

# 12A | Science fact

## SPEAKING & LISTENING

- 1 Work in two groups, A and B.  
Try to answer your group's questions below.



### Group A

- 1 Why is the sea salty?
- 2 Why does our mouth dry up when we are nervous?
- 3 Why do clothes look darker when they're wet?
- 4 What do seals drink?
- 5 What causes the sound of thunder?
- 6 Why are eggs egg-shaped?

### Group B

- 1 Why is the sky blue?
- 2 Why can biting on aluminum foil be painful?
- 3 Why don't we laugh when we tickle ourselves?
- 4 Why does a whip crack?
- 5 Why does a chip-pan fire explode if you put water on it?
- 6 Why do we close our eyes when we sneeze?



- 2  3.28-3.33 and  3.34-3.39 Listen and make notes on the answers to your questions.
- 3 Work with a student from the other group. Invite him/her to answer each of your questions then give the information which you heard in the recording.



## GRAMMAR: plurals & number

- 1 Underline the word in each group which is not a correct plural form.

*fish sheep cow deer*

- 1 heroes kiloes echoes tomatoes
- 2 spies countries monkies berries
- 3 cliffs handkerchiefs roofs shelves
- 4 verses horses geese roses
- 5 sister-in-laws down-and-outs break-ins drive-throughs
- 6 analyses theses appendises crises
- 7 nuclei formulii radii cacti
- 8 criteria memoranda phenomena stimula

- 2 Check your ideas for exercise 1 in section A of the grammar box. Then work in pairs and justify your answers to your partner.

*Some nouns require no changes or additions to form the plural. That's true of fish, sheep and deer, but not cow.*

- 3 Choose the correct alternatives to complete the sentences. More than one alternative may be possible.

*My government do / does more to help the rich / riches than the poor / poors.*

- 1 I remember the pyjamas I wore as a child – *it* / *they* had pictures of rabbits on *it* / *them*.
- 2 I received *a* / *some* / *many* good news recently – *it* / *they* made me feel very happy.
- 3 Mathematics *is* / *are* / *was* / *were* one of my least favourite subjects at school.
- 4 Our national media *is* / *are* generally biased in favour of the government.
- 5 The police in my country *is* / *are* very well paid.
- 6 My family *own* / *owns* a second home.
- 7 *This* / *These* school premises *is* / *are* very brightly decorated.
- 8 We get too *much* / *many* English homework / homeworks – 30 minutes *is* / *are* more than enough.

- 4 Check your ideas for exercise 2 in section B of the grammar box, then justify your answers to your partner.

- 5 Work in pairs. Discuss the sentences in exercise 3. Say how true each one is and give details.

### A To make nouns plural:

- some require no changes or additions.  
*aircraft, deer, fish, salmon, sheep, trout*
- some have irregular forms.  
*children, feet, geese, mice, teeth*
- add *s* and/or *es* to nouns ending in *o*. Add *s* to abbreviated words.  
*radios, photos, potatoes, dominoes, volcanoes/volcanos*
- change *y* to *ies* except where the *y* is preceded by a vowel.  
*flies, ladies, worries, days, donkeys, valleys*
- change *f* or *fe* to *ves* in some cases: in others simply add *s*.  
*halves, knives, loaves, shelves, chefs, safes*
- add *s* to the first word of compound nouns formed with noun + preposition + noun  
*birds of prey, brothers-in-law, but pin-ups, in-laws*
- use the original Latin or Greek form in some nouns borrowed from those languages.

*hypothesis → hypotheses    fungus → fungi  
curriculum → curricula    automaton → automata  
antenna → antennae    matrix → matrices*

### B Singular or plural?

Some nouns are always plural and take a plural verb form:  
*eg pyjamas, tights, trousers, police, premises.*

*These trousers **are** too tight – I can't get **them** on.*

Some nouns ending in *s* are uncountable and therefore take a singular verb form: *eg athletics, economics, mathematics, news.*

*The athletics **is** on TV tonight – are you going to watch **it**?*

Many collective nouns can take either a singular or a plural verb form: *crew, family, government, media, press, team.*

*The local press **has/have** been invited to the opening.*

Plural expressions of time, measurement and money are often considered as single items.

*Three weeks **is** too long to wait.*

Some adjectives can be used as plural nouns to talk about groups of people: *eg the homeless, the blind, the deaf, the rich, the poor.*

*The city's homeless **receive** free medical care.*

➤ SEE LANGUAGE REFERENCE PAGE 124

## DID YOU KNOW?

- 1 Work in pairs. Read the information and discuss the questions.

