

## Units of Sound Books

## Stage 3

Reading content for your reference.

## Units of Sound Books

The Units of Sound books contain the content of the Reading programme, excluding the Quiz Questions. They provide a useful overview of the programme and can be used for more detailed 1:1 work with a student if needed.
The book page numbers match the page numbers in the online programme.

## Content

$\checkmark$ Units of Sound and Word Blocks
$\checkmark$ Check Words
$\checkmark$ Check Sounds
$\checkmark$ Sentences \& Passages
$\checkmark$ Reading Check - 'A' pages

## How to use this book

$>$ For a more detailed check on a specific page covering sounds the student had difficulty with in the Reading Check.
$>$ For 1:1 revision purposes in relation to a student's needs.
$>$ For an overview of the content to see how the structure builds.
www.unitsofsound.com

## sm-

1

| smack |
| :--- |
| smell |
| smash |
| Smith |
| smudge |

2
small smile smart smoke smooth

3
smoky smuggle smoothly smother smiling

## sn-

| 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- |
| snap | snail | snare | snapshot <br> sniff |
| sneaky |  |  |  |
| snack <br> snug <br> snatch | sneer <br> sneeze <br> snow | snarl <br> snore | snuggle <br> snake |
| snowball |  |  |  |
| snowstorm |  |  |  |

A snare is a sort of trap.
I have never heard of anybody throwing a snowball at a snake.
Smith snatched the snapshot from the desk while the other man's back was turned.

There was a smell of smoke in the house. The man shouted "Fire", smashed the glass of the alarm and snatched up a bucket of sand to try to smother the flames. There was a smell of smoke in the hall. The man shouted 'Fire', smashed the glass of the alarm and snatched up a bucket of sand to try to smother the flames.

## Wr-

| 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- |
| wrap | wring | wreath | wreckage |
| wren | wrist | wrought | wretched |
| wreck | wrong | wrestle | writer |
| wrench | write | wriggle | writing |
| wretch | wrote | wrinkle | written |

## tw-

dw-

## 5

| twig | twelve |
| :--- | :--- |
| twin | twelfth |
| twine | twirl |
| twice | twist |

7
twenty
twentieth
twinkle
twinge

8
tweezers
twilight
twitch

9
dwell dwelling dwelt dwindle dwarf

The writer had written a letter to his twin sister. However he forgot the right address and wrote the wrong one on it.

Stars begin to twinkle soon after twilight on a clear night.
'Wriggle and twist and twitch and twirl' - it could be a fish or a dancing girl.
If a thing dwindles it gets smaller and smaller.

Some quite different words can remind us of painful things; like wrench and wrestle and tweezers and twinge.

## wor

## 1

word work worse worth worm world worker
working
worship
worry
worthless
worthwhile

## -ment

## 2

moment
movement
judgment
statement
payment

3
government
department
element
settlement
improvement

4
experiment development arrangement argument excitement

Dwarves and Elves feature in a number of popular fantasy films.

Jack and Ben were watching a tiny bird in the hedge. As usual it was only a moment before an argument started. 'It's a wren,' said Jack. 'It must be a wren to be as small as that.'

Jack's remark brought a smile to Ben's face. 'Stop trying to show off, Jack,' he laughed. 'You know almost nothing about birds. That's just a young sparrow.

## -ld and -nd

| 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| cold <br> gold <br> bold <br> told <br> fold <br> hold <br> sold <br> scold | wild <br> mild <br> child | bind <br> mind <br> kind <br> wind <br> find <br> blind <br> grind | golden <br> winding <br> blinded <br> wildly <br> soldier | behind <br> unwind <br> unkind <br> remind <br> mankind <br> unfold <br> behold |

-ful
6

| awful | cheerful <br> wonderful <br> beautiful |
| :--- | :--- |
| grateful <br> careful <br> powerful | joyful <br> delightful |
|  | peaceful <br> plentiful <br> fruitful |

8
frightful doubtful fearful pitiful
prove through group round another
alarm return rather surely spare
valley thought empty growl powder
laugh enough instead country cough
oy -ay ar or er ow oi
igh oa
on tion ur ir

