial infarction. / It is known that obesity is a risk factor of myocardial infarction.
10. It is believed that you will get a cold if you get wet in the rain.
11. The doctor was asked a question (by the patient). / A question was asked to the doctor (by the patient).

Exercise 6

1. The vein is tapped and then a needle is inserted into it.
2. The skin is cleaned and the patient is prepared for the intervention.
3. The patient is taken to the operating theatre.
4. The procedure is explained to the patient and then gentle pressure is applied to the puncture site.
5. This procedure is often performed by therapists.
6. This emergency procedure mustn't be performed by trainee doctors.
7. The approval of new measures to fight unemployment has been being put off for years (by the government).
8. A new operating theatre has been opened.
9. That surgical technique used to be preferred in the past (by surgeons).
10. I know I am being watched.

HEALTH SCIENCE

Exercise 1

1. The main aim is sharing your own original research work with other scientists or for reviewing the research conducted by others. To reach their goal, papers must aim to inform, not impress.
2. There are two types of audience. First, the referees, who help the journal editor decide whether a paper is suitable for publication. Second, the journal readers themselves, who may be more or less knowledgeable about the topic addressed in the paper.
3. In a scientific paper the following parts should be present: *Introduction, Materials and Methods, Results, Discussion, and Conclusion.*
4. In the *Results* and *Discussion* sections.
5. Yes. The above structure reflects the progression of most research projects, but effective papers typically break the chronology in at

least three ways to present their content. First, they summarize the motivation for, and the outcome of, the work in an abstract, located before the *Introduction*. Second, they move the more detailed, less important parts of the body to the end of the paper in one or more appendices so that these parts do not stand in the readers' way. Finally, they structure the content in the body stating first what readers must remember and then presenting evidence to support this statement.

6. Each journal has specific guidelines that must be followed and which are usually published and detailed on their websites.

Exercise 6

1. Prosthesis
2. Limb
3. Amputation / accident
4. Orthosis
5. Professionals
6. Rehabilitation / attention / care
7. Replace
8. Relieve
9. Splints
10. Deformity

Exercise 7

1. Outpatients are the people who come to hospital to attend a clinic, to have tests, or to receive ambulatory/outpatient treatment, and they return home on the same day. Inpatients, on the other hand, stay in the hospital (in rooms called “wards”) for at least one day.
2. Treatment is free but there is a prescription charge for drugs and appliances, such as a cervical collar, with exemptions for some patients, such as children and the elderly.
3. It means that the GP refers the patient to a consultant in secondary care.
4. Practice staff, district nurses, health visitors, midwives, physiotherapists.

Exercise 8

1. Do you think – use
2. Sorry to bother
3. Excuse me – come and have
4. I can see – can I just – write
5. Is it OK – clear
6. Would you mind – opened / open
7. Stick
8. Reached
9. Dealing

Exercise 12

1. ... a doctor who specialises in the treatment of allergies.
2. ... a medical practitioner trained in anaesthesia and perioperative medicine.
3. ... a doctor who specialises in the cardiovascular system, particularly in diagnosing and treating diseases or conditions of the heart and blood vessels.
4. ... a person who treats problems and diseases of people's feet.
5. ... a senior hospital-based physician or surgeon who has completed all of their specialist training.
6. ... a person who specialises in dentistry—the diagnosis, prevention, and treatment of diseases and conditions of the oral cavity.
7. ... a person who treats diseases and disorders of the skin, scalp, hair, and nails.
8. ... an expert in dietetics; that is, human nutrition and the regulation of the diet.
9. ... a doctor who deals with conditions of the ear, nose, and throat.
10. ... a medical doctor who treats acute and chronic illnesses and provides preventive care and health education to patients.
11. ... a doctor who deals with the health of the female reproductive systems (vagina, uterus, and ovaries) and the breasts.
12. ... a doctor who deals with the prevention, diagnosis, and treatment of adult diseases.
13. ... is a professional in midwifery, specialised in pregnancy, childbirth, postpartum, women's sexual and reproductive health, and new-born care.
14. ... a doctor who concerns themselves with kidney problems.

15. ... a physician specialising in neurology and trained to investigate or diagnose and treat neurological disorders.
16. ... a person whose job is to care for people who are ill or injured, especially in a hospital.
17. ... a doctor who deals with the prevention, diagnosis, and treatment of cancer.
18. ... a specialist in medical and surgical eye problems.
19. ... a hospital worker who does jobs for which no training is necessary, such as helping the nurses or carrying heavy things.
20. ... a doctor who treats the musculoskeletal system.
21. ... a doctor specialised in the medical care of infants, children, and adolescents.
22. ... a primary care worker who, by using mechanical force and movements, helps with impairments and promotes mobility.
23. ... a doctor who deals with diseases involving the respiratory tract.
24. ... a physician who specialises in mental disorders.
25. ... a professional who assesses and studies behaviour and mental processes.
26. ... a hospital technician who performs a variety of imaging techniques, such as X-ray radiography, ultrasound, computed tomography (CT), nuclear medicine including positron emission tomography (PET), and magnetic resonance imaging (MRI).
27. ... a doctor devoted to rheumatic diseases, dealing mainly with joints, soft tissues, autoimmune diseases, vasculitis, and heritable connective tissue disorders.
28. ... a doctor who specialises in the evaluation, diagnosis, and treatment of communication disorders, cognition, voice disorders, and swallowing disorders.
29. ... a doctor specialised in surgical and medical diseases of the male and female urinary tract system and the male reproductive organs.