Concern has been expressed in the UK in recent years at the declining interest in science in schools. Whilst A-Level entries overall have been increasing, the number of 16-18-year-old students studying science and maths has fallen, by as much as 35% over a 15-year period in the case of physics. Consequently, science graduates, teachers and research scientists are all in shorter supply. In 2004, the UK government introduced a 10-year plan, the *Science and Innovation Investment Framework*, part of which was aimed at reversing the trend.

- How popular are science and maths subjects in schools in your country?
- How interested in science are you? Why?

# 12B | Wearable technology

## VOCABULARY: compound adjectives (technology)

- 1 Complete the beginning of the compound adjectives in bold with one of the participles from the box.

called conditioned drawn generated heated powered  
consuming guzzling inducing moving saving

- 1 Animation films nowadays all seem to use CGI (**Computer-**\_\_\_\_ Imagery), but the old **hand-**\_\_\_\_ cartoons are much better.
  - 2 There is no greater **labour-**\_\_\_\_ device than the food mixer: previously very **time-**\_\_\_\_ tasks can now be done in a matter of minutes.
  - 3 The car is the most frustrating, **stress-**\_\_\_\_ invention of modern times – even more so than the computer.
  - 4 There's no point buying the latest models of computers or mobile phones: in the **fast-**\_\_\_\_ world of technology, they rapidly become obsolete.
  - 5 With our **air-**\_\_\_\_, **centrally-**\_\_\_\_ homes and our **gas-**\_\_\_\_ cars, we as individuals can do far more than governments to reduce the **so-**\_\_\_\_ greenhouse effect.
  - 6 **Wave-** and **wind-**\_\_\_\_ energy is the only way forward.
- 2 Work in pairs. Discuss the opinions expressed in exercise 1.

## READING

- 1 You are going to read about three items of 'wearable technology'. In pairs, look at the photos and titles for the three texts and predict what technological features each item might have.

- 2 Read the texts and check your ideas.

- 3 Read the texts again and complete the sentences with (A) Air Guitar, (B) Build Your Own Bag or (C) Verb for Shoe.

- 1 \_\_\_\_ permits you to communicate with other wearers.
- 2 \_\_\_\_ will help you locate things in the dark.
- 3 \_\_\_\_ created a positive impression even before it was launched.
- 4 \_\_\_\_ requires no great technical ability.
- 5 \_\_\_\_ is no more difficult to use than a construction toy.
- 6 \_\_\_\_ uses technology which eliminates a potential source of accidents.
- 7 \_\_\_\_ could become more affordable in the future.
- 8 \_\_\_\_ has a wider range of possible uses than other items of wearable technology.
- 9 \_\_\_\_ uses technology which could be modified for use with virtually all types of clothing.
- 10 \_\_\_\_ adapts instantly to suit the circumstances.

- 4 In pairs, discuss which, if any, of the items you would be most interested in owning. Why?

## Wearable electronics

Doug Robbins looks at three recent items of wearable technology.



### A Air guitar T-shirt

Scientists have breathed life into the fantasies of millions of frustrated rockers by creating a T-shirt that adds a soundtrack when the wearer plays 'air guitar'. The invention could bring an end to the days of strumming a tennis racket and playing imaginary rock anthems in the privacy of one's bedroom or kitchen.

The long-sleeved T-shirt has sensors in its elbows to detect and interpret the arm movements of the air guitarist. Information is then sent by wireless signal to a computer which interprets them and plays them as a series of guitar riffs. One arm chooses chords and the other strums imaginary strings. Because the T-shirt is based on wireless technology there are no trailing cables for budding rock guitarists to trip over or become entangled in.

The 'wearable instrument shirt' allows would-be rock stars to live out their dreams and can be 'played' by either right- or left-handed people. 'It's an easy-to-use, virtual instrument that allows real-time music making, even by players without significant musical or computing skills,' said Richard Helmer, the head of the team that developed the T-shirt. 'The technology, which is adaptable to almost any kind of apparel, takes clothing beyond its traditional role of protection and fashion into the realms of entertainment.'

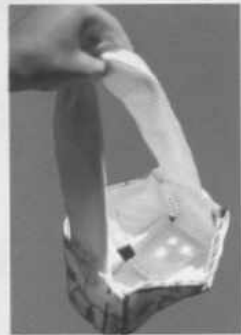
## B Build Your Own Bag

If you're in the habit of forgetting your keys when you leave the house, help is at hand in the shape of a smart bag, designed by a team of engineers at the Massachusetts Institute of Technology Media Lab.