## 4A

Jack and Ben both heard the noise of the aircraft at the same time. When they looked up, they could see it flying very high, 'It's a jet,' remarked Jack, 'I wonder where it's going. I wish I was in it. I bet the pilot can see half the world from up there.'
'I bet he hardly ever looks,' replied Ben. 'Most of the time he's flying he'll be watching the instruments.'
'Well, he'll have radar, so the plane's perfectly safe even if it's in cloud or in the dark,' said Jack.
'Radar's nothing new,' replied Ben 'It was invented by bats. Well, not exactly invented by them, but they use radar. They send out a sort of highpitched scream, and when the sound-waves hit something they bounce back. The bat has a different kind of hearing which picks up the sound waves so it just twists away from things before it sees them.'
'Have you been reading books again?’ asked Jack.
'Yes', replied Ben, 'How did you know?'

| in- |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | $3 \quad 4$ |  | 5 |
| into <br> indeed <br> increase <br> instead <br> include | inside <br> invite instance instant inquire insist | inform insect intend income incline involve | instinct <br> instruct <br> injure <br> inspire <br> invent | Interest industry indicate introduce influence |
| 6 | 7 |  | 8 | 9 |
| India <br> Indian invention instantly instrument | interrupt <br> instruction <br> interval <br> institute <br> intention |  | information <br> independent <br> interesting <br> industrial <br> introduction <br> intelligence | invitation <br> independence <br> investigation <br> individual <br> international <br> invisible |

eight height applied friendly foreign climbed break combed received stopped

Instantly means almost at once.
If we intend to do a thing we have made up our minds about it.
Something invisible is a complete blank, if you see what I mean.

## de-

| 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: |
| destroy <br> declare <br> decide <br> degree | defeat <br> delight <br> delay <br> design | depend <br> depart <br> describe <br> desire | deny <br> deserve <br> defend <br> defence |


| 5 | 6 |
| :--- | :--- |
| demand <br> debate <br> decline <br> decay | defy <br> deceive <br> despair <br> device |


| 7 | 8 |
| :--- | :---: |
| devil | defect <br> delete <br> desert <br> decade | 10

develop
deliver
determine
deposit
department
December
development
delicate
destruction
decision
definite
detective

```
aw igh qu- shr- str- thr-
scr- sm- sn- dw- tw- -ment
```

The aim of the attack was to defeat and destroy the enemy army.
Everything would depend on the delicate timing of the attack.

## -ine

1
engine engineer famine destined examine determine discipline

2
imagine
medicine
feminine
masculine
heroine
genuine
Katherine
$\mid$
marine machine ravine sardine quinine routine

4 submarine margarine gelatine machinery magazine nicotine quarantine

## 5

Pauline
Josephine
Philippines

In 1899, on the shores of a huge lake between Germany and Switzerland, a man introduced a new wonder to the world. He was a rich man, and he needed to be both rich and determined. The machines to which he gave his name were expensive to build. As it turned out, they were also delicate.

His name was Count Zeppelin. No one in England had heard of him at that time. However a few years later the Zeppelin was to become a household word in this country.

The Zeppelin was a giant airship, shaped like a cigar. Zeppelin 1 was over 120 metres in length and just under 13 metres across the middle. The last Zeppelin, called the Hindenburg, was number 129.

## -OUS

1

| famous |
| :--- |
| nervous |
| gorgeous |
| numerous |
| marvellous |

2
vigorous
treacherous
tremendous
continuous
generous

3
various serious curious glorious obvious victorious
-le

| 4 | 5 | 6 | 7 |
| :---: | :---: | :---: | :---: |
| single <br> middle <br> fiddle <br> sprinkle | beetle <br> needle <br> eagle | candle <br> handle <br> saddle <br> angle <br> ankle <br> castle | title <br> idle cradle poodle |

8
bundle
struggle
purple
shuffle

9
bristle thistle whistle
nestle
castle
title
idle cradle poodle
direct known kissed fierce juice change shine machine examine gentle medicine ginger giant alive active

| -nge ui -ous -ine -ine -ine ge- ge- -ive -ive | -ceive | -ieve gi- gi- |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## 8A

Zeppelin 1 was driven by two engines which were fixed below it. Count Zeppelin believed it would be a new weapon of war. But the engines of this first Zeppelin were far too small to be effective. It had to be broken up because it cost too much money. Zeppelin 2 did little better and was destroyed in a storm. But Zeppelin 3 worked well. At last the German High Command agreed that it was a worthwhile machine.

