

VOCABULARY WORKBOOK

**CHECK YOUR ENGLISH
VOCABULARY FOR**

Medicine

Third Edition

All you need to improve your vocabulary

CHECK YOUR ENGLISH VOCABULARY FOR

MEDICINE

third edition

A & C Black • London

www.acblack.com

First published in Great Britain 1995
Second edition published 2000
Third edition published 2006

A & C Black Publishers Ltd
38 Soho Square, London W1D 3HB

© Peter Collin Publishing 1995, 2000
© A & C Black Publishers Ltd 2006

All rights reserved.
No part of this publication may be reproduced in
any form without the permission of the publishers.

A CIP entry for this book is available from the British Library
ISBN-10: 0 7136 7590 X
ISBN-13: 978 0 7136 7590 0
eISBN-13: 978-1-4081-0238-1

Text typeset by A & C Black
Printed in Italy by Legoprint

A & C Black uses paper produced with elemental chlorine-free pulp,
harvested from managed sustainable forests.

Introduction

The worksheets in this workbook contain a variety of exercises appropriate for students requiring a working knowledge of English medical terminology. The worksheets can be used either for self-study or in the classroom and can be completed in any order. Several have 'extensions': short classroom exercises based on the language in the main exercise. All the questions within this workbook are based on the A & C Black *Dictionary of Medical Terms*, fourth edition (ISBN 0 7136 7603 5).

This workbook is aimed at students with at least an intermediate level of English. However, many people who work in medicine have to read in English on a regular basis; students with a more basic level of English may therefore already have the passive vocabulary to handle many of the exercises.

Specialist vocabulary

It is important to appreciate that 'knowing' specialist vocabulary involves more than simply recognising it.

- You can understand the meaning of a word when reading or listening and yet be unable to remember that same word when speaking or writing.
- You may remember the word, but use it incorrectly. This can be a grammatical problem, like knowing that 'fracture' can be used both as a noun and as a verb. Or it may be a question of collocation: a surgeon *makes an incision* during an operation, but when he wants a piece of bread he simply *cuts* it.
- Then there is the question of the sound of the word. Can you pronounce it? And do you recognise it when you hear it pronounced?

For these reasons - memory, use and sound - it is important that students practise specialist vocabulary so that they can learn to use it more confidently and effectively. The exercises in this workbook will help students to expand their knowledge and use of medical vocabulary.

Using the *Dictionary of Medical Terms*

All of the vocabulary taught or practised in this workbook is in the A & C Black *Dictionary of Medical Terms*. The *Dictionary of Medical Terms* gives definitions in simple English which students can read and understand. Many of the examples and definitions in the workbook are taken directly from the dictionary. Students should have a copy of the *Dictionary of Medical Terms* for referring to when completing the exercises; using the dictionary is an essential part of successful language learning.

Structure of a *Dictionary of Medical Terms* entry

Each entry within the dictionary includes key elements that help a student understand the definition of the term and how to use it in context. Each term has a clear example, and part of speech. This is followed by example sentences and quotations from newspapers and magazines that show how the term is used in real life. These elements of the dictionary are used to create the questions within this workbook.

Vocabulary Record Sheet

At the back of the book is a Vocabulary Record Sheet. Recording useful vocabulary in a methodical way plays a key role in language learning and could be done, for example, at the end of each lesson. The *Dictionary of Medical Terms* is a useful tool for ensuring that the personal vocabulary record is accurate and is a good source for example sentences to show how words are used, as well as for notes about meaning and pronunciation, etc.

Workbook contents

Page	Title	Description	Mode
WORD-BUILDING			
1	Word association 1: missing links	Linking each set of four words with one other word	<i>Self-study</i>
2	Word formation: nouns	Forming nouns from list of verbs; rewriting sentences using noun forms instead of verbs	<i>Self-study</i>
3	Two-word expressions	Combining words from two lists to make two-word expressions that fit the definitions	<i>Self-study</i>
4	Plural formation	Multiple choice: choosing correct plural forms of singular nouns	<i>Self-study</i>
5	Word formation: adjectives	Rewriting sentences using adjective forms instead of nouns	<i>Self-study</i>
6	Word association 2: partnerships	Linking each verb with a noun to make a 'partnership'; using the 'partnerships' to complete sentences	<i>Self-study</i>
7	Opposites 1: prefixes	Selecting the correct prefix for each adjective to create an opposite; using the adjectives to complete sentences Extension: working with a partner to test one another	<i>Self-study</i>
8	Word formation: verbs	Making verb forms from list of nouns; writing sentences using the verbs	<i>Self-study</i>
9	Word association 3: mind maps	Finding words in a mind map that fit definitions; designing mind maps	<i>Self-study</i>
PARTS OF SPEECH			
10	Nouns	Sentence completion	<i>Self-study</i>
11	Adjectives 1	Sentence completion	<i>Self-study</i>
12	Adjectives 2	Sentence completion	<i>Self-study</i>
13	Verbs 1	Matching verbs with their correct definitions	<i>Self-study</i>
14	Verbs 2	Matching verbs with their correct definitions	<i>Self-study</i>
15	Verbs: past tense ~ regular verbs	Sentence completion	<i>Self-study</i>
16	Verbs: mixed tenses	Sentence completion	<i>Self-study</i>
17	Phrasal verbs	Sentence completion Extension: working with a partner to write a dialogue using phrasal verbs	<i>Self-study</i>
18	Verbs: active/passive	Changing sentences from active to passive tense	<i>Self-study</i>
19	Adverbs	Identifying adverbs in sentences and swapping adverbs around so that each sentence makes sense	<i>Self-study</i>
20	Prepositions	Correcting sentences with deliberate mistakes in the prepositions	<i>Self-study</i>
PRONUNCIATION			
21	Word stress 1	Identifying three-syllable words and classifying by their pronunciation Extension: practising the dialogues with a partner	<i>Self-study</i> <i>Pair work</i>
22	Word stress 2	Completing sentences using four-syllable words; classifying four-syllable words by their pronunciation	<i>Self-study</i>
23	Present simple	Identifying present tense verbs and classifying by their pronunciation Extension: working with a partner to identify plural nouns in each pronunciation category	<i>Pair work</i>
24	Past tense	Identifying past tense verbs and classifying by their pronunciation	<i>Self-study</i>

Page	Title	Description	Mode
VOCABULARY IN CONTEXT			
25	Good advice	Matching half-sentences together to make complete sentences Extension: writing pieces of medical advice with a partner	<i>Self-study</i> <i>Pair work</i>
26	Multiple meanings	Classifying meanings	<i>Self-study</i>
27	Odd one out	Identifying word that is different to others in each set	<i>Self-study</i>
28	Body parts - categories	Deciding which category each body part belongs to	<i>Self-study</i>
29	Opposites 2	Matching words with opposite meanings; inserting correct opposites in sentences Extension: working with a partner to test one another	<i>Self-study</i> <i>Pair work</i>
30	Abbreviations	Stating what abbreviations stand for Extension: working with a partner to test one another	<i>Self-study</i> <i>Pair work</i>
31	Symptoms & common illnesses 1	Checking meanings of words; matching descriptions to names of illnesses	<i>Self-study</i>
32	Symptoms & common illnesses 2	Matching formal and informal names of illnesses; completing conversations by using informal names of illnesses Extension: practising conversations with a partner	<i>Self-study</i> <i>Pair work</i>
33	Diagnosis	Identifying each disease or illness from its description Extension: writing a description of a disease or illness and testing a partner	<i>Self-study</i> <i>Pair work</i>
34	How it works	Matching half-sentences together to make complete sentences	<i>Self-study</i>
35	Instruments and equipment	Matching each instrument and item of equipment with its correct description Extension: working with a partner to test one another	<i>Self-study</i> <i>Pair work</i>
36	Chemistry	Matching symbols of chemical elements and compounds with correct names and descriptions Extension: working with a partner to test one another	<i>Self-study</i> <i>Pair work</i>
PUZZLES & QUIZZES			
37	Anagrams 1	Solving anagrams by reading clues and putting letters in order	<i>Self-study</i>
38	Parts of the body crossword 1	Solving crossword	<i>Self-study</i>
39-40	Communicative crossword 1	Completing crossword by working with partner and defining words	<i>Pair work</i>
41	Anagrams 2	Solving anagrams by reading clues and putting letters in order	<i>Self-study</i>
42	Word search	Finding words hidden in letters using clues listed	<i>Self-study</i>
43-44	Communicative crossword 2	Completing crossword by working with partner and defining words	<i>Pair work</i>
45	Parts of the body crossword 2	Solving crossword	<i>Self-study</i>
46	Gap fill crossword	Completing crossword with missing words from sentences	<i>Self-study</i>
47-48	Communicative crossword 3	Completing crossword by working with partner and defining words	<i>Pair work</i>
49	Quiz	Answering questions Extension: writing a quiz with a partner	<i>Self-study</i> <i>Pair work</i>
50	Vocabulary Record Sheet	Recording new vocabulary, definitions and terms	<i>Self-study</i>
51	Answer key	Answers to all worksheets	

Using the workbook

Most students find it easier to assimilate new vocabulary if the words are learned in related groups, rather than in isolation. For example, words frequently occur in the same context as their opposites and, as such, it makes sense to learn the pairs of opposites together (see *worksheets on pages 7 and 29*). Similarly, mind maps encourage students to look for connections between words (see *worksheet on page 9*). The exercises and activities in this workbook have all been grouped into sections. These sections practise different elements of medical vocabulary, enabling the student to gain a fuller understanding of the words learnt.

The first section, **Word-building** (pages 1-9), encourages the student to identify links between words and to learn words that are morphologically related (for example, verbs and nouns which have the same stems). Within the **Parts of Speech** (pages 10-20) section, the emphasis is on understanding meanings and how to use terms in their correct grammatical forms. The worksheets in the third section practise the **Pronunciation** of medical vocabulary (pages 21-24). The section **Vocabulary in Context** (pages 25-36) includes topic-specific exercises such as identifying diseases and illnesses from their descriptions. The activities in the last section, **Puzzles & Quizzes** (pages 37-49), expand students' knowledge and use of vocabulary in a fun way.

Communicative crosswords

Included in the last section are three communicative crosswords. These are speaking exercises where students complete a half-finished crossword by exchanging clues with a partner. There are two versions of the crossword: A & B. The words which are missing from A are in B, and vice versa. No clues are provided: the students' task is to invent them. This is an excellent exercise for developing linguistic resourcefulness; in having to define words themselves, students practise both their medical vocabulary and the important skill of paraphrasing something when they do not know the word for it.

Using Communicative crosswords in the classroom

Stage 1 - Set-up. Divide the class into two groups - A and B - with up to four students in each group. Give out the crossword: sheet A to group A, sheet B to group B together with a copy of the *Dictionary of Medical Terms*. Go through the rules with them. Some answers may consist of more than one word.

Stage 2 - Preparation. The students discuss the words in their groups, exchanging information about the words they know and checking words they do not know in the *Dictionary of Medical Terms*. Circulate, helping with any problems. This is an important stage: some of the vocabulary in the crosswords is quite difficult.

Stage 3 - Activity. Put the students in pairs - one from group A and one from group B. The students help each other to complete the crosswords by giving each other clues.

Make sure students are aware that the idea is to help each other complete the crossword, rather than to produce obscure and difficult clues.

- What's one down?
- *It's a person who works in a hospital.*
- A doctor?
- *A sort of doctor. He does operations.*
- A surgeon?
- *Yes, that's right.*

A A	B B
A A	B B

Students work in groups, checking vocabulary

Alternatively, students can work in small groups, each group consisting of two As and two Bs and using the following strategies:

- i) defining the word
- ii) describing what the item looks like
- iii) stating what the item is used for
- iv) describing the person's role
- v) stating what the opposite of the word is
- vi) giving examples
- vii) leaving a gap in a sentence for the word
- viii) stating what the word sounds like.

A B	A B
A B	A B

Students work in pairs, co-operating to solve their crosswords

Word association 1: missing links

Each of the sets of four words below can be linked by one other word. All the words are related to medical matters. What are the missing words? Write them in the centre of the charts.

1.

ciliary		temperature
foreign		fat

2.

throbbing		relief
abdominal		threshold

3.

metacarpal		graft
cancellous		marrow

4.

cardiac		fatigue
skeletal		spasm

5.

black		bath
glass		drops

6.

blood		membrane
beta		body

Word formation: nouns

A fast way to expand your vocabulary is to make sure you know the different forms of the words you learn.

Exercise 1. The words in this list are all verbs. What are the noun forms? Write them in the second column. The first one has been done for you as an example.

- | | | | | | |
|----|-----------|------------------|-----|------------|-------|
| 1. | diagnose | <u>diagnosis</u> | 9. | infect | _____ |
| 2. | examine | _____ | 10. | carry | _____ |
| 3. | prescribe | _____ | 11. | replace | _____ |
| 4. | suffer | _____ | 12. | degenerate | _____ |
| 5. | operate | _____ | 13. | refer | _____ |
| 6. | cure | _____ | 14. | paralyse | _____ |
| 7. | recover | _____ | 15. | obstruct | _____ |
| 8. | analyse | _____ | | | |

Exercise 2. First, check your answers to Exercise 1 in the key. Then rewrite the sentences below, changing the verbs (which are in **bold**) to nouns. Do not change the meaning of the sentences, but be prepared to make grammatical changes if necessary. The first one has been done for you as an example.