The bYOB (Build Your Own Bag) alerts the user if it fails to detect objects it has been programmed to recognize. Equipped with a radio antenna and receiver, the bag listens for signals from radio frequency identification tags attached to the objects, and either lights up or 'tells' the user if any of these are nearby or not when he or she picks it up: a voice will warn 'Keys, yes! Mobile, yes! Wallet, no!'.  
 But that's not all. The fabric of the bag also illuminates when there is insufficient light, making it easier for users to see inside and find what they are looking for. And the incorporation of wireless Bluetooth technology means that

information such as weather forecasts and news updates can be downloaded to the bag.

Clothes and fabrics with computer chips and sensors are not, of course, a new concept, but what makes the bYOB so different is its versatility. The bag is made up of a number of computerized fabric patches, which can be readjusted and reconfigured to create new items with different functions; a scarf which informs you of the likelihood of snow, or a belt that gives you directions. 'bYOB was motivated by a desire to transform everyday surfaces into ambient displays for information and to make building with fabric as easy as playing with Lego™ blocks,' say the designers.



## C Verb for shoe

This curiously named shoe from Vectrasense Technologies took Hollywood by storm when it was presented at an exclusive preview there, with celebrities raving about its many features.

Verb for Shoe is indeed a remarkable piece of footwear, consisting of an embedded computer, a set of air bags or 'bladders', a motion sensor and a wireless link. The motion sensor detects whether, for example, you are running or walking, and the computer adjusts the air bladders accordingly in order to improve comfort and performance. It responds to any changes in the level of activity in a matter of milliseconds.

The wireless link enables the shoes to download and store information from your PC, as well as exchange files with other Verb for Shoe users. You need to be within a metre of each other to do so, though. By tilting the shoes forward you can pass on personal contact information and other data, including pictures and sounds.

The ShoeDoctor keeps a close check on the 'health' of the shoe, monitoring its various components and alerting the wearer if a problem occurs. And if something does go wrong, Customer Support can connect to your shoes via the internet and help you sort things out.

Not surprisingly, Verb for Shoe does not come cheap – around a thousand dollars if you go for all the optional extras. But if this kind of footwear catches on, it may one day come within the reach of the pockets of those of us that are not Hollywood celebrities.



## SPEAKING

- 1 Work in groups. You are going to submit a project for a Design and Technology competition.

Discuss each of the following possibilities in turn, and consider in general terms:

- the design of the item of clothing (what it looks like).
- its capabilities and purpose (what it can do and why).
- the technology involved (how it does it).

### Possible projects

A 'smart jacket' for the disabled  
 Techno-trousers for saving military lives  
 Intelligent shoes for child safety  
 A 'healing hat' for use in hospitals

Decide which of the above projects you will submit and select a spokesperson.

- 2 Each spokesperson should present their group's project to the rest of the class, who will then vote to decide the winner. You may not vote for your own group's project.



# 12c | Sport technology



## LISTENING

- 1 Work in pairs. Discuss the different ways in which technology may influence the following sports.

golf athletics cycling swimming  
tennis skating football hockey

*I'm fairly sure technology has influenced the design of golf clubs and golf balls. The first clubs were wooden, but now they're made of graphite or something. And golf balls used to be made of leather, didn't they? Now, ...*

- 2 You are going to listen to a radio discussion on technology in sport.

**3.40** Listen to Part 1 of the recording and answer these questions:

- 1 Which of the sports in exercise 1 does the presenter mention?
- 2 What technological developments does he describe for each one?

- 3 **3.41** Listen to Part 2 and answer the question.

What are the three main arguments put forward by each guest in support of their views?

- 4 **3.42** Listen to Part 3 and decide which of the following statements are true and which are false.

- 1 Geoff thinks the use of cameras for refereeing decisions will add to the excitement of sport.
- 2 Sally enjoys the speed at which tennis is played nowadays.
- 3 Geoff says that certain banned practices should be made legal.
- 4 He feels that there are adequate restrictions on the use of technology in sport.

## PRONUNCIATION: intonation (feelings)

- 1 Work in pairs. Read out the following exchange in the manner indicated in brackets.

**Sally:** [*Heavily sarcastic*] Oh right. So presumably then, doping is acceptable, as long as everyone has access to it. That's brilliant.