By the start of the Great War in 1914 a number of Zeppelins were in use. During the war they even carried out night bombing raids over England. The Zeppelins of that time were almost 215 metres in length. It is hard to imagine that these monster machines made such raids all those years ago.

After the war it semed that such airships were here to stay. Britain, France, Italy and the USA were all building them. The greatest Zeppelin of all, the Hindenburg, impressed the whole world. Hindenburg was about 300 metres long. It had four 1,000 horse-power engines.

In 1937 this Zeppelin made a flight across the Atlantic to the USA. Thousands of people came to watch its landing. The beautiful, gleaming, airship came gently down to its landing point. Suddenly it gave a jerk. There was a flash of flame. A moment later the whole 300 metre length crumpled to the ground. Its crew and passengers all died.

When Hindenburg was destroyed it seemed to mark the end of all gas-filled airships.

1

| animal | local |
| :--- | :--- |
| hospital | equal |
| capital | final |
| national | metal |
| general | mental |
| personal | moral |

3

| arrival | naval |
| :--- | :--- |
| medical | legal |
| several | normal |
| principal | total |
| mineral | royal |
| annual | signal |

4
naval
legal normal total royal signal


6
original material industrial
universal
equally
finally generally

## 5

$\left|\begin{array}{l}\text { equally } \\ \text { finally } \\ \text { generally }\end{array}\right|$
$\mid$

## en-

| 1 | 2 | 3 |
| :--- | :--- | :--- |
| enter | entrance <br> enjomy | energy <br> enormous |
| entire | entirely <br> engage | entertain <br> encounter <br> encourage |
| enforce |  |  |
| endure |  |  |

## op

4
oppose operate opinion operator

5
opposite
operation
opposition opportunity
write beautiful worse snare twinge enough
smudge excitement dwindle remind soldier

Tom said he did not expect to enjoy the football match. He said that in his opinion the opposition would be too good for their team. Jack did not entirely agree and he encouraged them all to believe their team could win.

## -Our

| 1 | 2 | 3 |
| :--- | :--- | :--- |
| colour | neighbour | rumour |
| favour | armour | behaviour |
| honour | flavour | endeavour |
| labour |  |  |
| harbour | favourite | vapour |
| humour |  |  |
| neighbour | rumour |  |
| behaviour |  |  |

## -cious

4
precious
conscious
delicious
suspicious
precious

5
unconscious
gracious
spacious

After searching around the village for Tom, Sally went along to the place they called 'The Sandpit'. She finally found him there with several of his friends and their motor-bikes.
'We're going to go down that dip and up the steep bank on the other side,' said Tom. 'If we take it at the right speed we'll almost fly over the far edge!'
'Don't be silly!' said Sally, 'You'll never climb that bank, it's almost vertical!'
Tom was the first to attempt it. He started slowly and carefully down the near slope. Then he opened the throttle and shot up the steep bank. When he was almost at the top he turned a slow backwards loop, and he and his bike collapsed into the hollow.

They all rushed down to him, fearing the worst. Tom's friends grabbed his bike, while Sally dashed to where Tom was lying stretched out and looking unconscious. She lifted his head and cried out, 'Tom, have you hurt yourself?' Tom looked up at her and grinned. 'Don't panic!' he said. 'I'm all right. What year is it?'

## Soft C

| face once | chance | price prince | voice |
| :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 |
| cease <br> receive <br> ceiling <br> scene <br> sincere | cell <br> cellar <br> celebrate <br> parcel <br> princess <br> ceremony | cent centre central scent recent | recently <br> percent <br> century <br> necessary |
| 5 | 6 | 7 | 8 |
| certain <br> certainly | pencil <br> council <br> incident <br> specimen <br> Pacific | city <br> citizen <br> civil <br> civilised cigarette | capacity <br> electricity <br> scissors |
| 9 | 10 | 11 | 12 |
| science society | circle <br> circular <br> circuit <br> circumstance | ocean scarcely | cycle <br> cylinder |

```
armour precious colour engage conscious energy entitle local entrance
medical equal famous identical generous decide imagine discipline hospital
cradle observe instance fringe decent telephone
```



## 12A

Sally, Martin and Mike entered the back workshop of the garage. They saw Tom having an argument with a boy who was sitting on a motor bike. 'Look, Jack' said Tom, 'That's not your bike, and you can't ride one anyhow, so get off.'