- | | |
|---|---|
| 1. I diagnosed that the patient had a heart condition.
<i>My diagnosis was that the patient had a heart condition.</i> | 9. We found that the tissue was infected .
<i>We found an _____</i> |
| 2. I examined the patient fully.
<i>I made a full _____</i> | 10. Ten per cent of the population are thought to carry the bacteria.
<i>Ten per cent of the population are thought to be _____</i> |
| 3. I prescribed a course of antibiotics.
<i>I wrote a _____</i> | 11. We replaced the patient's hip.
<i>The patient was given a hip _____</i> |
| 4. He suffered very little.
<i>He experienced very little _____</i> | 12. His condition has degenerated .
<i>There has been a _____</i> |
| 5. We operated immediately.
<i>The _____</i> | 13. The patient was referred to a specialist.
<i>The patient was given a _____</i> |
| 6. This disease cannot be cured .
<i>There is no _____</i> | 14. His arm was paralysed after the stroke.
<i>He suffered _____</i> |
| 7. He has recovered fully.
<i>He has made a full _____</i> | 15. The artery was obstructed by a blood clot.
<i>The blood clot was forming an _____</i> |
| 8. The lab analysed the blood sample.
<i>The lab made an _____</i> | |

Two-word expressions

Make 15 two-word expressions connected with medicine by combining words from the two lists: A and B. Match each expression with the appropriate phrase. Use each word once. The first one has been done for you as an example.

A

allergic
balanced
bedside
biological
bone
brain
clinical
digestive
general
general
heart
malignant
plastic
primary
surgical

B

anaesthetic
attack
clock
death
diet
intervention
manner
marrow
practitioner
reaction
surgery
system
tooth
trial
tumour

1. A condition in which the heart has a reduced blood supply because one of the arteries becomes blocked by a blood clot, causing myocardial ischaemia and myocardial infarction
heart attack
2. A substance given to make someone lose consciousness so that a major surgical operation can be carried out
3. Soft tissue in cancellous bone.
4. The treatment of disease or other condition by surgery.
5. Any one of the first twenty teeth which develop in children between about six months and two-and-a-half years of age, and are replaced by the permanent teeth at around the age of six.
6. Surgery to repair damaged or malformed parts of the body.
7. A condition in which the nerves in the brain stem have died, and the person can be certified as dead, although the heart may not have stopped beating.
8. The way in which a doctor behaves towards a patient, especially a patient who is in bed.
9. An effect produced by a substance to which a person has an allergy, such as sneezing or a skin rash.
10. A trial carried out in a medical laboratory on a person or on tissue from a person.
11. A tumour which is cancerous and can grow again or spread into other parts of the body, even if removed surgically.
12. A doctor who provides first-line medical care for all types of illness to people who live locally, refers them to hospital if necessary and encourages health promotion.
13. The rhythm of daily activities and bodily processes such as eating, defecating or sleeping, frequently controlled by hormones, which repeats every twenty-four hours.
14. The set of organs such as the stomach, liver and pancreas which are associated with the digestion of food.
15. A diet that provides all the nutrients needed in the correct proportions.

Plural formation

In *Column A* of this table there are 25 nouns relating to medicine. For each of the nouns decide whether the correct plural form is in *Column B* or *Column C* and then circle it.

The first question has been done for you as an example.

	<i>Column A</i>	<i>Column B</i>	<i>Column C</i>
1.	stratum	stratums	strata
2.	foot	foots	feet
3.	fibula	fibulae	fibulas
4.	glomerulus	glomerulae	glomeruli
5.	abscess	abscesses	abscessi
6.	joint	jointes	joints
7.	bullae	bullae	bullas
8.	testis	testises	testes
9.	septum	septa	septums
10.	oesophagus	oesophaguses	oesophagi
11.	diagnosis	diagnoses	diagnosises
12.	humerus	humeruses	humeri
13.	syringe	syringes	syringae
14.	acetabulum	acetabula	acetabulums
15.	larva	larvae	larvi
16.	chorda	chordas	chordae
17.	varix	varices	varixi
18.	fungus	fungi	funguses
19.	ganglion	ganglions	ganglia
20.	villus	villi	villae
21.	atrium	atria	atriums
22.	pons	pontes	ponses
23.	ovum	ovums	ova
24.	bout	bouts	boutae
25.	cortex	cortexes	cortices

Word formation: adjectives

The italicised words in the sentences in Column A are all nouns. What are the adjective forms? Complete the sentences in Column B using the correct adjective forms.

	Column A	Column B
1.	The surgeons operated to repair the <i>defect</i> on the patient's heart valve.	The surgeons operated to repair the patient's ...
2.	His diet has a calcium <i>deficiency</i> .	His diet is calcium-...
3.	She has a physical <i>dependence</i> on amphetamines.	She is physically ...
4.	The doctor noted an <i>excess</i> of bile in the patient's blood.	The doctor noted an ...
5.	An attack of <i>hypoglycaemia</i> can be prevented by eating glucose or a lump of sugar when feeling faint.	A ...
6.	The vaccine should give <i>immunity</i> to tuberculosis.	The vaccine should make you ...
7.	They have periods of complete <i>inactivity</i> .	They have periods when they are completely ...
8.	The <i>pain</i> in his foot is so great that he can hardly walk.	His foot is so ...
9.	I injured my <i>spine</i> in the crash.	I suffered ...
10.	She complained of <i>stiffness</i> in the joints.	She complained of ...

Word association 2: partnerships

Exercise 1.

Link each *verb* on the left with a *noun* on the right to make 10 'partnerships'. The first one has been done for you as an example.

	Verbs	Nouns
1.	administer	an improvement
2.	analyse	a baby
3.	arrange	antibiotics
4.	burp	the treatment
5.	catch	some infections
6.	detect	an appointment
7.	discontinue	a sample
8.	ease	the pain
9.	resist	a drug
10.	prescribe	a cold

Exercise 2.

Complete these sentences using the partnerships from Exercise 1. You may have to make some changes to fit the grammar of the sentences. The first one has been done for you as an example.

1. The doctor will administer a drug to the patient.
2. She was _____ .
3. As soon as the patient reported severe side-effects, the doctor _____ .
4. I've _____ from one of my colleagues at work.
5. The laboratory _____ of the food and found traces of bacteria.
6. A healthy body can _____ .
7. I would like to _____ with the dental hygienist for 10.00am tomorrow.
8. She had an injection to _____ in her leg.
9. The health visitor advised the new parents to _____ after feeding.
10. The nurses _____ in the patient's condition.

Opposites 1: prefixes

Exercise 1.

English often uses prefixes to create opposites. There are several different prefixes that are used. Choose the right prefix for each of the adjectives below and write them into the table. The first one has been done for you:

active adequate coherent compatible complete
 conscious controllable dependent digested direct fertile fit healthy
 hygienic legal movable operable palpable pure qualified reducible
 regular sanitary soluble stable well

il-	im-	in-	ir-	un-
1.	1.	1. inactive	1.	1.
	2.	2.	2.	2.
	3.	3.		3.
		4.		4.
		5.		5.
		6.		6.
		7.		7.
		8.		8.
		9.		9.
		10.		
		11.		

Exercise 2.

Use ten of the adjectives in the table to complete these sentences. The first one has been done for you as an example.

1. He was found unconscious in the street.
2. He felt _____ and had to go home.
3. The serum makes the poison _____.
4. The children have a very _____ diet.
5. The nurse noted that the patient had developed an _____ pulse.
6. She used to play a lot of tennis, but she became _____ in the winter.
7. The surgeon decided that the cancer was _____.
8. Cholera spread rapidly because of the _____ conditions in the town.
9. The patient was showing signs of an _____ mental condition.
10. She has an _____ desire to drink alcohol.

Extension. Work with a partner and test each other. One partner closes the book, while the other asks questions such as "What's the opposite of conscious?".

Word formation: verbs

Exercise 1.

The words listed in the table below are nouns. What are the verb forms of these nouns? The first question has been done for you as an example.

1.	abuse	abuse	16.	perspiration
2.	admission		17.	preparation
3.	bandage		18.	provision
4.	blood		19.	reabsorption
5.	breath		20.	regeneration
6.	coagulation		21.	registration
7.	consultation		22.	regurgitation
8.	convalescence		23.	rehabilitation
9.	fertilisation		24.	reproduction
10.	identification		25.	resuscitation
11.	immunisation		26.	sedation
12.	implant		27.	stammer
13.	maceration		28.	stitch
14.	management		29.	suppression
15.	occurrence		30.	sweat

Exercise 2.

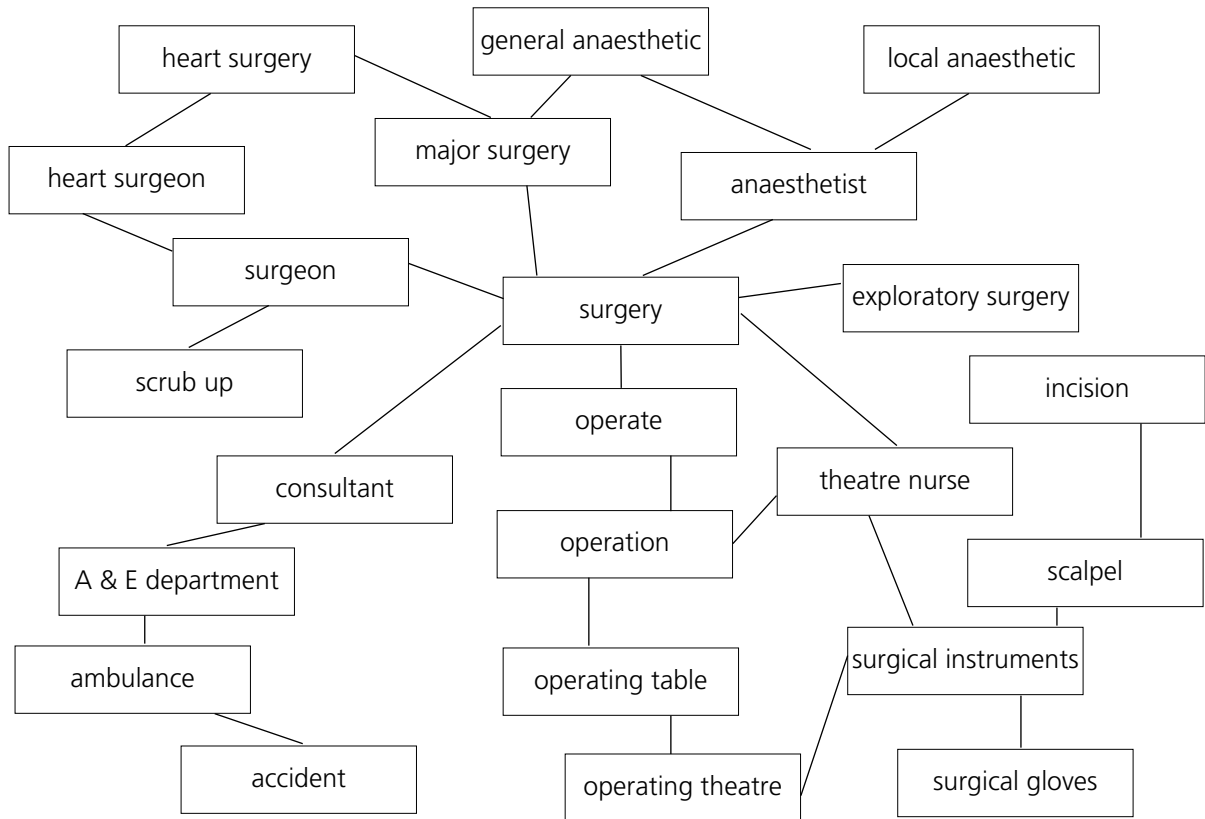
Choose ten verbs from Exercise 1 and write a sentence below for each one. Write the correct form of each verb in the column on the right and leave gaps for the verbs in the sentences. Cover up the right-hand column and give the sentences to another student as a test. For example:

<i>She with her local GP.</i>	<i>registered</i>
-------------------------------------	-------------------

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

Word association 3: mind maps

A mind map is a way of organising vocabulary to show the connections between words. This mind map is based on the word 'surgery'.



Exercise 1.

Find words and expressions in the mind map that fit the following definitions.

1. A special room in a hospital, where surgical operations are carried out
2. A nurse who is specially trained to assist a surgeon during an operation
3. The part of a hospital which deals with people who need urgent treatment because they have had accidents or are in sudden serious pain
4. Surgical operations involving important organs in the body
5. A doctor who specialises in surgery
6. An anaesthetic which removes the feeling in a single part of the body only
7. A senior specialised doctor in a hospital
8. A surgical operation to remedy a condition of the heart
9. To clean the hands and arms thoroughly before performing surgery
10. The treatment of diseases or disorders by procedures which require an operation to cut into, to remove or to manipulate tissue, organs or parts

Exercise 2.

Design a mind map for one or more of the following:

- health
- hospital
- patient

Nouns

There are 20 nouns connected with medicine in the box below. Use them to complete the sentences - in some cases you will need to make them plural. The first one has been done for you as an example.

accident	allergy	ambulance	biopsy	consent	course	examination	excess
exercise	injection	intake	overdose	paroxysm	progress	rash	recurrence
		surgery	tendency	treatment	vaccination		

1. He developed an allergy to penicillin.
2. He suffered _____ of coughing in the night.
3. She went into a coma after an _____ of heroin.
4. The patient will need plastic _____ to remove the scars he received in the accident.
5. She took a _____ of steroid treatment.
6. He had a _____ of a fever which he had caught in the tropics.
7. There is a _____ to obesity in her family.
8. From the _____ of the X-ray photographs, it seems that the tumour has not spread.
9. The doctor gave him an _____ to relieve the pain.
10. He doesn't take enough _____: that's why he's fat.
11. The injured man was taken away in an _____.
12. She was advised to reduce her _____ of sugar.
13. The _____ of the tissue from the growth showed that it was benign.
14. The parents gave their _____ for their son's heart to be used in the transplant operation.
15. The doctors seem pleased that she has made such good _____ since her operation.
16. This is a new _____ for heart disease.
17. Her body could not cope with an _____ of blood sugar.
18. Three people were injured in the _____ on the motorway.
19. _____ is mainly given against cholera, diphtheria, rabies, smallpox, tuberculosis and typhoid.
20. She had a high temperature and then broke out in a _____.