**Geoff:** [*Indignant*] I'm not suggesting that at all. That should be obvious.

**3.43** Listen to the recording, paying particular attention to the intonation of the speakers. Then read out the exchange again.

- 2 **3.44** Read and listen to these exchanges and match the feelings in the box to the speakers. More than one answer may be possible.

admiration curiosity enthusiasm  
indifference irritation reassurance  
sarcasm surprise suspicion worry

- 1 A: Oh, I wonder what that noise is.  
B: Oh, that always happens when you turn it on.
- 2 A: Oh, isn't he a talented cyclist?  
B: Oh, yeah. I mean, no one else could pedal like that, could they?
- 3 A: Oh, I wonder if he works with computers for a living.  
B: Oh, I don't know. Ask him if you want to.
- 4 A: Oh, are you coming with us as well?  
B: Oh, yeah, I thought I'd tag along - see what was going on.
- 5 A: Oh, yeah, John's going to be there, too.  
B: Oh, yes, I heard that, too. That's interesting.

- 3 Practise reading the exchanges with your partner. Use the same intonation to express the same feelings that you heard in the recording.
- 4 Read the exchanges again, this time expressing different feelings from the box.

## SPEAKING

- 1 Work in two groups, A and B. You are going to discuss this statement with the other group.  
*There is too much technology in the home.*  
Group A: You agree with the statement.  
Group B: You disagree with the statement.  
In your group, brainstorm and note down as many different arguments as possible to support your opinion.
- 2 Select the three most convincing arguments from exercise 1 and choose a representative from your group. He or she has one minute to put forward these arguments to the other group.
- 3 All group members may now discuss the statement in exercise 1, expanding on the points your representative made. You should offer further arguments and examples, as well as counter arguments.

## Useful language

### Introducing arguments

Firstly ... Secondly ... And finally ...

The main/Another argument in favour of/  
against having technology in the home ...  
Obviously/Clearly/Naturally/Unfortunately/  
Worryingly/Regrettably/Worse still ...

### Referring to arguments

I'd like to pick up on the point you made about ...  
Let's go back to what you said about ...  
Regarding your comment about ...  
You mentioned earlier ...

### Introducing examples

(Let's) take, for instance, the use of ...  
A good/perfect example of this is ...  
That's particularly true of ...

## VOCABULARY: verb affixes

- 1 Complete the sentences with the correct form of the word in brackets. Check your answers in tapescripts 3.41–3.42 on pages 162 & 163.

Technology has revolutionized (revolution) sport.

- 1 It \_\_\_\_\_ (able) athletes to improve their performance.
- 2 It helps to \_\_\_\_\_ (maximum) safety.
- 3 Technology \_\_\_\_\_ (sure) a greater degree of fairness.
- 4 Technology has come to \_\_\_\_\_ (dominant) sport.
- 5 We see them using technologies which \_\_\_\_\_ (danger) health.
- 6 The cameras will serve to \_\_\_\_\_ (high) interest, to \_\_\_\_\_ (intense) the drama.
- 7 Tennis no longer \_\_\_\_\_ (captive) spectators like it used to.
- 8 There is no way we can \_\_\_\_\_ (just) the use of performance-enhancing drugs.
- 9 You did use the word equipment, perhaps we should \_\_\_\_\_ (emphasis) that.
- 10 Its use has to be \_\_\_\_\_ (standard) by the sporting authority.

- 2 Use the same affixes as those in exercise 1 to form verbs from the following groups of words. Some words require further spelling changes.

1 category	summary	stable
2 class	identity	example
3 large	courage	rage
4 assassin	difference	value
5 threat	flat	long

Verbs can also be formed using particles, as in these examples from the listening.

The effects of technology in sport cannot be **understated**.  
[Technology] **overshadows** human achievement.

- 3 Choose the correct alternative to complete the sentences.
  - 1 I regularly *download* / *downplay* music from the internet.
  - 2 I never *overuse* / *overstretch* myself at school or work – I only ever do the bare minimum.
  - 3 Our national football team is usually *outclassed* / *outlasted* by the opposition.
  - 4 I never tell the shop assistant if I realize I've been *underfunded* / *undercharged*.
  - 5 My great grandmother *outlived* / *outnumbered* my great grandfather – he passed away first.
  - 6 I'm not the sort of person to be *overtaken* / *overcome* by emotion.
  - 7 I've never had to *undercut* / *undergo* surgery.
  - 8 The advantages of nuclear power *outweigh* / *outgrow* the disadvantages.
- 4 Work in pairs. Tell your partner how true the statements and opinions in exercise 3 are for you.