Exercise 13

OBJECTIVE

The aim of the study was to determine whether applying an assistance force to the pelvis and legs during treadmill training can improve walking function in children with cerebral palsy.

DESIGN

Twenty-three children with cerebral palsy were randomly assigned to the robotic or treadmill-only group. For participants who were assigned to the

robotic group, a controlled force was applied to the pelvis and legs during treadmill walking. For participants who were assigned to the treadmill-only group, manual assistance was provided as needed. Each participant trained three times/wk for six wks. Outcome measures included walking speed, six-min walking distance, and the clinical assessment of motor function, which were evaluated before and after training, and eight wks after the end of training, and were compared between two groups.

RESULTS

Significant increases in walking speed and six-min walking distance were observed after robotic training ($P = 0.03$), but no significant change was observed after treadmill-only training. A greater increase in six-min walking distance was observed after robotic training than that after treadmill-only training ($P = 0.01$).

CONCLUSIONS

Applying a controlled force to the pelvis and legs, for facilitating weight-shift and leg swing, respectively, during treadmill training may improve walking speed and endurance in children with cerebral palsy.

Exercise 14

- | | |
|------------------|----------------|
| 1. estimates | 15. seeking |
| 2. on how LBP | 16. with |
| 3. suggests | 17. by |
| 4. at least | 18. sought |
| 5. recurrent | 19. reportedly |
| 6. acute | 20. surveyed |
| 7. self-limiting | 21. while |
| 8. leading | 22. came into |
| 9. disabled | 23. former |
| 10. of | 24. for |
| 11. of | 25. provided |
| 12. seek | 26. prevalence |
| 13. undertake | 27. burden |
| 14. sole | 28. all |

PHONETICS**Exercise 1***Specialised words*

1. Biceps: 'baɪseps
2. Bronchioles: /'brɒŋkiəsl/
3. Colonoscopy: /,kɒlə'nɒskəpi/
4. Coracobrachialis: /,kɒrəkəs'breɪkiəlɪs/
5. Cuneiform: /'kju:nɪfɔ:m/
6. Duodenum: /,dʒu:ə'di:nəm/
7. Endoscope: /'endə'skəʊp/
8. Endoscopic: /,endəs'skɒpɪk/
9. Endoscopy: /en'dɒskəpi/
10. Mediastinum: /,mi:diə'staɪnəm/
11. Metacarpus: /,metə'kɑ:pəs/
12. Pectoralis: /'pektə'rɑ:lɪs/
13. Prominence: /'prɒmɪnəns/
14. Saphenous: /sə'fi:nəs/
15. Spinal cord: /,spɑ:məl'kɔ:d/
16. Tracheostomy: /træki'ɒstəmi/
17. Upper arm: ,ʌpər'ɑ:m
18. Urinary: /'jʊərɪnəri/
19. Vasectomy: /və'sektəmi/
20. Vertebrae: /'vɜ:tbrɪ/ /'vɜ:tbrɛɪ/
21. Windpipe: /'wɪndpaɪp/

Frequent derivative words

1. 'photograph
2. pho'tography
3. pho'tographer
4. photo'graphic
5. 'pain
6. 'painful
7. 'nature
8. 'natural
9. 'effort
10. 'effortless
11. 'courage
12. cou'rageous
13. 'alcohol

14. alco'holic
15. in'vincible
16. invinci'bility
17. 'engine
18. engin'eer
19. re'fer
20. refe'ree

Exercise 5

1. *What's your name?*
2. *When did the pain come on?*
3. *How long has it been bothering you?*
4. *Have you had the pain before?*
5. *What seems to bring it on?*
6. *What about coughs or wheezing or shortness of breath?*
7. *Apart from it, are there any other problems?*
8. *Does lying down help the pain?*
9. *Does it come on at any particular time?*
10. *Would you strip to your waist, please?*
11. *Could you bend down and touch your toes, please?*

Unit 4

GRAMMAR

Exercise 1

- | | |
|---------------------|--------------|
| 1. Doing | 6. Leave |
| 2. Smoking | 7. Swimming |
| 3. To go / Stay | 8. Study |
| 4. Determine | 9. Having |
| 5. Running / Damage | 10. Sleeping |