Adjectives 1

Complete the sentences using the adjectives in the box. Use each adjective once only. The first one has been done for you as an example.

aware	compatible	confused	delicate	depressed	hoarse	hygienic
inactive	inborn	incipient	infectious	inoperable	insanitary	lethal
motionless	poisonous	predisposed	regular	safe	severe	

1. This is a safe painkiller, with no harmful side-effects.
2. Some mushrooms are good to eat and some are _____ .
3. The surgeons are trying to find a donor with a _____ blood group.
4. The surgeon decided that the cancer was _____ .
5. These fumes are _____ if inhaled.
6. The body has an _____ tendency to reject transplanted organs.
7. The tests detected _____ diabetes mellitus.
8. The serum makes the poison _____.
9. A _____ outbreak of whooping cough occurred during the winter.
10. Old people can easily become _____ if they are moved from their homes.
11. Catatonic patients can sit _____ for hours.
12. Don't touch food with dirty hands: it isn't _____.
13. All the members of the family are _____ to vascular diseases.
14. She is not _____ of what is happening around her.
15. The bones of a baby's skull are very _____.
16. Cholera spread rapidly because of the _____ conditions in the town.
17. He was _____ after his exam results.
18. He was advised to make _____ visits to the dentist.
19. This strain of flu is highly _____.
20. He became _____ after shouting too much.

Adjectives 2

Complete the sentences using the adjectives in the box. Use each adjective once only. The first one has been done for you as an example.

acute	bedridden	critical	deaf	depressed	excessive	harmful	infirm
inflamed	latent	lethal	mobile	obsessive	painful	persistent	premature
		severed	subjective	tender	viable		

1. These fumes are lethal if inhaled.
2. The report was _____ of the state of aftercare provision.
3. She had a _____ cough.
4. The psychiatrist gave a _____ opinion on the patient's problem.
5. My grandfather is quite _____ now.
6. The skin has become _____ around the sore.
7. It is important for elderly patients to remain _____.
8. His foot is so _____ he can hardly walk.
9. A fetus is _____ by about the 28th week of the pregnancy.
10. You have to speak slowly and clearly when you speak to Mr Jones because he's quite _____.
11. The baby was born five weeks _____.
12. The patient was passing _____ quantities of urine.
13. He felt _____ chest pains.
14. He is _____ and has to be looked after by a nurse.
15. The children were tested for _____ viral infection.
16. He has an _____ desire to steal small objects.
17. Her shoulders are still _____ where she got sunburnt.
18. Surgeons tried to sew the _____ finger back onto the patient's hand.
19. She was _____ for weeks after the death of her husband.
20. Bright light can be _____ to your eyes.

Verbs 1

The sentences in *Column A* contain examples of useful verbs in medicine. In *Column B* there are definitions of the verbs. Read the examples and match the verbs (in *italics*) with the definitions. Then write the infinitive forms into the spaces in the definitions in *Column B*. The first one has been done for you as an example.

Column A: Examples	Column B: Definitions
1. After the accident the passengers were <i>treated</i> in hospital for cuts.	a) diagnose means to identify a condition or illness, by examining the person and noting symptoms
2. Nurses <i>dressed</i> the wounds of the accident victims.	b) _____ means to use medical methods to cure a disease or help a sick or injured person to recover
3. He <i>specialises in</i> children with breathing problems.	c) _____ means to make someone healthy
4. She <i>suffers</i> from headaches.	d) _____ means to put someone or something at risk
5. She was <i>vaccinated</i> against smallpox as a child.	e) _____ means to give instructions for a person to get a specific dosage of a drug or a specific form of therapeutic treatment
6. Some forms of cancer cannot be <i>cured</i> .	f) _____ means to study or treat one particular disease or one particular type of patient
7. The calamine lotion will <i>soothe</i> the rash.	g) _____ means to have an illness for a long period of time
8. The doctor diagnosed <i>operated</i> on the patient's appendix.	h) _____ means to treat a person for a condition by cutting open the body and removing a part which is diseased or repairing a part which is not functioning correctly
9. The doctor <i>prescribed</i> a course of antibiotics.	i) _____ means to introduce vaccine into a person's body in order to make the body create its own antibodies, so making the person immune to the disease
10. The drug <i>suppresses</i> the body's natural instinct to reject the transplanted tissue.	j) _____ means to relieve pain
11. The operation may <i>endanger</i> the life of the patient.	k) _____ means to clean a wound and put a covering over it
12. The surgeons decided to <i>operate</i> as the only way of saving the baby's life.	l) _____ means to reduce the action of something completely, e.g. to remove a symptom or to stop the release of a hormone

Verbs 2

The sentences in *Column A* contain examples of useful verbs in medicine. In *Column B* there are definitions of the verbs. Read the examples and match the verbs (in *italics*) with the definitions. Then write the infinitive forms into the spaces in the definitions in *Column B*. The first one has been done for you as an example.

Column A: Examples	Column B: Definitions
1. He was <i>admitted</i> this morning.	a) _____ means to pass from one place to another
2. The cancer is not <i>responding</i> to drugs.	b) _____ means to damage or hurt someone or something
3. He was still <i>limping</i> three weeks after the accident.	c) _____ means to go through or into something
4. The doctors <i>saved</i> the little boy from dying of cancer.	d) _____ means to make a hole through something
5. The end of the broken bone has <i>penetrated</i> the liver.	e) _____ means to investigate the inside of something
6. The new heart has <i>performed</i> very well.	f) _____ means to stop someone from being hurt or killed
7. The patient was <i>transferred</i> to a special unit.	g) _____ means to walk awkwardly because of pain, stiffness or malformation of a leg or foot
8. She <i>fainted</i> when she saw the blood.	h) <u>admit</u> means to register a patient in a hospital
9. The surgeon <i>probed</i> the wound with a scalpel.	i) _____ means to stop something from happening
10. Walking to work every day won't <i>harm</i> you.	j) _____ means to react to something or to begin to get better because of a treatment
11. The treatment is given to <i>prevent</i> the patient's condition from getting worse.	k) _____ means to stop being conscious for a short time and, usually, fall down
12. The ulcer <i>perforated</i> the duodenum.	l) _____ means to work

Verbs: past tense ~ regular verbs

All the verbs in the box relate to medical matters. Use the past tense forms to complete the sentences. The first question has been done for you as an example.

adapt aggravate develop examine faint fracture prolong react
~~receive~~ recover require strain suffer tremble weigh

1. He **received** a new kidney from his brother.
2. He _____ his back lifting the table.
3. She _____ from her concussion in a few days.
4. It was so hot standing in the sun that he _____ .
5. The doctors decided that her condition _____ surgery.
6. She _____ from poor circulation, which made her feel the cold.
7. She _____ well to her new diet.
8. The embryo _____ quite normally in spite of the mother's illness.
9. His tibia _____ in two places.
10. The patient _____ badly to the penicillin.
11. The nurse _____ the baby on the scales.
12. The treatment _____ her life by three years.
13. Playing football only _____ his knee injury.
14. The doctor _____ the boy's throat.
15. His hands _____ with the cold.

Verbs: mixed tenses

All the verbs in the box relate to medical matters. Use them to complete the sentences. You may have to change the forms of the verbs to fit the grammar of the sentences. (Remember the five forms of English verbs - for example: take, takes, took, taken, taking.) The first question has been done for you as an example.

amputate	bite	bruise	burn	control	expel	freeze	heal	hurt
measure	overcome	progress	rebuild	undergo	visit			

1. I am going to visit my brother in hospital.
2. She _____ her disabilities and now leads a normal life.
3. After the accident her pelvis was completely _____.
4. She has _____ several operations.
5. They _____ my big toe to remove the nail.
6. She _____ her knee on the corner of the table.
7. A thermometer _____ temperature.
8. Air is _____ from the lungs when a person breathes out.
9. His arm is _____ so much he can't write.
10. A minor cut will _____ faster if it is left without a bandage.
11. The girl _____ her hand on a hot frying pan.
12. He _____ his asthma with a bronchodilator.
13. The patient's leg needs to be _____ below the knee.
14. She was _____ by an insect.
15. The doctor asked how the patient was _____ .

Phrasal verbs

Natural English conversation includes many phrasal verbs. These are verbs made up of two words: a verb and a preposition. For example: 'I *get up* at eight o'clock'. Complete the sentences below using the phrasal verbs in the box. You will have to change the forms of some of the verbs to make the grammar of the sentence correct. The first one has been done for you as an example.

1. He **got over** his cold.
2. The nurses are _____ her very well.
3. He must have _____ the disease when he was travelling in Africa.
4. She often _____ in front of the TV.
5. When we told her that her father was ill, she _____.
6. She _____ and cried as she described the symptoms to the doctor.
7. He _____ his father.
8. The doctor asked him to _____ his shirt.
9. He was _____ mucus.
10. Since she had the accident she _____ using crutches.
11. I was advised to _____ smoking.
12. He was _____ by a blow to the head.
13. The nurse _____ the patient with pillows.
14. The swelling has started to _____.
15. She became worried when the girl started _____ blood.

<i>Phrasal verbs</i>
<i>break down</i> = to start to cry and become upset
<i>bring up</i> = to cough up material such as mucus from the lungs or throat
<i>cough up</i> = to cough hard to expel a substance from the trachea
<i>drop off</i> = to fall asleep
<i>get around</i> = to move about
<i>get over</i> = to become better after an illness or a shock
<i>give up</i> = not to do something any more
<i>go down</i> = to become smaller
<i>knock out</i> = to hit someone so hard that he or she is no longer conscious
<i>look after</i> = to take care of a person and attend to his or her needs
<i>pass out</i> = to faint
<i>pick up</i> = to catch a disease
<i>prop up</i> = to support a person, e.g. with pillows
<i>take after</i> = to be like one or other parent
<i>take off</i> = to remove something, especially clothes

Extension. Work with a partner: write a dialogue which includes at least seven of the phrasal verbs from this page.

Verbs: active/passive

Change the sentences below from active to passive tense. For example:

Active: *The GP referred the patient to a consultant.*

Passive: *The patient was referred to a consultant by the GP.*

Remember that it is not always necessary to mention the subject in a passive sentence. For example:

Active: *We have identified the cause of this outbreak of dysentery.*

Passive: *The cause of this outbreak of dysentery has been identified.*

1. The nurse noticed a rise in the patient's pulse rate.
 Passive:.....
2. The consultant is allowing him to watch the operation.
 Passive:.....
3. All chemists sell the tablets.
 Passive:.....
4. The doctor diagnosed appendicitis.
 Passive:.....
5. The paramedics comforted the injured person until the ambulance arrived.
 Passive:.....
6. The midwife delivered the twins.
 Passive:.....
7. The gland was producing an excess of hormones.
 Passive:.....
8. They looked after him very well in hospital.
 Passive:.....
9. We examined the tissue under the microscope.
 Passive:.....
10. The doctor gave me an unpleasant mixture to drink.
 Passive:.....
11. You cannot take the lotion orally.
 Passive:.....
12. Toxic fumes poisoned the workers.
 Passive:.....
13. Doctors are predicting a rise in cases of whooping cough.
 Passive:.....
14. The drug suppresses the body's natural instinct to reject the transplanted tissue.
 Passive:.....

Adverbs

The sentences below do not read correctly. Identify the adverbs in the sentences and then swap the adverbs around so that each sentence makes sense.

Some of the adverbs could be used in several of the sentences.

1. The bandage was medicinally tied around her wrist.
.....
2. Immediately, she is very advanced for her age.
.....
3. If the patient sweats fairly, it may be necessary to cool his body with cold compresses.
.....
4. The tumour is excessively placed and not easy to reach.
.....
5. She manages all her patients very mentally.
.....
6. The relief team loosely requires more medical supplies.
.....
7. This is a physically antiseptic solution.
.....
8. Mildly he is very weak, but his mind is still alert.
.....
9. He became ill efficiently after he came back from holiday.
.....
10. The herb can be used awkwardly.
.....
11. He has been working as a doctor only for a severely short time.
.....
12. Her breathing was urgently affected.
.....

Prepositions

The sentences in this exercise contain **mistakes**. The mistakes are all in the prepositions and there are three types:

- | | | | |
|----|-------------------------|---|-----------|
| 1. | missing preposition | I spoke [^] him about this last week. | <i>to</i> |
| 2. | wrong preposition | We're meeting again in [^] Tuesday. | <i>on</i> |
| 3. | unnecessary preposition | I'll telephone to you tomorrow. | |

Find the mistakes and correct them.

1. The hospital has installed new apparatus through the physiotherapy department.
2. Her lips were cracked of the cold.
3. The boy's little toe was crushed the door.
4. The tissue was examined on the microscope.
5. It is important that needles used at injections should be sterilised.
6. He is recovering from a bout flu.
7. She was given to a pain-killing injection.
8. Some types of wool can irritate to the skin.
9. This report quotes the number of cases of cervical cancer from thousand patients tested.
10. The doctor put the patient to sleep within a strong narcotic.
11. She burnt her hand at the hot frying pan.
12. We have no spare beds on the hospital at the moment.
13. He will have an operation to remove of an ingrowing toenail.
14. Please ensure that the patient takes of his medicine.

Word stress 1

One of the keys to English pronunciation is *stress* - emphasis. There are three possible patterns for three-syllable words:

- A: ■ □ □ **hos**-pi-tal
 B: □ ■ □ pre-**scrip**-tion
 C: □ □ ■ rec-om-**mend**

Read these five conversations. Find all the three-syllable words and classify them by their pronunciation. There are 27 in total. Put them in the correct sections of the table on the right. The first one has been done for you as an example.

Dialogue 1

- When was she admitted to hospital?
- At about four o'clock.
- Has there been any improvement?
- No, her condition is stable. We're waiting to see how things develop.

Dialogue 2

- What do you recommend?
- Well, first of all: cut down on fatty foods.
- And what else?
- Take regular exercise, don't smoke and keep alcohol down to a minimum.

Dialogue 3

- What's the problem?
- I went to give him his injection and I saw that he'd started to haemorrhage.
- We'll have to operate. Make sure all the equipment is prepared.
- I'll go down to the theatre and check.