# 12D | The end?

## Revision

### Units 1 - 3

#### VOCABULARY

- 1 Choose the correct alternative to complete the sentences.
  - 1 She found it difficult to \_\_\_\_\_ to married life.  
A vary B transform C alter D adapt
  - 2 He looks middle-aged but he's only just \_\_\_\_\_.  
A turned B gone C taken D had
  - 3 I have a very \_\_\_\_\_ memory for facts and figures.  
A rich B hard C poor D soft
  - 4 The four \_\_\_\_\_ in the pack are hearts, clubs, diamonds and spades.  
A suits B patterns C colours D designs
  - 5 She went \_\_\_\_\_ her way to help me.  
A from B out of C around D off
  - 6 He started gambling and \_\_\_\_\_ huge debts.  
A set aside B ran up C frittered away D built in
  - 7 They live next door to the local rubbish \_\_\_\_\_.  
A scrap B bank C pile D tip
  - 8 Sure, animals have rights, but these activists take it to \_\_\_\_\_.  
A the top B overkill C extremes D excess

- 2 Check your answers in units 1-3.

#### WORD BUILDING

- 1 Complete the sentences with the correct form of the word in brackets.
  - 1 I have a high level of \_\_\_\_\_ (*fluent*) and \_\_\_\_\_ (*accurate*) in both spoken and written English.
  - 2 I have feelings of \_\_\_\_\_ (*sad*) and \_\_\_\_\_ (*disappoint*) that this course is coming to an end.
  - 3 I am familiar with the emergency \_\_\_\_\_ (*proceed*) in this building.
  - 4 I don't think I could write a book - I'm not creative or \_\_\_\_\_ (*imagine*) enough.
  - 5 I'm a clean-living person with no \_\_\_\_\_ (*harm*) vices.
  - 6 I enjoy \_\_\_\_\_ (*expect*) surprises - they add spice to life!

- 2 Check your answers on pages 13 and 33.
- 3 Work in pairs. Discuss how true the statements in exercise 1 are for you.

#### GRAMMAR

- 1 Choose the correct alternatives to complete the sentences.
  - 1 We've *finished* / *been finishing* two sections of this revision page; now we *work* / *'re working* on the third.
  - 2 A: Did she get to the station on time?  
B: I think *yes* / *did* / *so* - if *no* / *not* / *didn't* she'd have phoned by now.
  - 3 He says he's had difficulty *finding* / *to find* a job, but I actually think he enjoys *being* / *to be* unemployed and he's given up *looking* / *to look*.
  - 4 I regret *informing* / *to inform* you that your application has been rejected.
  - 5 You sound just *as* / *like* your mother.
  - 6 The *older* / *oldest* I get, the *less* / *least* I seem to know.
  - 7 It wasn't until I got home *when* / *that* I realized what had happened.
  - 8 All he ever does is *play* / *playing* computer games.

Check your answers on pages 9, 17 and 23.

#### DID YOU KNOW?

- 1 How well do you remember what you learnt in the *Did you know?* sections? Answer the following.
  - 1 Name a charity which represents the interests of elderly people in the UK.
  - 2 Which British admiral stands at the top of a column in Trafalgar Square, London?
  - 3 Who or what is *Alison Lapper Pregnant*?
  - 4 Which was the first country to introduce a tax on plastic shopping bags?
  - 5 What is the name of the tax in number 4 above?

- 2 Check your answers on page 13, 23 and 29.

### Units 4 - 12

- 1 Work in three groups, A, B and C. You are going to write your own revision questions. Each group will focus on the following units: Group A: Units 4-6 Group B: Units 7-9 Group C: Units 10-12

Write twelve revision questions of the types seen above for units 1-3. You should write between two and four questions for each of the four sections: *Vocabulary*, *Word building*, *Grammar* and *Did you know?*

- 2 Work in new groups with one student from each of groups A, B and C. Ask your questions to each of the other two students in turn. A correct answer scores two points.

If a student does not know the answer, or gives an incorrect answer to the question, offer it to the other student for one point.

The winner is the student with the most points after all students have asked their questions.

## SPEAKING

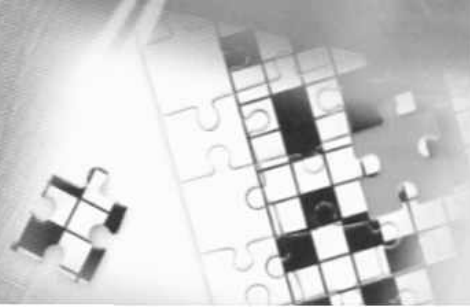
- 1 Work in small groups. You are a team of photo editors who have been asked to choose photos to illustrate the final page of this Student's Book.