Exercise 2

- | | |
|-------------------|----------------|
| 1. to build | 16. to choose |
| 2. operating | 17. cry |
| 3. walking | 18. to give |
| 4. to undergo | 19. to get |
| 5. phoning | 20. to give |
| 6. to be operated | 21. teaching |
| 7. sneezing | 22. to sit |
| 8. to recover | 23. coughing |
| 9. telling | 24. saying |
| 10. to be | 25. to improve |
| 11. working | 26. asking |
| 12. starting | 27. to do |
| 13. to sign | 28. taking |
| 14. to do | 29. eat |
| 15. to deal | 30. taki |
| 31. ng | |

Exercise 3

1. The doctor asked the patient to take off his/her clothes from his/her waist up.
2. Her GP advised her to get vaccinated against the flu. / Her GP said that she had to get vaccinated against the flu.
3. The receptionist asked/enquired if I would mind going the following day instead of on Friday.
4. The physiotherapist recommended me not to carry heavy bags / The physiotherapist told me not to carry heavy bags.

5. Mary's father said that Mary had broken her arm the year before.
6. Paul suggested going cycling.
7. The grandfather said to his child that he / she would damage his back if he / she did that. / The grandfather warned his grandchild not to damage his back doing that.
8. My mum told not that she wouldn't go to that party if she were me. She added that I had to stay at home until I was better.
9. My GP told / ordered me to cut down on fats because my cholesterol levels were high. / My GP told me I had to cut down on fats because my cholesterol levels were high.
10. The consultant asked the patient whereabouts the pain was.
11. The doctor told Anne to take some painkillers if the pain went on.
12. Jim regretted going. / Jim regretted having gone. / Jim said that he should not have gone.
13. He asked me if I would like to go. / He invited me to go. I refused and thanked him.
14. The doctor encouraged me to keep active. / The doctor told me that I should keep active.
15. The dietician recommended me to go to the gym. / The dietician asked me why I didn't try going to the gym.
16. The doctor warned me that in five years' time I would have developed a serious illness if I hadn't given up smoking that moment. / The doctor warned me that in five years' time I would develop a serious illness if I didn't give up smoking that moment.
17. The grandmother threatened the child that he / she would not have any chocolate the following day if he / she didn't go to bed.
18. My teacher promised to always help us. / My teacher told me that he / she will always help us.
19. Matt asked if I wanted to join them. / Matt invited me to join them.
20. My colleague asked me if I needed any help. My colleague offered me help.
21. The doctor asked when I had first noticed the pain.
22. The dentist ordered me to open my mouth.
23. The neurologist asked if I usually have headaches. / The neurologist asked if I used to have headaches.
24. The doctor recommended me to do exercise every day.
25. The doctor asked me when the pain had started.
26. The nurse ordered me to lie on the couch.
27. The X-ray technician asked me not to breathe.
28. The doctor asked if I had fainted.

29. The urologist pointed out that he was afraid I need some antibiotics. / The urologist pointed out that he was afraid I needed some antibiotics.
30. The doctor informed me I had to drink two litres of water a day. / The doctor informed me I must drink two litres of water a day.

HEALTH SCIENCE

Exercise 4

<i>Drugs</i>	<i>Elements to administer drugs</i>	<i>Procedures and therapies</i>
Anti-inflammatory	Inhaler	Electrotherapy (ultrasound therapy, TENS, pulsed short wave therapy, extracorporeal shock wave therapy, pulsed electromagnetic field therapy, microwave, diathermy, interferential [current, IFC] therapy, iontophoresis, LASER [Light Amplification by Stimulated Emission of Radiation], magnetotherapy, infrared, TENS [Transcutaneous Electrical Nerve Stimulation])
Corticoid / Corticosteroid	Syringe (Injection)	Joint mobilization (passive, active, active-assistive, thrust)
Diabetes medications		Kinesiotherapy
Hypertension medications / High Blood Pressure Medications		Manual therapy
Medications used to treat hypercholesterolemia		Mechanotherapy
Ointment		Paraffin
Pill		Taping
Tablet		Therapeutic exercise

Exercise 5

1. Balance board
2. Bedpan
3. Blood lancet
4. Blood pressure monitor
5. Catheter
6. Crutches
7. Dressing
8. Electrocardiogram (ECG)
9. Filing cabinet
10. Forceps
11. Gauze
12. Magnetic Resonance Imaging (MRI)
13. Orthosis
14. Otoscope or Auriscope
15. Parallel bars
16. Phonendoscope
17. Plaster cast
18. Quadriceps chair
19. Sandbag
20. Scalpel
21. Sink
22. Sling
23. Splint
24. Stationary bicycle
25. Sticking plaster
26. Stool
27. Stretcher
28. Therapy putty
29. Treadmill
30. Wall bars

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