Dialogue 4

- So, is it serious?
- Don't worry. It's probably just an allergic reaction.
- Are you just saying that to reassure me?
- You're fine. Look, I'm going to give you a prescription for some painkillers...

Dialogue 5

- Have you got the test results yet?
- Well, they're still incomplete, but it's clear that it's positive.
- Any idea when infection took place?
- I'd say five or six weeks ago, but that's just an opinion. Do you want to see her medical history?

Extension. Practise the dialogues with a partner.

Group A: ■ □ □	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
Group B: □ ■ □	
1	admitted
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
Group C: □ □ ■	
1	
2	
3	

Word stress 2

One of the keys to English pronunciation is *stress* - emphasis. There are three normal patterns for four-syllable words:

A: ■ □ □ □ **vac**-ci-na-ted B: □ ■ □ □ pneu-**mo**-ni-a C: □ □ ■ □ in-flu-**en**-za

Exercise 1. Complete the sentences below using the four-syllable words in the table. The first question has been done for you as an example.

1. She appeared to be improving, but a **complication** set in and she died a few hours later.
2. Bell's Palsy causes facial _____.
3. Come right now: it's an _____!
4. The patient was having difficulties breathing so we put him on a _____.
5. She had an _____ to replace the cornea.
6. He was given a general _____ before the surgeons began work.
7. As a precaution against AIDS we use _____ needles.
8. He can't take aspirin: he has an _____ to it.
9. Rub your hands together to get the _____ going.
10. He couldn't _____ the movements of his arms and legs.
11. An _____ was organised to test the drug on a small group of people.
12. Tests confirmed the _____ of the growth.
13. This is the allergen which was _____ for the patient's reaction.
14. _____ showed that the food contained bacteria.
15. The surgeons are trying to find a _____ donor.
16. A diet high in _____ fats increases the risk of heart disease.
17. The surgeon _____ to the students how to make the incision.
18. As many as 60-70% of diarrhoeal deaths are caused by _____.
19. Autistic children do not _____ with anyone.
20. _____ is a common antibiotic produced from a fungus.

Exercise 2. Decide which pronunciation pattern is correct for each of the words in the table and tick the appropriate column.

	A ■ □ □ □	B □ ■ □ □	C □ □ ■ □
anaesthetic			
analysis			
circulation			
communicate			
compatible			
complication			
coordinate			
dehydration			
demonstrated			
disposable			
emergency			
experiment			
intolerance			
malignancy			
operation			
paralysis			
penicillin			
respirator			
responsible			
saturated			

Present simple

Verbs in the present tense add an 's' in the third person singular: I work, you work, he/she/it works. But the 's' has three different pronunciations. Look at these examples:

A: /s/, for example *treats*

B: /z/, for example *heals*

C: /ɪz/, for example *changes*

Find the third person present tense verbs in these sentences and classify them by their pronunciation. Put them in the correct columns in the table on the right. Be careful: some sentences have more than one example. There are 27 verbs in total. The first one has been completed for you as an example.

1. The patient breathes with difficulty and coughs and sneezes constantly.
2. This drug helps to alleviate the symptoms and reduces the risk of reinfection.
3. A person whose resistance is low catches diseases more easily.
4. When someone panics his heart beats more rapidly and his temperature rises.
5. The laboratory analyses the blood samples and then the doctor examines the results and diagnoses the condition.
6. He then recommends a course of treatment and prescribes any necessary drugs.
7. This drug relaxes the muscles and relieves pain.
8. The gland releases hormones into the bloodstream, causing an immediate reaction.
9. If the patient sleeps well, he wakes feeling refreshed.
10. She suffers constant pain and controls it by using morphine.
11. This treatment counteracts the effects of the infection.
12. It is a procedure which cures the condition or kills the patient.
13. If the surgeon operates now the chance of success increases to about 50%.
14. The sinoatrial node regulates the heart beat.

Group A: /s/

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

Group B: /z/

- 1... **breathes**
- 2.....
- 3.....
- 4.....
- 5.....
- 6.....
- 7.....
- 8.....
- 9.....

Group C: /ɪz/

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

Extension. The same rule applies to plural nouns: /s/ patients, /z/ doctors, /ɪz/ nurses. Work with a partner and find five example nouns for each sound.

Past tense

Regular verbs have three different pronunciations in the past tense (or the past participle). The difference is in the sound you use for the ending. Look at these examples:

- A: /t/, for example *placed*
- B: /d/, for example *examined*
- C: /ɪd/, for example *injected*

Find the past tense verbs in these sentences and classify them by their pronunciation. Put them in the correct columns in the table on the right. Be careful: some sentences have more than one verb. There are 23 examples in total. The first one has been done for you as an example.

1. She was ~~vaccinated~~ vaccinated against smallpox as a child.
2. The doctor diagnosed him as having hepatitis B.
3. Her condition improved, so we reduced the dose.
4. He consulted a specialist, who recommended surgery.
5. The patient coughed and sneezed all through the consultation.
6. The surgeons replaced her hip with a metal one.
7. The doctor prescribed a course of antibiotics.
8. The doctor's speedy action prevented further complications.
9. The pharmacist mixed the chemicals in this bottle.
10. The surgeons operated immediately on the child.
11. He was completely cured.
12. The nurse disinfected and dressed the wound.
13. She was treated by a heart specialist.
14. His pulse rate increased by 10%.
15. The attack was preceded by a rise in body temperature.
16. The surgical instruments were sterilised before use.
17. Nobody noticed that the patient's blood pressure had dropped.
18. The surgeon probed the wound with a scalpel.

Group A: /t/	
1.....	
2.....	
3.....	
4.....	
5.....	
6.....	
7.....	
8.....	
Group B: /d/	
1.....	
2.....	
3.....	
4.....	
5.....	
6.....	
7.....	
Group C: /ɪd/	
1... vaccinated	
2.....	
3.....	
4.....	
5.....	
6.....	
7.....	
8.....	

Good advice

These sentences all give very good advice, but they have been divided into separate halves. Match the half-sentences in Column A with the half-sentences in Column B to make 14 sentences which are correct, complete and true.

<i>Column A</i>		<i>Column B</i>	
1.	Regular exercise is ...	a)	... burn easily in the sun.
2.	A balanced diet should ...	b)	... cause back pain.
3.	Medicines should ...	c)	... be inoculated against diphtheria.
4.	A patient in shock should ...	d)	... be kept out of the reach of children.
5.	Not taking any exercise is ...	e)	... be kept warm and lying down.
6.	Reading in bad light can ...	f)	... about 2.5 litres of fluid each day.
7.	You should do ...	g)	... good for the heart.
8.	A normal adult should drink ...	h)	... five minutes' exercise every morning.
9.	HIV can be transmitted ...	i)	... be sterilised before use.
10.	Bad posture can ...	j)	... make the eyes ache.
11.	People with fair complexions ...	k)	... provide all the nutrients needed, in the correct proportions.
12.	Surgical instruments must ...	l)	... an unhealthy way of living.
13.	Babies should ...	m)	... be by pressure and elevation.
14.	Haemorrhage control routinely should ...	n)	... by using non-sterile needles.

Extension. Working with a partner, write five pieces of medical advice.

Multiple meanings

Some words have more than one meaning. For example, the word *pulse* means the pressure wave in an artery when the heart beats, but it also refers to a certain type of vegetable: beans and peas. In the table below 19 meanings appear in the column on the left. Match each meaning to one of the seven words across the top. The first one has been done for you as an example.

	cold	fit	focus	light	notice	patient	turn
1. A person who is in hospital or who is being treated by a doctor.							
2. To attach an appliance correctly.							
3. The point where light rays converge through a lens.							
4. To see or be aware of something.							
5. To change into something different.							
6. Weighing a comparatively small amount.							
7. An illness, with inflammation of the nasal passages, in which someone sneezes and coughs and has a blocked and running nose.							
8. The centre of an infection.							
9. To move the head or body to face in another direction.							
10. Being able to wait a long time without getting annoyed.							
11. A piece of writing giving information, usually put in a place where everyone can see it.							
12. To have convulsions.							
13. A slight illness or attack of dizziness.							
14. A sudden attack of a disorder, especially convulsions and epilepsy.							
15. The energy that makes things bright and helps a person to see.							
16. To adjust a lens until an image is clear and sharp.							
17. Strong and physically healthy.							
18. Not warm or hot.							
19. Referring to hair or skin which is very pale.							

Odd one out

In each set of words one is the *odd one out*: different from the others. Find the word that is different, and circle it.

For example:

callosum..... cerebellum..... colliculus..... coccyx.....

Coccyx is the odd one out. It is a bone; the others are all parts of the brain.

1.	aching.....	bleeding.....	nagging.....	throbbing.....
2.	hand.....	kidney.....	leg.....	liver.....
3.	ankle.....	elbow.....	knee.....	forearm.....
4.	ear.....	eye.....	face.....	nose.....
5.	nurse.....	orderly.....	surgeon.....	patient.....
6.	bandage.....	forceps.....	probe.....	scalpel.....
7.	expiration.....	inspiration.....	respiration.....	supination.....
8.	cataracts.....	eyelids.....	nearsightedness.....	strabismus.....
9.	improve.....	get better.....	recover.....	relapse.....
10.	iris.....	lens.....	palm.....	pupil.....
11.	oval window.....	semicircular canals...	tympanic membrane	vertebral column....
12.	aluminium.....	copper.....	iron.....	zinc.....
13.	break.....	crack.....	fracture.....	wound.....
14.	metacarpal bone....	nasal bone.....	occipital bone.....	zygomatic arch.....
15.	liver.....	heart.....	pancreas.....	spleen.....
16.	bite.....	chew.....	swallow.....	taste.....
17.	hepatalgia.....	hernia.....	liver.....	hepatocyte.....
18.	epidermis.....	pore.....	dermis.....	diabetes.....

Body parts - categories

In this table there are 38 words for parts of the body and six categories. Decide which category or categories each part belongs to. The first one has been done for you as an example.

	arm	hand	leg	foot	torso	head
abdomen					x	
Achilles tendon						
ankle						
buttock						
calf						
chest						
chin						
ear						
elbow						
eye						
eyebrow						
eyelash						
eyelid						
finger						
forearm						
forehead						
gum						
hip						
knee						
knuckle						
lip						
nail						
navel						
neck						
nipple						
nose						
palm						
rib						
scalp						
shoulder						
sole						
temple						
thigh						
thumb						
toe						
tongue						
tooth						
wrist						

Opposites 2

Exercise 1.

Match the words in italics with their opposites in the box on the right. The first one has been done for you as an example.

1. The opposite of *back* is **front**
2. The opposite of *acute* is
3. The opposite of *dead* is
4. The opposite of *improve* is
5. The opposite of *healthy* is
6. The opposite of *open* is
7. The opposite of *major* is
8. The opposite of *reduce* is
9. The opposite of *smooth* is
10. The opposite of *benign* is

alive
chronic
closed
deteriorate
front
ill
increase
malignant
minor
rough

Exercise 2.

Complete these sentences using the words from Exercise 1. Use one word from each pair of opposites.

1. She had an _____ attack of shingles.
2. He became excited, causing his pulse rate to _____.
3. He was very ill, but now his condition has begun to _____.
4. The calf muscles are at the _____ of the lower leg.
5. She put cream on her hands, which were _____ from heavy work.
6. The tumour is _____ and so may reappear even if removed surgically.
7. The hospital is _____ to visitors from noon to five o'clock.
8. The doctor arrived too late: the patient was already _____.
9. There's nothing wrong with you: you're completely _____.
10. He had to undergo _____ surgery on his heart.

Extension. Work with a partner and test each other. One partner closes the book, while the other asks questions such as "*What's the opposite of back?*".

Abbreviations

Test your medical abbreviations. What do the following stand for? Check the ones you don't know in the dictionary. The first one has been done for you as an example.

1. A & E **Accident & Emergency**
2. AIDS
3. BMR
4. CAT
5. CHD
6. D & V
7. DOA
8. GP
9. HAV
10. HIV
11. MND
12. OTC
13. PM
14. PMA
15. PMT
16. RQ
17. RSI
18. SAD
19. SIDS
20. STI
21. TB
22. TBI
23. UV
24. VDH
25. WHO

Extension. Work with a partner and test each other. One partner closes the book, while the other asks questions such as "*What does A & E stand for?*".

Symptoms & common illnesses 1

These words are all used to talk about illnesses: their symptoms and effects. Tick the ones you understand. Check the others in the dictionary.

- | | | |
|----------------------|-----------------|----------------|
| 1. allergic reaction | 6. inflammation | 11. resistance |
| 2. blister | 7. itchy | 12. runny nose |
| 3. cough | 8. malformation | 13. sneeze |
| 4. fever | 9. malaise | 14. spot |
| 5. infectious | 10. rash | 15. swelling |

Read the descriptions below and match them to the names of the illnesses in the box on the right.

- | | |
|--|--|
| <p>1. An infectious disease of the upper respiratory tract with fever and muscular aches, which is transmitted by a virus and can occur in epidemics.
.....</p> <p>2. A common infectious viral disease of children, with mild fever, swollen lymph nodes and a rash. It can cause stillbirth or malformation of an unborn baby if the mother catches the disease while pregnant.
.....</p> <p>3. An illness, with inflammation of the nasal passages, in which someone sneezes and coughs and has a blocked and running nose.
.....</p> <p>4. An infectious disease of children, caused by a herpes virus, and characterised by fever and red spots which turn to itchy blisters.
.....</p> <p>5. An infectious disease of children where the body is covered with a red rash. It can weaken the body's resistance to other disease, especially bronchitis and ear infections. If caught by an adult it can be very serious.
.....</p> <p>6. An infectious disease of children, with fever and swellings in the salivary glands, caused by a paramyxovirus.
.....</p> <p>7. An infectious disease affecting the bronchial tubes, common in children and sometimes very serious. The patient coughs very badly and makes a characteristic 'whoop' when inhaling after a coughing fit.
.....</p> <p>8. Inflammation in the nose and eyes caused by an allergic reaction to plant pollen, mould spores, dust mites or animal hair.
.....</p> | <p>allergic rhinitis
coryza
infectious parotitis
influenza
pertussis
rubella
rubeola
varicella</p> |
|--|--|

Symptoms & common illnesses 2

Exercise 1.