Discuss the suitability of each of the photos shown below, then agree on two that you wish to include. At least one of the photos should be from this selection: if you cannot agree on a second, you may write a brief description outlining your requirements.

Explain your choices to the rest of the class.

- 2 Discuss the following in your groups.

- What aspects of your English do you think you have developed most during this course?
- Do you intend to take further English study courses? Give reasons/details.
- What do you plan to do outside of the classroom to improve your language skills?





# 12 | Language reference

## GRAMMAR

### Plurals & number

#### A Plural forms

Some nouns, particularly those referring to animals or fish, have the same form for both singular and plural. They include:

**Animals:** *bison, deer, moose, reindeer, sheep*

**Fish:** *cod, (shell)fish\*, mackerel, salmon, squid, trout*

**Others:** *aircraft, means, offspring, series, species*

\*The form *fishes* exists but is not common.

The following nouns have special plural forms:

*child/children foot/feet goose/geese man/men mouse/mice*

*ox/oxen tooth/teeth woman/women*

Nouns ending in *-ch, -sh, -s* or *-z* form their plural by adding *-es*.  
*churches, dishes, buses, quizzes*

Nouns ending in *o* form their plural by adding *s* or *es*. Sometimes either form is used. Examples include:

**Add s:** *pianos, radios, solos, sopranos, studios, zoos*

**Add es:** *dominoes, echoes, heroes, potatoes, tomatoes, torpedoes, vetoes*

**Add s or es:** *ghettos/es, halos/es, mosquitos/es, tornados/es, volcanos/es*

Plurals of abbreviated words are usually written with *s*:  
*autos, kilos, memos, photos, videos.*

Nouns ending in *y* form their plural with *ies* except where the *y* is preceded by a vowel.

*so flies, spies, babies, berries, countries, ladies, worries*  
but *boys, days, guys, donkeys, monkeys, trolleys, valleys*

Several nouns substitute *ves* for *f* or *fe* to form their plurals:  
*shelf/shelves, life/lives.*

Other words which behave in this way include:

*calf, half, knife, leaf, loaf, scarf\*, self, thief, wife, wolf.*

Nouns ending in *fs* or *fes* in the plural include:

*chefs, cliffs, cuffs, handkerchiefs\*, hoofs\*, roofs\*, safes*

\*The forms *scarfs, handkerchieves, hooves, rooves* are also possible.

Most compound nouns have plurals formed by adding *s* to the end of the last word:

*check-ups, down-and-outs, in-laws, play-offs, pencil sharpeners.*

In compound nouns formed with verb + *er* and an adverb, the first word is made plural.

*hangers-on, lookers-on, passers-by, runners-up*

Compounds composed of noun + preposition + noun behave in the same way:

*daughters-in-law, holes-in-one, heads of state, Members of Parliament, works of art.*

Some words of Latin and Greek origin retain their original plural form. Examples include:

*crisis/crises, diagnosis/diagnoses, emphasis/emphases*

*antenna/antennae, formula/formulae, larva/larvae*

*cactus/cacti, stimulus/stimuli, syllabus/syllabi*

*automaton/automata, criterion/criteria, phenomenon/phenomena*

*erratum/errata, medium/media, stadium/stadia.*

The English *s* or *es* plural is also possible in some cases, particularly in less formal or non-technical contexts: *antennas, cactuses, formulas, stadiums, syllabuses.*

#### B Number

Some nouns which refer to single items are always plural and take a plural verb form. This applies to clothes and tools made up of two parts:

**Clothes:** *jeans, pants, pyjamas, shorts, tights, trousers*

**Tools:** *nail clippers, pliers, scissors, tweezers*

*My trousers have got a hole in them and they're the only clean pair I've got.*

Other nouns which are always plural include *belongings, earnings, goods, outskirts, premises, savings* as well as *police* and *people*.

*Police have arrested two people who are thought to have taken part in the robbery.*

Some words, like *news*, look plural but are actually uncountable nouns which take a singular verb form. Other examples include:

**Sports:** *aerobics, athletics, gymnastics*

**Academic disciplines:** *economics, genetics, mechanics, linguistics, mathematics, physics, politics*

**Illnesses:** *diabetes, measles, mumps, rabies*

When the use of the word is different to that of the above categories, a plural verb form may be used:

#### Academic discipline

*Economics just sends me to sleep – it's so boring.*

#### Financial system

*The economics of the business are not easy to explain.*

Many collective nouns referring to groups can be either singular or plural. These include:  
*audience, band, cast, committee, crew, family, government, media, press, team* (and names of teams).