Many illnesses also have informal names. Match the informal and formal names listed below. The first one has been done for you as an example.

INFORMAL

1. Chickenpox is the same as
2. A cold is the same as
3. The flu is the same as
4. German measles is the same as
5. Hay fever is the same as
6. Measles is the same as
7. Mumps is the same as
8. Whooping cough is the same as

FORMAL

- allergic rhinitis
- infectious parotitis
- coryza
- influenza
- rubella
- rubeola
- pertussis
- varicella

Exercise 2.

Complete these six conversations between doctors and patients by writing in the name of the illness. Use the informal terms from the table above.

1. What seems to be the trouble?
My eyes and my nose are running all the time.
I feel terrible.
When did this begin?
At the beginning of July.
It's probably just
2. What's the problem?
It's my son. He's got a rash and swelling in his armpits.
Does he have a fever?
Yes.
Hmm. He may have.....
3. How are you feeling?
I've got this terrible cough.
Mm-hmm.
And after I cough I make a noise when I try to breathe.
Sounds like
4. How are you today?
Oh, not very well. I've got a cough and a terrible cold.
Do you have a fever?
Umm, yes I do.
It's probably a touch of
5. What's the problem?
It's my daughter. She's got a fever and this swelling.
Where's the swelling?
In her throat.
It could be.....
6. So, what can I do for you?
It's the twins. They're covered in these dreadful red spots.
Are they experiencing any itching?
Yes, they are.
It may be.....

Extension. Practise the conversations with a partner.

Diagnosis

Read the eleven descriptions which follow, using your dictionary as and when necessary. What is the disease or illness being described in each case?

1. A disorder of the nervous system in which there are convulsions and loss of consciousness due to disordered discharge of cerebral neurons.
.....
2. A condition where tissues die and decay, as a result of bacterial action, because the blood supply has been lost through injury or disease of the artery.
.....
3. A condition where the lens of the eye gradually becomes hard and opaque.
.....
4. A progressive nervous disorder without a known cause which is a type of Parkinsonism, the main symptoms of which are trembling hands, a slow shuffling walk and difficulty in speaking.
.....
5. An infectious disease in which infected lumps form in the tissue. Its commonest form is infection of the lungs, causing patients to lose weight, cough blood and have a fever. It is caught by breathing in germs or by eating contaminated food, especially unpasteurised milk.
.....
6. A hereditary disease in which there is malfunction of the exocrine glands such as the pancreas, in particular those which secrete mucus, causing respiratory difficulties, male infertility and malabsorption of food from the gastrointestinal tract.
.....
7. A progressive disease of the liver, often associated with alcoholism, in which healthy cells are replaced by scar tissue.
.....
8. A serious, infectious disease of children. Its first symptoms are a sore throat, followed by a slight fever, rapid pulse and swelling of the glands in the neck. A fibrous growth like a membrane forms in the throat and can close the air passages. The disease is often fatal, either because the patient is asphyxiated or because the heart becomes fatally weakened.
.....
9. A disorder of the brain, mainly due to brain damage occurring before birth, or due to lack of oxygen during birth. The patient may have bad coordination of muscular movements, impaired speech, hearing and sight, and sometimes mental retardation.
.....
10. Inflammation of the membrane lining the intestines and the stomach, caused by a viral infection, and resulting in diarrhoea and vomiting.
.....

Extension. Write a description of a disease or illness and see if your partner can recognise it.

How it works

Match the half-sentences in column A with the half-sentences in column B to make 18 sentences which are correct, complete and true. The first one has been done for you as an example.

Column A		Column B	
1.	Fluid accumulates in the tissue ...	a)	... the acetabulum at the hip and the tibia at the knee.
2.	The autonomic nervous system works ...	b)	...the chest muscles relax and the lungs become smaller.
3.	Cartilage is thick connective tissue which ...	c)	... as a man grows older.
4.	A blood vessel is any tube (artery, vein, capillary) that ...	d)	... of patients suffering from dropsy.
5.	The pituitary gland secretes hormones that ...	e)	... according to the ABO system.
6.	The femur joins ...	f)	... deoxygenated blood from the heart to the lungs for oxygenation.
7.	Expiration takes place when ...	g)	... lines the joints and acts as a cushion.
8.	The pulmonary arteries take ...	h)	... to digest fatty substances and to neutralise acids.
9.	The trachea runs ...	i)	... is about 72 beats a minute.
10.	Bile is produced by the liver, stored in the gall bladder and used ...	j)	... derived from the carotid artery.
11.	The colon is divided ...	k)	... when a person is asleep or even unconscious.
12.	Holocrine glands ...	l)	... to human life.
13.	The prostate gland tends to enlarge ...	m)	... carries blood round the body.
14.	The very high frequency waves of ultrasound ...	n)	... from the larynx to the lungs.
15.	Oxygen is essential ...	o)	... can be used to detect and record organs or growths inside the body.
16.	The supply of blood to the sublingual region is ...	p)	... into four distinct sections.
17.	The normal adult pulse ...	q)	... are secretory only.
18.	Blood groups may be classified ...	r)	.... control the functioning of the other glands.

Instruments and equipment

Match each of the following instruments and items of equipment with its correct description below. The first one has been done for you as an example.

bandage	catheter	curette	drain	forceps	gag	hook	pipette
probe	scalpel	slings	splint	stethoscope	stretcher		
syringe	thermometer	tourniquet	wheelchair				

1. wheelchair = a chair with wheels in which someone can sit and move around
2. _____ = a small sharp-pointed knife used in surgery
3. _____ = an instrument used to explore inside a cavity or wound
4. _____ = a surgical instrument with handles like a pair of scissors, made in different sizes and with differently shaped ends, used for holding and pulling
5. _____ = a surgical instrument like a long thin spoon, used for scraping the inside of an organ
6. _____ = a thin glass tube used for taking and measuring samples of liquid
7. _____ = an instrument or tight bandage wrapped round a limb to constrict an artery, so reducing the flow of blood and stopping bleeding from a wound
8. _____ = a surgical instrument with a bent end used for holding structures apart in operations
9. _____ = a tube used to remove liquid from the body
10. _____ = an instrument placed between the teeth to stop the mouth from closing
11. _____ = a medical instrument made of a tube with a plunger which either slides down inside the tube, forcing the contents out through a needle as in an injection, or slides up the tube, allowing a liquid to be sucked into it
12. _____ = a tube passed into the body along one of the passages in the body
13. _____ = a piece of cloth which is wrapped around a wound or an injured limb
14. _____ = a triangular bandage attached around the neck, used to support an injured arm and prevent it from moving
15. _____ = a folding bed, with handles, on which an injured person can be carried by two people
16. _____ = a stiff support attached to a limb to prevent a broken bone from moving
17. _____ = two earpieces connected to a tube and a metal disc, used to listen to sounds made inside the body
18. _____ = an instrument for measuring temperature

Extension. Work with a partner and test each other. For example: "*What do you call a chair with wheels in which someone can sit and move around?*"

Chemistry

What are the names for the symbols of the chemical elements and compounds in the table below? Complete the 'name' column and connect each substance to the notes which refer to it. The first one has been done for you as an example.

	Symbol	Name	Notes
1.	Na	... sodium (e)...	(a) acid found in the gastric juices which helps to break apart the food
2.	Ca	.....	(b) acid which forms cyanide
3.	Pb	.....	(c) main alkaloid substance found in tobacco
4.	Ti	.....	(d) used as a contrast when taking X-ray photographs of soft tissue
5.	Ba	.....	(e) the basic substance in salt
6.	Zn	.....	(f) metallic element which is the basis of a radioactive isotope used to treat cancer
7.	Fe	.....	(g) colourless gas with a sweet smell, used in combination with other gases as an anaesthetic in dentistry and surgery
8.	Co	.....	(h) colourless gas which is present in air and essential to human life
9.	Cl	.....	(i) one of the common non-metallic elements which is an essential component of living matter and organic chemical compounds
10.	He	.....	(j) an essential part of the red pigment in red blood cells, found in liver and eggs
11.	S	.....	(k) gas which combines with oxygen to form water
12.	Au	.....	(l) heavy soft metallic element which is poisonous in compounds
13.	O	.....	(m) very light gas used in combination with oxygen, especially to relieve asthma or sickness caused by decompression
14.	H	.....	(n) light metallic element which does not corrode
15.	HCl	.....	(o) gas which is the main component of air and an essential part of protein
16.	N	.....	(p) metallic element which is the major component of bones and teeth
17.	HCN	.....	(q) powerful greenish gas, used to sterilise water
18.	C	.....	(r) soft yellow-coloured precious metal, used as a compound in various drugs, and sometimes as a filling for teeth
19.	N ₂ O	.....	(s) white metallic trace element
20.	C ₁₀ H ₁₄ N ₂	.....	(t) yellow non-metallic element found in some amino acids

Extension. Check the pronunciation of the 20 elements and compounds, then work with a partner to test each other: one person writes the symbol, while the other says the names.

Anagrams 1

Solve the anagrams by reading the clues and putting the letters in order to form words. Write your answers in the grid to find the mystery word spelled by their initial letters.

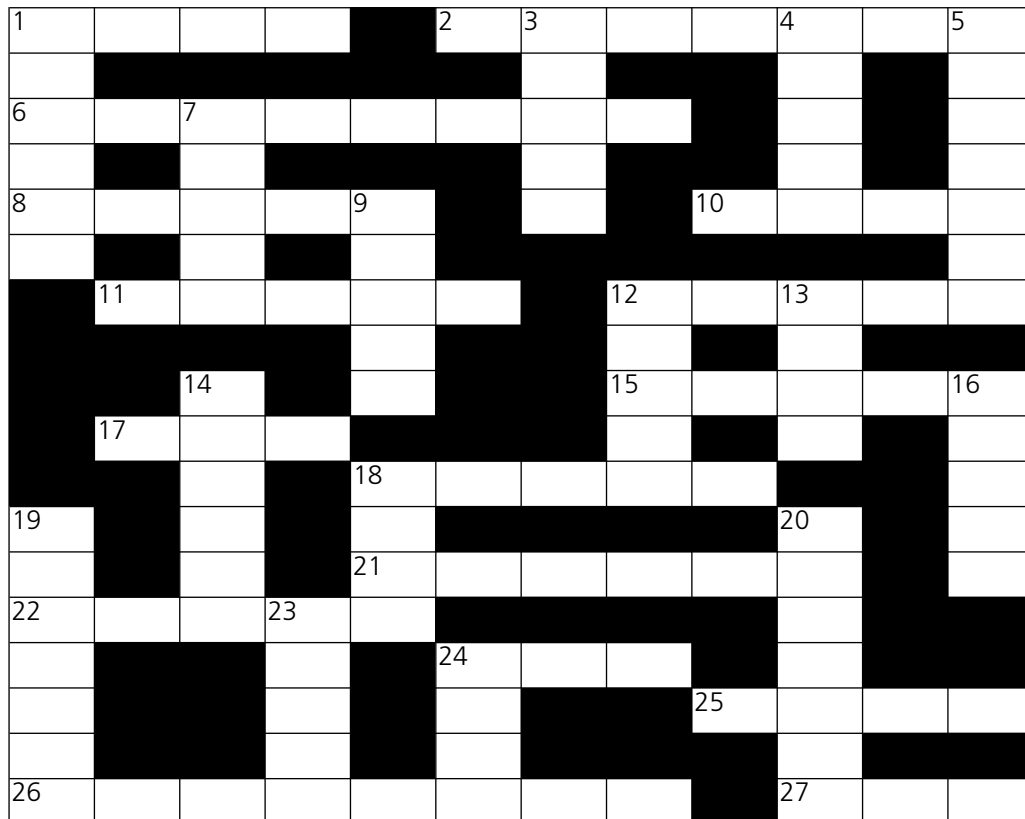
- | | | |
|-----|--|-------------|
| 1. | Action of breathing..... | RAEINOPRIST |
| 2. | Sensitivity to certain substances, such as pollen or dust which cause a physical reaction..... | AEGLLRY |
| 3. | A female child of a parent..... | ADEGHRTU |
| 4. | Cut in a person's body made by a surgeon using a scalpel..... | CIINNOS |
| 5. | Surgical intervention..... | AEINOPRST |
| 6. | Study of the process of ageing and the diseases of old people..... | EGGLNOOORTY |
| 7. | Becoming worse after seeming to get better..... | AEELPRS |
| 8. | Equipment used in a laboratory or hospital..... | AAAPPRSTU |
| 9. | Give instructions for a person to receive a specific dosage of a drug..... | BCEEIPRRS |
| 10. | Place where sick or injured people are looked after..... | AHLIOPST |
| 11. | Physical or mental activity..... | CEEEIRSX |
| 12. | The ability of a person not to get a disease..... | ACEEINRSST |

1.																				
2.																				
3.																				
4.																				
5.																				
6.																				
7.																				
8.																				
9.																				
10.																				
11.																				
12.																				

Mystery word: a person specially trained to operate a machine to take X-ray photographs

Parts of the body crossword 1

All the answers in this crossword are parts of the body.



ACROSS

1. Joins the femur and the tibia (4)
2. The organ into which food passes after being swallowed and where the process of digestion continues (7)
6. The first part of the small intestine (8)
8. Hinged joint in the arm (5)
10. It grows on your head (4)
11. The upper chambers of 18 across (5)
12. Breathing organs (5)
15. They carry blood to 11 across (5)
17. Part of the body with which a person sees (3)
18. The organ which moves blood around your body (5)
21. Cell in the nervous system which transmits impulses (6)
22. An organ which secretes substances which act elsewhere in the body (5)
24. A white oily substance in the body, which stores energy and protects the body against cold (3)
25. Tissue which forms the outside surface of the body (4)
26. Type of nerve ending or cell (8)
27. For hearing with (3)

DOWN

1. It cleans your blood (6)
3. Main part of the body, without the arms, legs and head (5)
4. A major artery (5)
5. Connected to 8 across, funnily enough (7)
7. Eye socket (5)
9. Narrow part of the body below the chest and above the buttocks (5)
12. The major detoxicating organ (5)
13. Hard growth which forms on the top surface at the end of each finger and toe (4)
14. Cheekbone (6)
16. Protects the brain (5)
18. At the end of your arm (4)
19. The throat or neck, major artery (7)
20. The back of each joint on a person's hand (7)
23. Bundle of fibres which take impulses from one part of the body to another (5)
24. End part of the leg on which a person stands (4)

Communicative crossword 1 sheet A

This crossword is not complete: you have only half the words. The other half are on sheet B. Check that you know the words in your crossword. Then work with a partner who has sheet B to complete the two crosswords. Follow these three rules:

1. Speak only in English.
2. Don't say the word in the crossword.
3. Don't show your crossword to your partner.

"What's one across?"
→ across, ↓ down

1				2			3	R	A	4	I	S	E		
								E			T				
5	H	E	6	A	R	T	A	T	T	A	C	K			
			N					I			H				
7			G				8		N						
			I				9		A		10		11		
			N												
12	H	E	A	13	R		14	G	A	15	S				
										A					
										16	G				
17	N	A	I	L					I						
									T						
18	A	P	19	E	X				T						
				A			20		A						
21				R			22		P		L				
23			S		E		24			25	R	E	T	26	E
					E										G
27					L						28				G

Communicative crossword 1 sheet B

This crossword is not complete: you have only half the words. The other half are on sheet A. Check that you know the words in your crossword. Then work with a partner who has sheet A to complete the two crosswords. Follow these three rules:

1. Speak only in English.
2. Don't say the word in the crossword.
3. Don't show your crossword to your partner.

"What's one across?"
→ across, ↓ down

1	S	L	E	E	2	P	Y		3		4				
	C				A										
5	H		6		T										
	I														
7	Z	Y	G	O	T	8	E								
	O					9	P	L	A	C	10	E	B	11	O
	P						I					Y			V
12	H			13		14	G		15			E		E	
	R						L					L		R	
	E						O		16	G	L	A	N	D	
17	N						T					S		O	
	I						T					H		S	
18	A		19				I					E		E	
							20	S	C	A	N	S			
21	H				22										
23	I	N	S	P	E	C	24	T		25				26	
	P							I							
27	S	H	O	U	L	D	E	R			28	L	E	G	

Anagrams 2

Solve the anagrams by reading the clues and putting the letters in order to form words. Write your answers in the grid to find the mystery word spelled by their initial letters.

- | | | |
|-----|--|-------------|
| 1. | Main part of the brain..... | BCEEMRRU |
| 2. | Value calculated by adding together several quantities and dividing the total by the number of quantities..... | AAEEGRV |
| 3. | Effect produced by a stimulus..... | ACEINORT |
| 4. | Way of acting..... | ABEHIORUV |
| 5. | To notice or to see something and understand it..... | BEEORSV |
| 6. | Spasm causing sudden inhalation followed by closure of the glottis which makes a characteristic sound..... | CCHIPU |
| 7. | Reflex action when tired or sleepy..... | ANWY |
| 8. | To become worse..... | ADEEIORRTTE |
| 9. | Reducing strain or stress..... | AAEILNORTX |
| 10. | Not asleep..... | AAEKW |
| 11. | Operating room..... | AAEHRTT |
| 12. | Causing vomiting..... | TMECEI |

1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

Mystery word: found in sugar and starch, and provides the body with energy

Word search

Find the 28 medical terms and expressions hidden in the letters below; 14 read across and 14 read down. The first word has been found for you as an example. The clues listed beneath will help you to find all of the words.

P	A	T	H	O	L	O	G	I	S	T	W
E	C	N	O	S	T	R	I	L	P	R	O
N	L	S	C	R	E	E	N	I	O	I	M
D	I	M	M	U	N	E	A	V	T	C	B
E	N	B	C	S	L	I	D	E	W	E	T
M	I	L	B	E	D	S	O	R	E	P	H
I	C	O	R	T	I	S	O	N	E	S	E
C	H	C	P	A	N	C	R	E	A	S	R
D	O	U	E	T	A	P	A	A	G	T	N
F	S	M	L	I	S	P	S	S	E	A	I
A	T	O	N	Y	A	G	H	E	H	K	A
I	R	O	N	A	L	L	E	R	G	E	N

- Number of years that a person has lived
- Substance which produces hypersensitivity
- Lack of tone or tension in the muscles
- Decubitus ulcer
- Small hospital or department in a large hospital which deals only with walking patients or which specialises in the treatment of certain conditions
- Hormone secreted in small quantities by the adrenal cortex
- To make pain or worry less
- Referring to any disease which is very common in certain places
- Condition where an organ bulges through a hole or weakness in the wall which surrounds it
- Person or animal on which a parasite lives
- Protected against an infection or allergic disease
- Chemical element essential to the body, found in liver, eggs, etc.
- Large gland in the upper part of the abdomen
- Speech defect where the patient has difficulty in pronouncing 's' sounds and replaces them with 'th'
- Doctor who takes the place of another doctor for a time
- Referring to the nose
- One of the two passages in the nose through which air is breathed in or out
- Gland which lies across the back of the body between kidneys
- Doctor who examines dead bodies to find out the cause of death
- Mass of small spots which stays on the skin for a period of time, and then disappears
- Light wall, sometimes with a curtain, which can be moved about and put round a bed to shield the patient
- Piece of glass, on which a tissue sample is placed, to be examined under a microscope
- Small round mark or pimple
- To swallow a medicine
- To remove or drain liquid from part of the body
- Muscle formed of three parts, which are joined to form one tendon
- Not dry
- Uterus

Communicative crossword 2 sheet A

This crossword is not complete: you have only half the words. The other half are on sheet B. Check that you know the words in your crossword. Then work with a partner who has sheet B to complete the two crosswords. Follow these three rules:

1. Speak only in English.
2. Don't say the word in the crossword.
3. Don't show your crossword to your partner.

"What's one across?"
→ across, ↓ down

1	R		2		3		4	R		5	C			6	T	
	E							E		7	H				E	
8	D							T			A				N	
	U							I			I				D	
	C				9			R			N				O	
10	T	R	11	A	C	E				E	R				N	
	I			M							E					
	O			P		12	C		13	H	E	A	L	T	14	H
15	N			U				16				C				
				T			17	C				18	T	R	I	P
19	A			A								I				
20	B			T						21	O					
	N			E								N				
	O				22	M	A	N	I	23	C		24			
	R			25	S					26	L					
27	M	A	L	I	G	N					O					
	A			I							S					
28	L			M							E					

Communicative crossword 2 sheet B

This crossword is not complete: you have only half the words. The other half are on sheet A. Check that you know the words in your crossword. Then work with a partner who has sheet A to complete the two crosswords. Follow these three rules:

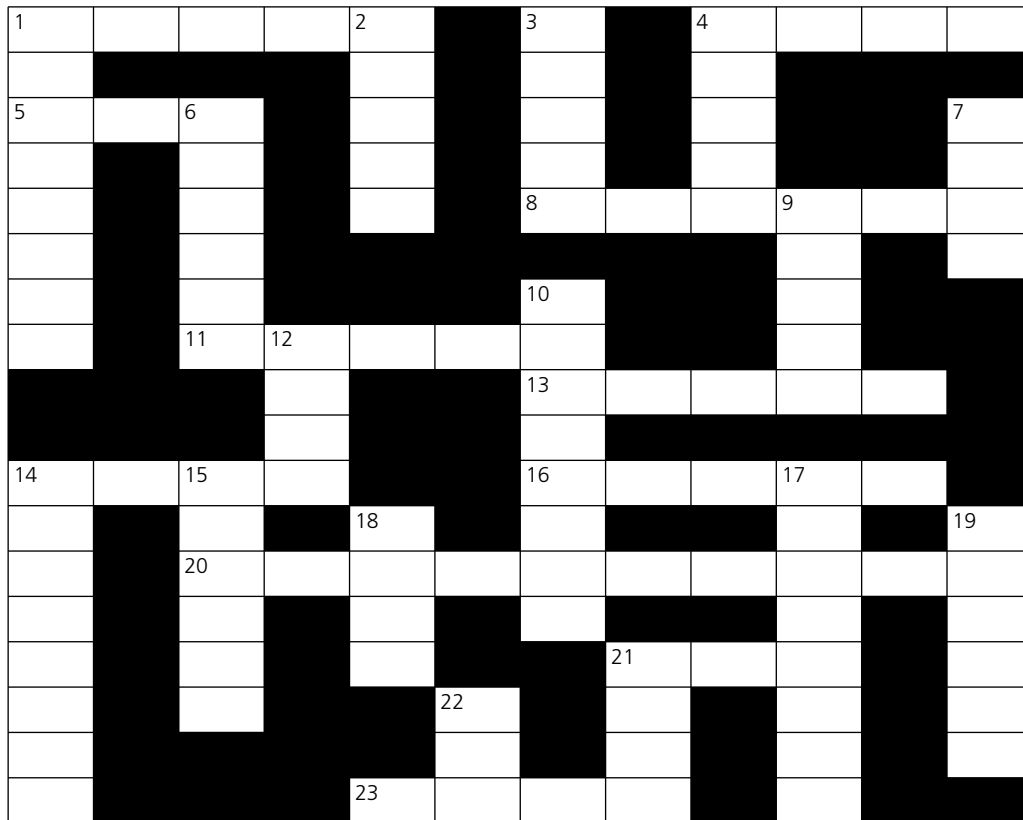
1. Speak only in English.
2. Don't say the word in the crossword.
3. Don't show your crossword to your partner.

"What's one across?"
→ across, ↓ down

1	R	E	2	C	O	3	V	E	4	R		5		6			
				U		I						7	H	O	M	E	
8	D	O	R	M	A	N	T										
			E		B												
					9	L	A	R	Y	N	X						
10			11		E												
					12			13								14	H
15	N	E	U	R	O	N											Y
					17	C	A	T				18					P
19																	O
20	B	O	T	T	L	E				21	C	O	U	N	T		
																	H
					22					23			24	O			E
			25							26	L	I	V	E	R		
27													A				M
																	I
28	L	Y	M	P	H	A	D	E	N	O	M	A					

Parts of the body crossword 2

All the answers to this crossword are parts of the body.



ACROSS

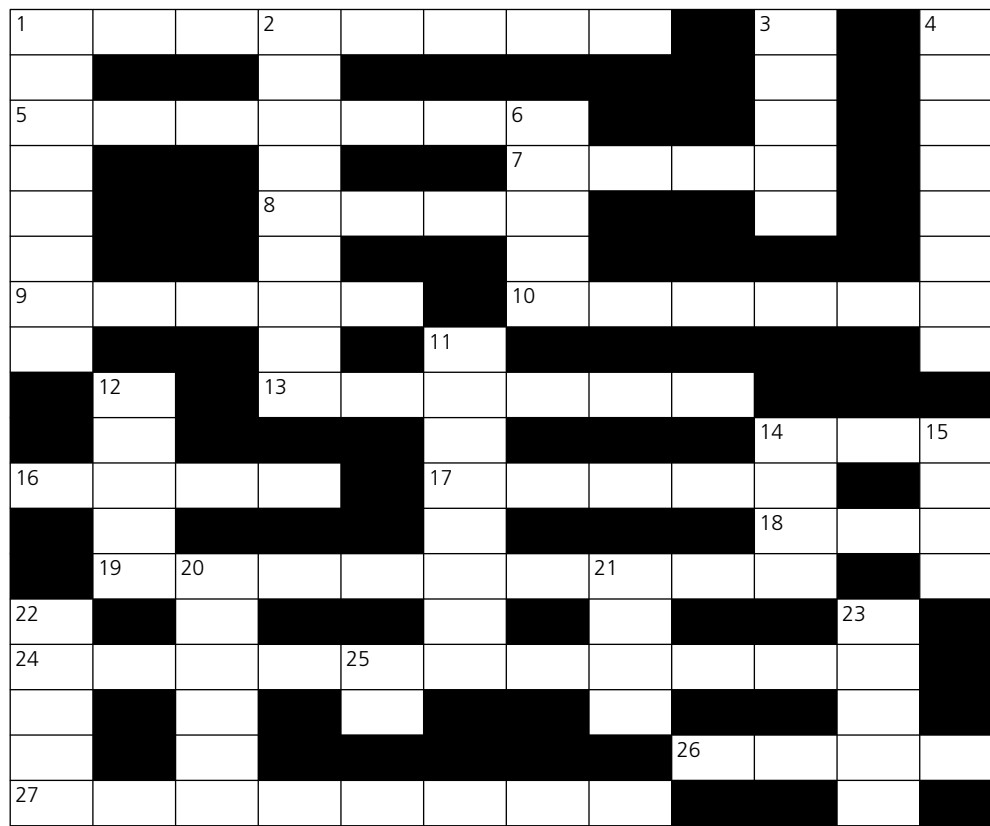
1. Ligament (5)
4. One of the calcified pieces of connective tissue which make 1 down (4)
5. Organ used for hearing (3)
8. Sight, hearing, smell, taste and touch (6)
11. It connects your foot to your leg (5)
13. Thorax (5)
14. Other side to the front (4)
16. Egg-producing organ (5)
20. Clavicle (10)
21. One of twenty-four inside 13 across
23. Plural of foot (4)

DOWN

1. All the bones which make up a body (8)
2. Joint between the hand and the forearm (5)
3. Branch of a nerve, artery or vein (5)
4. Encephalon (5)
6. Inside layer of the eye which is sensitive to light (6)
7. In the middle of your face (4)
9. Cavity inside the body, including the cavities inside the head behind the cheekbone, forehead and nose (5)
10. Main muscle in 13 across (8)
12. Part of the body which joins the head to the body (4)
14. Air passage from the trachea to the lungs (8)
15. Human tail, at the end of the backbone (6)
17. One of two muscles in the top part of the back which moves the shoulder blades (8)
18. Soft, fat flesh (4)
19. Wall between two parts of an organ (6)
21. Radix, point from which a limb grows (4)
22. One of ten found on 23 across (3)

Gap fill crossword

Complete the crossword with the missing words from the sentences.