*United has/have lost its/their last six games.*

When referring to time, money and measurement, expressions of quantity often take a singular verb form, even if the noun is plural.

*Ten years isn't enough – he should have been given a life sentence.*

*Fifty pounds was a lot of money in those days.*

*Four miles is about six kilometres, isn't it?*

A limited number of adjectives can be used with the definite article to talk about groups of people. No plural *s* or *es* is added, but a plural verb form is used. They include: *the blind, the deaf, the old, the elderly, the young, the rich, the poor, the sick, the wounded, the dead, the homeless, the unemployed.*

*The sick were the first to be evacuated, followed by the elderly and the very young.*

## WORD LIST

Compound adjectives  
(technology)

air-conditioned <i>adj</i>	/,eə(r) kən'diʃ(ə)nd/
centrally-heated <i>adj</i>	/'sentrəli,hi:tɪd/
computer-	/kəm,pju:tə(r)/
generated <i>adj</i>	'dʒenəreɪtɪd/
fast-moving <i>adj</i>	/fɑ:st'mu:vɪŋ/
gas-guzzling <i>adj</i>	/'gæs,gʌzlɪŋ/
hand-drawn <i>adj</i>	/'hænd'drɔ:n/
labour-saving <i>adj</i>	/'leɪbə(r),servɪŋ/
so-called <i>adj</i> **	/'səʊ,kɔ:ld/
stress-inducing <i>adj</i>	/'stresɪn,dju:sɪŋ/
time-consuming <i>adj</i>	/'taɪm kən'sju:mɪŋ/
wave-powered <i>adj</i>	/'weɪv,pauə(r)d/
wind-powered <i>adj</i>	/'wɪnd,pauə(r)d/

## Verb affixes

able <i>adj</i> ***	/'eɪb(ə)l/
enable <i>v</i> ***	/'ɪn'eɪb(ə)l/
assassin <i>n</i> C	/ə'sæsn/
assassinate <i>v</i>	/ə'sæsɪneɪt/
class <i>n</i> C ***	/klɑ:s/
classify <i>v</i> **	/'klæsɪfaɪ/
revolution <i>n</i> C ***	/'revə'lju:f(ə)n/
revolutionize <i>v</i>	/'revə'lju:fə,naɪz/
threat <i>n</i> C ***	/θret/
threaten <i>v</i> ***	/'θret(ə)n/
download <i>v</i>	/'daʊn'ləʊd/
downplay <i>v</i>	/'daʊn'pleɪ/
outclass <i>v</i>	/'aʊt'klɑ:s/
outlast <i>v</i>	/'aʊt'lɑ:st/
outlive <i>v</i>	/'aʊt'lɪv/
outnumber <i>v</i>	/'aʊt'nʌmbə(r)/
overcome <i>v</i> ***	/'əʊvə(r)'kʌm/
overshadow <i>v</i>	/'əʊvə(r)'ʃædəʊ/
overstretch <i>v</i>	/'əʊvə(r)'stretʃ/
overtake <i>v</i> *	/'əʊvə(r)'teɪk/
overuse <i>v</i>	/'əʊvə(r)'ju:z/
undercharge <i>v</i>	/'ʌndə(r)'tʃɑ:(r)dʒ/
undercut <i>v</i>	/'ʌndə(r)'kʌt/
underfund <i>v</i>	/'ʌndə(r)'fʌnd/
undergo <i>v</i> **	/'ʌndə(r)'gəʊ/
understate <i>v</i>	/'ʌndə(r)'steɪt/