ACROSS

1. He _____ a new type of catheter. (8)
5. Blood _____ were taken from all the staff in the hospital. (7)
7. There is a _____ of names in alphabetical order. (4)
8. She must have a cold - her _____ is running. (4)
9. We will _____ the operating theatre with the latest scanning devices. (5)
10. Fear of snakes is a common _____. (6)
13. Sugar is a source of _____. (6)
14. The doctor _____ the patient's broken arm. (3)
16. When she cut her finger it _____. (4)
17. He breathed in the smoke from the fire and it made him _____. (5)
18. He went to see an _____ specialist about his deafness. (3)
19. Anorexic patients may become _____ and may need hospitalisation. (9)
24. Can I make an _____ to see Dr Jones? (11)
26. The box is so heavy she can't _____ it off the floor. (4)
27. He became hysterical and had to be put under _____. (8)

DOWN

1. The catheter is _____ into the passage. (8)
2. How can you afford this _____ treatment? (9)
3. She gave _____ to twins. (5)
4. The surgeon was able to move the organ back to its _____ position. (8)
6. The doctor put her to _____ with a powerful narcotic. (5)
11. The patient suffers from an allergic _____ to oranges. (8)
12. Her _____ rate was very irregular. (5)
14. The lining of the uterus is _____ during menstruation. (4)
15. When you add the reagent, the solution will _____ blue. (4).
20. We have _____ out the extent of the tumour. (6)
21. The drug begins acting after a very short _____. (4)
22. There were two hundred _____ of cholera in the recent outbreak. (5)
23. The clinic has a _____ of 100. (5)
25. The _____ is the ratio of a person's mental age, given by an intelligence test, to the person's actual age. (2)

Communicative crossword 3 sheet A

This crossword is not complete: you have only half the words. The other half are on sheet B. Check that you know the words in your crossword. Then work with a partner who has sheet B to complete the two crosswords. Follow these three rules:

1. Speak only in English.
2. Don't say the word in the crossword.
3. Don't show your crossword to your partner.

"What's one across?"
→ across, ↓ down

1		2			3	N		4	T								
					E		A						5				
6					A		L										
					R		L			7	P	U	S				
					S					A							
8					I					R							
					G					T							
		9	T	E	C	H	N	I	C	I	A		10	N			
					T					A							
					11			E		12		L					
13					D												
					14	S	O	N				15	D				
					T			16	E			E					
17					E			S				F					
					18	R		S		19		E					
					20	A		I				N					
					G			L		21	M		22	C	A	23	L
24	D	E	P	E	N	D	E	N	C	E							D

Communicative crossword 3 sheet B

This crossword is not complete: you have only half the words. The other half are on sheet A. Check that you know the words in your crossword. Then work with a partner who has sheet A to complete the two crosswords. Follow these three rules:

1. Speak only in English.
2. Don't say the word in the crossword.
3. Don't show your crossword to your partner.

"What's one across?"
→ across, ↓ down

1	E	X	2	A	M	I	3	N	A	4	T	I	O	N	
	P		N											5	H
6	I	N	C	U	R	A	B	L	E						O
	L		Y									7			S
	E		L												T
8	P	R	O	P	R	I	E	T	A	R	Y				
	S		S												
	Y		9	T										10	N
			O												A
			11	M	A	T	E	R	12	N	A	L			R
13	W		A							O					C
	R			14						S			15		O
	I					16	E	L	E	M	E	N	T		
17	S	I	T	E											I
	T			18	R	E	S	O	19	L	V	E			C
		20								O					
						21				I		22		23	
24										N					

How many of these questions can you answer?

1. Name four sources of Vitamin D.
2. Complete the following sentence. "In human anatomy, the hand has a dorsal and a palmar surface, and the foot a dorsal and a _____ surface."
3. What is the difference between myopia and hypermetropia?
4. Which of the following substances are poisonous?
 - arsenic
 - cyanide
 - fructose
 - glucose
 - polyunsaturated fat
 - starch
 - strychnine
5. Fill the gaps in the sentence with the correct numbers.
"Permanent teeth, otherwise known as adult teeth, are formed of eight incisors, _____ canines, _____ premolars and _____ molars."
6. What is the term for an organisation responsible for overseeing the provision of primary healthcare and the commissioning of secondary care in a district. Key members include GPs, community nurses, social services and lay members?
7. If a patient is living at home and going to a hospital for treatment, is he/she classed as an "inpatient" or an "outpatient"?
8. What is the child's term for the stomach or abdomen?
9. Are the following statements true or false?

[T / F] Blood is formed of red and white corpuscles, platelets and plasma.
[T / F] The liver maintains the circulation of the blood around the body by its pumping action.
[T / F] A mastectomy is a surgical operation to deliver a baby by cutting through the abdominal wall into the uterus.
10. What is the normal average human body temperature?
11. To which part of the body do words beginning with "gastr-" refer?
12. Formerly, burns were classified by degrees (first-degree burn and second-degree burn). The modern classification is into two categories. What are these categories?

Extension. Work with a partner and write a medical knowledge quiz. Make sure you know the answers. Then ask the questions to another pair of students in the class.

Vocabulary Record Sheet

WORD	CLASS	NOTES (Translation, definition, example, etc.)

This page can be photocopied.

Answer key

Word-building

Word association 1: missing links (p. 1)

- body
- pain
- bone
- muscle
- eye
- cell

Word formation: nouns (p. 2)

Exercise 1.

- diagnosis
- examination
- prescription
- suffering
- operation
- cure
- recovery
- analysis
- infection
- carrier
- replacement
- degeneration
- referral
- paralysis
- obstruction

Exercise 2.

- My diagnosis was that the patient had a heart condition.
- I made a full examination of the patient.
- I wrote a prescription for a course of antibiotics.
- He experienced very little suffering.
- The operation was performed immediately.
- There is no cure for this disease.
- He has made a full recovery.
- The lab made an analysis of the blood sample.
- We found an infection in the tissue.
- Ten per cent of the population are thought to be carriers of the bacteria.
- The patient was given a hip replacement.
- There has been a degeneration in his condition.
- The patient was given a referral to a specialist.
- He suffered paralysis of the arm after the stroke.
- The blood clot formed an obstruction in the artery.

Two-word expressions (p. 3)

- heart attack
- general anaesthetic
- bone marrow
- surgical intervention
- primary tooth
- plastic surgery
- brain death
- bedside manner
- allergic reaction
- clinical trial
- malignant tumour
- general practitioner
- biological clock
- digestive system
- balanced diet

Plural formation (p. 4)

- strata
- feet
- fibulae
- glomeruli
- abscesses
- joints
- bullae
- testes
- septa
- oesophagi
- diagnoses
- humeri
- syringes
- acetabula
- larvae
- chordae
- varices
- fungi
- ganglia
- villi
- atria
- pontes
- ova
- bouts
- cortices or cortexes

Word formation: adjectives (p. 5)

- The surgeons operated to repair the patient's *defective* heart valve.
- His diet is calcium-*deficient*.
- She is physically *dependent* on amphetamines.
- The doctor noted an *excessive* amount of bile in the patient's blood.
- A *hypoglycaemic* attack can be prevented by eating glucose or a lump of sugar when feeling faint.
- The vaccine should make you *immune* to tuberculosis.
- They have periods when they are completely *inactive*.
- His foot is so *painful* that he can hardly walk.
- I suffered *spinal* injuries in the crash.
- She complained of *stiff* joints.

Word association 2: partnerships (p. 6)

Exercise 1.

- administer a drug
- analyse a sample
- arrange an appointment
- burp a baby
- catch a cold
- detect an improvement
- discontinue the treatment
- ease the pain
- resist some infections
- prescribe antibiotics

Exercise 2.

- The doctor will *administer a drug* to the patient.
- She was *prescribed antibiotics*.
- As soon as the patient reported severe side-effects, the doctor *discontinued the treatment*.
- I've *caught a cold* from one of my colleagues at work.
- The laboratory *analysed a sample* of the food and found traces of bacteria.
- A healthy body can *resist some infections*.
- I would like to *arrange an appointment* with the dental hygienist for 10.00am tomorrow.
- She had an injection to *ease the pain* in her leg.
- The health visitor advised the new parents to *burp the baby* after feeding.
- The nurses *detected an improvement* in the patient's condition.

Opposites 1: prefixes (p. 7)

Exercise 1.

- | | |
|------------|----------------|
| il- | ir- |
| 1. illegal | 1. irreducible |
| | 2. irregular |

Answer key

im-

1. immovable
2. impalpable
3. impure

in-

1. inactive
2. inadequate
3. incoherent
4. incompatible
5. incomplete
6. independent
7. indirect
8. infertile
9. inoperable
10. insanitary
11. insoluble

Exercise 2.

1. unconscious
2. unwell
3. incapable
4. unhealthy
5. irregular
6. unfit
7. unpasteurised
8. insanitary
9. unstable
10. uncontrollable

Word formation: verbs (p. 8)

Exercise 1.

1. abuse
2. admit
3. bandage
4. blood
5. breathe
6. coagulate
7. consult
8. convalesce
9. fertilise
10. identify
11. immunise
12. implant
13. macerate
14. manage
15. occur
16. perspire
17. prepare
18. provide
19. reabsorb
20. regenerate
21. register
22. regurgitate
23. rehabilitate
24. reproduce
25. resuscitate
26. sedate
27. stammer
28. stitch
29. suppress
30. sweat

Word association 3: mind maps (p. 9)

Exercise 1.

1. operating theatre
2. theatre nurse
3. A&E department
4. major surgery
5. surgeon
6. local anaesthetic
7. consultant
8. heart surgery
9. scrub up
10. surgery

Parts of Speech

Nouns (p. 10)

1. allergy
2. paroxysms
3. overdose
4. surgery
5. course
6. recurrence
7. tendency
8. examination
9. injection
10. exercise
11. ambulance
12. intake
13. biopsy
14. consent
15. progress
16. treatment
17. excess
18. accident
19. vaccination
20. rash

Adjectives 1 (p. 11)

1. safe
2. poisonous
3. compatible
4. inoperable
5. lethal
6. inborn
7. incipient
8. inactive
9. severe
10. confused
11. motionless
12. hygienic
13. predisposed
14. aware
15. delicate
16. insanitary
17. depressed
18. regular
19. infectious
20. hoarse

Adjectives 2 (p. 12)

1. lethal
2. critical
3. persistent
4. subjective
5. infirm
6. inflamed
7. mobile
8. painful
9. viable
10. deaf
11. premature
12. excessive
13. acute
14. bedridden
15. latent
16. obsessive
17. tender
18. severed
19. depressed
20. harmful

Verbs 1 (p. 13)

- a) diagnose
- b) treat
- c) cure
- d) endanger
- e) prescribe
- f) specialise
- g) suffer
- h) operate
- i) vaccinate
- j) soothe
- k) dress
- l) suppress

Verbs 2 (p. 14)

- a) transfer
- b) harm
- c) penetrate
- d) perforate
- e) probe
- f) save
- g) limp
- h) admit
- i) prevent
- j) respond
- k) faint
- l) perform

Verbs: past tense ~ regular verbs (p. 15)

1. received
2. strained
3. recovered
4. fainted
5. required
6. suffered
7. adapted
8. developed
9. fractured
10. reacted
11. weighed
12. prolonged
13. aggravated
14. examined
15. trembled

Verbs: mixed tenses (p. 16)

1. visit
2. overcame
3. rebuilt
4. undergone
5. froze
6. bruised
7. measures
8. expelled
9. hurting
10. heal
11. burnt
12. controls
13. amputated
14. bitten
15. progressing

Phrasal verbs (p. 17)

1. got over
2. looking after
3. picked up
4. drops off
5. passed out
6. broke down
7. takes after
8. take off
9. bringing up
10. got around
11. give up
12. knocked out
13. propped up
14. go down
15. coughing up

Verbs: active/passive (p. 18)

1. A rise in the patient's pulse was noticed by the nurse.
2. He is being allowed by the consultant to watch the operation.
3. The tablets are sold by all chemists.
4. Appendicitis was diagnosed by the doctor.

Answer key

5. The injured person was comforted by the paramedics until the ambulance arrived.
6. The twins were delivered by the midwife.
7. An excess of hormones was being produced by the gland.
8. He was very well looked after in hospital.
9. The tissue was examined under the microscope.
10. I was given an unpleasant mixture to drink by the doctor.
11. The lotion cannot be taken orally.
12. The workers were poisoned by toxic fumes.
13. A rise in cases of whooping cough is being predicted by doctors.
14. The body's natural instinct to reject the transplanted tissue is suppressed by the drug.

Adverbs (p. 19)

1. The bandage was *loosely* tied around her wrist.
2. *Mentally*, she is very advanced for her age.
3. If the patient sweats *excessively*, it may be necessary to cool his body with cold compresses.
4. The tumour is *awkwardly* placed and not easy to reach.
5. She manages all her patients very *efficiently*.
6. The relief team *urgently* requires more medical supplies.
7. This is a *mildly* antiseptic solution.
8. *Physically*, he is very weak, but his mind is still alert.
9. He became ill *immediately* after he came back from holiday.
10. The herb can be used *medicinally*.
11. He has been working as a doctor only for a *fairly* short time.
12. Her breathing was *severely* affected.

Prepositions (p. 20)

1. The hospital has installed new apparatus ~~through~~ ⁱⁿ the physiotherapy department.
2. Her lips were cracked ~~of~~ ^{from} the cold.
3. The boy's little toe was crushed ^{by} the door.
4. The tissue was examined ~~on~~ ^{under} the microscope.
5. It is important that needles used ~~at~~ ^{for} injections should be sterilised.
6. He is recovering from a bout ^{of} flu.
7. She was given ~~to~~ a pain-killing injection.
8. Some types of wool can irritate ~~to~~ the skin.
9. This report quotes the number of cases of cervical cancer ~~from~~ ^{per} thousand patients tested.
10. The doctor put the patient to sleep with ~~in~~ a strong narcotic.
11. She burnt her hand ~~at~~ ^{on} the hot frying pan.
12. We have no spare beds ~~on~~ ⁱⁿ the hospital at the moment.

13. He will have an operation to remove ~~of~~ an ingrowing toenail.
14. Please ensure that the patient takes ~~of~~ his medicine.

Pronunciation

Word stress 1 (p. 21)

Group A: hospital regular exercise alcohol minimum haemorrhage operate theatre serious painkillers positive medical history

Group B: admitted improvement condition develop injection equipment allergic reaction prescription infection opinion

Group C: recommend reassure incomplete

Word stress 2 (p. 22)

Exercise 1.

- | | | |
|-----------------|------------------|-----------------|
| 1. complication | 2. paralysis | 3. emergency |
| 4. respirator | 5. operation | 6. anaesthetic |
| 7. disposable | 8. intolerance | 9. circulation |
| 10. coordinate | 11. experiment | 12. malignancy |
| 13. responsible | 14. Analysis | 15. compatible |
| 16. saturated | 17. demonstrated | 18. dehydration |
| 19. communicate | 20. Penicillin | |

Exercise 2.

	A ■ □ □ □	B □ ■ □ □	C □ □ ■ □
anaesthetic			x
analysis		x	
circulation			x
communicate		x	
compatible		x	
complication			x
coordinate		x	
dehydration			x
demonstrated	x		
disposable		x	
emergency		x	
experiment		x	
intolerance		x	
malignancy		x	
operation			x
paralysis		x	
penicillin			x
respirator	x		
responsible		x	
saturated	x		

Answer key

Present simple (p. 23)

Group A: coughs helps panics beats sleeps wakes counteracts operates regulates

Group B: breathes examines recommends prescribes relieves suffers controls cures kills

Group C: sneezes reduces catches rises analyses diagnoses relaxes releases increases

Past tense (p. 24)

Group A: reduced coughed replaced mixed dressed increased noticed dropped

Group B: diagnosed improved sneezed prescribed cured sterilised probed

Group C: vaccinated consulted recommended prevented operated disinfected treated preceded

Vocabulary in Context

Good advice (p. 25)

- | | |
|-------|--------|
| 1. g) | 8. f) |
| 2. k) | 9. n) |
| 3. d) | 10. b) |
| 4. e) | 11. a) |
| 5. l) | 12. i) |
| 6. j) | 13. c) |
| 7. h) | 14. m) |

Multiple meanings (p. 26)

1. patient 2. fit 3. focus 4. notice 5. turn 6. light
7. cold 8. focus 9. turn 10. patient 11. notice
12. fit 13. turn 14. fit 15. light 16. focus 17. fit
18. cold 19. light

Odd one out (p. 27)

- bleeding; the others are words which describe types of pain
- liver; you have two of all the others
- forearm; the others are all joints
- face; the others are all specifically sense organs
- patient; the others are all jobs
- bandage; the others are all instruments
- supination; the others are all connected to breathing
- eyelids; the others are all eye conditions
- relapse; the others all mean to return to normal after an illness
- palm; the others are all parts of the eye
- vertebral column; the others are all part of the ear
- aluminium; the others are all normally found in the body
- wound; the others refer principally to damage to

bones

- metacarpal bone; the others are all in the skull
- pancreas; the others deal with blood
- taste; the others are all physical actions
- hernia; the others relate to the liver
- diabetes; the others are all part of the skin

Body parts - categories (p. 28)

abdomen - torso	knuckle - hand
Achilles tendon - foot	lip - head
ankle - leg (or foot)	nail - hand (or foot)
buttock - torso	navel - torso
calf - leg	neck - torso
chest - torso	nipple - torso
chin - head	nose - head
ear - head	palm - hand
elbow - arm	rib - torso
eye - head	scalp - head
eyebrow - head	shoulder - torso (or arm)
eyelash - head	sole - foot
eyelid - head	temple - head
finger - hand	thigh - leg
forearm - arm	thumb - hand
forehead - head	toe - foot
gum - head	tongue - head
hip - torso (or leg)	tooth - head
knee - leg	wrist - arm (or hand)

Opposites 2 (p. 29)

Exercise 1.

1. front 2. chronic 3. alive 4. deteriorate 5. ill
6. closed 7. minor 8. increase 9. rough
10. malignant

Exercise 2.

1. acute 2. increase 3. improve 4. back 5. rough
6. malignant 7. open 8. dead 9. healthy 10. major

Abbreviations (p. 30)

- A & E: Accident & Emergency
- AIDS: Acquired Immunodeficiency Syndrome
- BMR: Basal Metabolic Rate
- CAT: Computerised Axial Tomography
- CHD: Coronary Heart Disease
- D & V: Diarrhoea & Vomiting
- DOA: Dead On Arrival
- GP: General Practitioner
- HAV: Hepatitis A Virus
- HIV: Human Immunodeficiency Virus
- MI: Motor Neurone Disease
- OTC: Over The Counter
- PM: Post Mortem
- PMA: Progressive Muscular Atrophy
- PMT: Premenstrual Tension
- RQ: Respiratory Quotient
- RSI: Repetitive Strain Injury

Answer key

18. SAD: Seasonal Affective Disorder
19. SIDS: Sudden Infant Death Syndrome
20. STI: Sexually Transmitted Infection
21. TB: Tuberculosis
22. TBI: Total Body Irradiation
23. UV: Ultraviolet
24. VDH: Valvular Disease of the Heart
25. WHO: World Health Organization

Symptoms & common illnesses 1 (p. 31)

1. influenza
2. rubella
3. coryza
4. varicella
5. rubeola
6. infectious parotitis
7. pertussis
8. allergic rhinitis

Symptoms & common illnesses 2 (p. 32)

Exercise 1.

1. Chickenpox is the same as varicella
2. A cold is the same as coryza
3. The flu is the same as influenza
4. German measles is the same as rubella
5. Hay fever is the same as allergic rhinitis
6. Measles is the same as rubeola
7. Mumps is the same as infectious parotitis
8. Whooping cough is the same as pertussis

Exercise 2.

1. hay fever
2. German measles
3. whooping cough
4. flu
5. mumps
6. chickenpox

Diagnosis (p. 33)

1. epilepsy
2. gangrene
3. cataracts
4. Parkinson's disease
5. tuberculosis
6. cystic fibrosis
7. cirrhosis
8. diphtheria
9. cerebral palsy
10. gastroenteritis

How it works (p.34)

- | | |
|-------|--------|
| 1. d) | 10. h) |
| 2. k) | 11. p) |
| 3. g) | 12. q) |
| 4. m) | 13. c) |
| 5. r) | 14. o) |
| 6. a) | 15. l) |
| 7. b) | 16. j) |
| 8. f) | 17. i) |
| 9. n) | 18. e) |

Instruments and equipment (p. 35)

1. wheelchair
2. scalpel
3. probe
4. forceps
5. curette
6. pipette
7. tourniquet
8. hook
9. drain
10. gag
11. syringe
12. catheter
13. bandage
14. sling
15. stretcher
16. splint
17. stethoscope
18. thermometer

Chemistry (p. 36)

1. Na, sodium, (e) the basic substance in salt
2. Ca, calcium, (p) metallic element which is the major component of bones and teeth
3. Pb, lead, (l) heavy soft metallic element which is poisonous in compounds
4. Ti, titanium, (n) light metallic element which does not corrode
5. Ba, barium, (d) used as a contrast when taking X-ray photographs of soft tissue
6. Zn, zinc, (s) white metallic trace element
7. Fe, iron, (j) an essential part of the red pigment in blood cells, found in liver and eggs
8. Co, cobalt, (f) metallic element which is the basis of a radioactive isotope used to treat cancer
9. Cl, chlorine, (q) powerful greenish gas, used to sterilise water
10. He, helium, (m) very light gas used in combination with oxygen, especially to relieve asthma or sickness caused by decompression
11. S, sulphur, (t) yellow non-metallic element found in some amino acids
12. Au, gold, (r) soft yellow-coloured precious metal, used as a compound in various drugs, and sometimes as a filling for teeth
13. O, oxygen, (h) colourless gas which is present in air and essential to human life
14. H, hydrogen, (k) gas which combines with oxygen to form water
15. HCl, hydrochloric acid, (a) acid found in the gastric juices which helps to break apart the food
16. N, nitrogen, (o) gas which is the main component of air and an essential part of protein
17. HCN, hydrocyanic acid, (b) acid which forms cyanide
18. C, carbon, (i) one of the common non-metallic elements which is an essential component of living matter and organic chemical compounds
19. N₂O, nitrous oxide, (g) colourless gas with a sweet smell, used in combination with other gases as an anaesthetic in dentistry and surgery
20. C₁₀H₁₄N₂, nicotine, (c) main alkaloid substance found in tobacco

Answer key

Puzzles & Quizzes

Anagrams 1 (p. 37)

1. Respiration
2. Allergy
3. Daughter
4. Incision
5. Operation
6. Gerontology
7. Relapse
8. Apparatus
9. Prescribe
10. Hospital
11. Exercise
12. Resistance

Parts of the body crossword 1 (p. 38)

1	K	N	E	E		2	S	3	T	O	M	4	A	C	5	H
	I							R					O			U
6	D	U	7	O	D	E	N	U	M				R			M
	N			R						N				T		E
8	E	L	B	O	9	W		K		10	H	A	I			R
	Y			I		A										U
		11	A	T	R	I	A			12	L	U	13	N	G	S
							S				I			A		
			14	Z			T			15	V	E	I	N	16	S
		17	E	Y	E					E			L			K
				G			18	H	E	A	R	T				U
19	J			O			A						20	K		L
	U			M			21	N	E	U	R	O	N			L
22	G	L	A	23	N	D										U
	U							24	F	A	T				C	
	L				R							25	S	K	I	N
	A				V									L		
26	R	E	C	E	P	T	O	R					27	E	A	R

Answer key

Anagrams 2 (p. 41)

1. **C**erebrum
2. **A**verage
3. **R**eaction
4. **B**ehaviour
5. **O**bserve
6. **H**iccup
7. **Y**awn
8. **D**eteriorate
9. **R**elaxation
10. **A**wake
11. **T**heatre
12. **E**metic

Word search (p.42)

P	A	T	H	O	L	O	G	I	S	T	W
E	C	N	O	S	T	R	I	L	P	R	O
N	L	S	C	R	E	E	N	I	O	I	M
D	I	M	M	U	N	E	A	V	T	C	B
E	N	B	C	S	L	I	D	E	W	E	T
M	I	L	B	E	D	S	O	R	E	P	H
I	C	O	R	T	I	S	O	N	E	S	E
C	H	C	P	A	N	C	R	E	A	S	R
D	O	U	E	T	A	P	A	A	G	T	N
F	S	M	L	I	S	P	S	S	E	A	I
A	T	O	N	Y	A	G	H	E	H	K	A
I	R	O	N	A	L	L	E	R	G	E	N

Parts of the body crossword 2 (p. 45)

1	S	I	N	E	2	W		3	R		4	B	O	N	E
	K					R		A		R					
5	E	A	6	R		I		M		A				7	N
	L		E			S		U		I					O
	E		T			T		8	S	E	N	9	S	E	S
	T		I								I				E
	O		N					10	P				N		
	N		11	A	12	N	K	L	E					U	
				E					13	C	H	E	S	T	
				C						T					
14	B	A	15	C	K				16	O	V	A	17	R	Y
	R		O			18	F		R			H		19	S
	O		20	C	O	L	L	A	R	B	O	N	E		
	N		C		A			L				M		P	
	C		Y		B				21	R	I	B		T	
	H		X						22	T		O		O	U
	U									O			I		M
	S					23	F	E	E	T			D		

Answer key

Gap fill crossword (p. 46)

1	I	N	V	2	E	N	T	E	D	3	B	4	O			
	N			X						I		R				
5	S	A	M	P	L	E	6	S			R		I			
	E			E			7	L	I	S	T		G			
	R			8	N	O	S	E			H		I			
	T			S				E					N			
9	E	Q	U	I	P		10	P	H	O	B	I	A			
	D			V			11	R					L			
		12	P		13	E	N	E	R	G	Y					
		U						A				14	S	E	15	T
16	B	L	E	D			17	C	O	U	G	H			U	
		S						T					18	E	A	R
		19	E	20	M	A	C	I	A	21	T	E	D			N
22	C			A				O		I				23	S	
24	A	P	P	O	25	I	N	T	M	E	N	T				
	S		P			Q				E					A	
	E		E							26	L	I	F	T		
27	S	E	D	A	T	I	O	N					F			

Quiz (p. 49)

1. butter, egg yolk, fish liver oils, oily fish, yeast (Vitamin D is also produced in the skin when exposed to sunlight.)
2. plantar
3. Myopia is a condition where the patient can see clearly objects which are close, but not ones which are far away, whereas with hypermetropia, the patient sees more clearly objects which are a long way away, but cannot see objects which are close. (More common words for myopia are *shortsightedness* or *nearsightedness*. A more common word for hypermetropia is *longsightedness*.)
4. arsenic; cyanide; strychnine
5. four canines, eight premolars and twelve molars
6. primary care group
7. outpatient
8. tummy
9. True, False (The organ described here is the *heart*), False (The operation described here is a *caesarean*.)
10. about 37° Celsius or 98° Fahrenheit
11. stomach
12. deep; superficial