## Other words &amp; phrases

air guitar <i>n</i> U	/,eə(r) gr'tɑ:(r)/
alert <i>v</i> *	/ə'lɜ:(r)t/
aluminium foil <i>n</i> U	/'ælʊmɪniəm 'fɔɪl/
antenna <i>n</i> C	/æn'tenə/
apparel <i>n</i> U	/ə'pærəl/
be down to	/'bi: 'daʊn tu:; tu/
bend the rules	/'bend ðə 'ru:lz/
bladder <i>n</i> C	/'blædə(r)/
bolt of lightning <i>n</i> C	/'bəʊlt əv 'laɪtnɪŋ/

budding <i>adj</i>	/'bʌdɪŋ/
catch on <i>v</i>	/'kætʃ 'ɒn/
chord <i>n</i> C *	/kɔ:(r)d/
clap of	/'klæp əv
thunder <i>n</i> C	θʌndə(r)/
computer chip <i>n</i> C	/kəm'pju:tə(r) ,tʃɪp/

cylindrical <i>adj</i>	/'sɪ'lɪndrɪk(ə)l/
digestive	/daɪ'dʒestɪv
system <i>n</i> C	,'sɪst(ə)m/
diminish <i>v</i> **	/'dɪ'mɪnɪʃ/
discharge <i>n</i> C **	/'dɪstʃɑ:(r)dʒ/
doorknob <i>n</i> C	/'dɔ:(r),nɒb/
droplet <i>n</i> C	/'drɒplət/
embedded <i>adj</i>	/'ɪm'bedɪd/
entangled <i>adj</i>	/'ɪn'tæŋɡ(ə)ld/
fiery <i>adj</i>	/'faɪrɪ/
filling <i>n</i> C	/'fɪlɪŋ/
fireball <i>n</i> C	/'faɪə(r),bɔ:l/
freelance <i>adj</i>	/'fri:lə:ns/
grace <i>v</i>	/'ɡreɪs/
graphite <i>n</i> U	/'ɡræfʌɪt/
headgear <i>n</i> U	/'hed,ɡɪə(r)/
heart rate <i>n</i> C	/'hɑ:(r)t ,reɪt/
intake <i>n</i> sing *	/'ɪn,teɪk/
keep a close	/'ki:p ə 'kləʊs
check on	,tʃek ɒn/
line call <i>n</i> C	/'laɪn ,kɔ:l/
live (sth) out <i>v</i>	/'lɪv 'aʊt/
loop <i>n</i> C *	/'lu:p/
lung <i>n</i> C **	/'lʌŋ/
molten <i>adj</i>	/'mɒltən/
monitor <i>v</i> **	/'mɒnɪtə(r)/
octopus <i>n</i> C	/'ɒktəpəs/
ovoid <i>adj</i>	/'əʊvɔɪd/
patch <i>n</i> C **	/'pætʃ/
pole vault <i>n</i> sing	/'pəʊl ,vɔ:lt/
porous <i>adj</i>	/'pɔ:rəs/
rally <i>n</i> C **	/'ræli/
rave about <i>v</i>	/'reɪv ə ,baʊt/
reconfigure <i>v</i>	/'ri:kən'fɪɡə(r)/
refract <i>v</i>	/'rɪfrækt/
replenishment <i>n</i> U	/'ri:pleniʃm(ə)nt/
riff <i>n</i> C	/'rɪf/
rock anthem <i>n</i> C	/'rɒk ,ænthəm/
saliva <i>n</i> U	/'sə'lɪvə/
scalding <i>n</i> U	/'skɔ:ldɪŋ/
scatter <i>v</i> **	/'skætə(r)/
seal <i>n</i> C **	/'si:l/
sensor <i>n</i> C	/'sensə(r)/
soundtrack <i>n</i> C	/'saʊn(d),træk/
spark <i>n</i> C	/'spɑ:(r)k/
spherical <i>adj</i>	/'sfɪərɪk(ə)l/
spring <i>n</i> C ***	/'sprɪŋ/
squid <i>n</i> C	/'skwɪd/
string <i>n</i> C ***	/'strɪŋ/
strum <i>v</i>	/'strʌm/
surpass <i>v</i>	/'sə(r)'pɑ:s/
tag along <i>v</i>	/'tæg ə'lɒŋ/
tag <i>v</i>	/'tæg/
take (sth) by storm	/'teɪk baɪ 'stɔ:(r)m/

thigh <i>n</i> C **	/'θaɪ/
tickle <i>v</i>	/'tɪk(ə)l/
ticklish <i>adj</i>	/'tɪk(ə)lɪʃ/
tilt <i>v</i>	/'tɪlt/
tissue <i>n</i> U **	/'tɪʃu:; 'tɪsju:/
umpire <i>n</i> C	/'ʌmpaɪə(r)/
unease <i>n</i> U	/'ʌn'i:z/
versatility <i>n</i> U	/'vɜ:(r)sə'tɪləti/
whip <i>n</i> C *	/'wɪp/
would-be <i>adj</i> *	/'wʊd ,bi:/
young <i>n</i> pl	/'jʌŋ/