The motor bike was on its rear stand in the middle of the workshop. Jack shrugged his shoulders and said, 'Look, that's the front brake, that's the clutch, that's the gear change and here's the ignition.' Then he turned on the ignition and the engine started up. 'Get off!' shouted Tom.
'It's easy!' yelled Jack, over the engine noise. He suddenly gave a jerk, and hit the gear lever as the bike bumped forward off its stand. They all knew in a flash that Jack meant to ride the bike out of the garage.

The rear wheel of the bike came straight down on to a pool of oil. The wheel spun round, the bike slid to one side and then suddenly shot away. It went straight at the corner of the garage. The front wheel hit the leg of a bench and the bike bounced back before having another go. Then it fell over, throwing Jack to one side.

The engine stalled. All at once there was silence. Jack got to his feet and pulled a face at the others. They couldn't speak for laughing. He was red in the face and covered with blotches of oil and dirt.

## -nge

1

| change | danger <br> strange <br> range |
| :--- | :--- |
| arrange | stranger <br> angel <br> strangely <br> dangerous |

4
revenge avenge challenge passenger

## 5

orange sponge plunge

## -age and -ege

| 6 | 7 | 8 |
| :---: | :---: | :---: |
| passage | average <br> package | courage <br> message <br> marriage <br> advantage |

Paul's mother often said he was her little angel. Paul's father said he thought that rather strange because he was convinced that the boy was more like a little terror.

Driving a car too fast is a dangerous habit to get into and should be avoided.

## -cy

1
fancy
mercy
policy currency

2
agency tendency emergency efficiency

## sur-

3
surprise
surround
surface
survey

4
surrender
survive
surgeon
surplus
-ay ai oy -ce oa ur au -tion ph ci ci ce- ce- -ange -inge

Nearly two hundred years ago a little 4 year old French boy was in his father's workshop. When he tried to use some of the tools in there, his hand slipped, and the sharp tool he was holding went into his eye. Not long after that he also lost the sight in his other eye from an infection. So Louis Braille had become totally blind.

He was so young that he had, of course, never been to school and could not read. Although he could not see he made up his mind that he must learn to read. He would not surrender to being blind. He would not give in.

At ten years of age he went to a school for the blind in Paris.

## -ice

1 notice office officer service

2
practice justice Alice Venice

3
advice sacrifice device

4
police policeman

## 5

| fuel | anguish <br> cruel <br> cruelty <br> influence |
| :--- | :--- |
| extinguish |  |
| extish |  |

7
ruin suicide

8
language
liquid
January

## -gg-

| 9 | 10 | 11 |
| :---: | :---: | :--- |
| $\|$rugged <br> dagger <br> stagger <br> luggage | dragged <br> tugged | suggest <br> suggestion <br> suggestive |

The driver stopped his car and called out, 'Officer, can you tell me the way to the station?' The policeman walked across to the car.
'Which do you want, sir, the police station, the railway station or the petrol station?'
'I'm running out of fuel,' replied the driver, 'and I need to get some petrol quickly.'
'In that case I suggest you go to the petrol station on the left just down the road.'

## ch

| 1 | 2 |
| :--- | :--- |
| Christ | school |
| Christmas | scheme |
| Christian | scholar |
| chrome | schooner |
| character <br> chemist <br> chorus |  |
|  |  |

3
ache anchor echo orchestra architect
mechanic mechanical technical technique

## 6

 technique4
monarch stomach toothache headache

5
Michael
Nicholas
Christopher

| engine | engage | original | language | suggest |
| :---: | :---: | :---: | :---: | :--- |
| college | tragedy | passenger | dangerous | passage |
| metal | sincere | notice | delicious | influence |
| policy | science | survive | nervous | operation |


|  | kn | -se* | shr- | str- | thr- | scr- | -ous | -cious |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| -our | -dy | -cy | sur- | -ice | - gg* $^{*}$ | -ceive | -ieve |  |

## 16A

Louis Braille, was ten years old when he first went to the school for the blind. There he learned to read from great big books. These books were very big indeed because each letter was nearly 10 cms high. The letters were cut from thick cloth and stuck to large sheets of paper. In this way a person could feel the shape of the letters and so could slowly learn to read. Of course there were only a few of these large books.

Louis was a really clever boy, and he did learn to read by using these strange big books, but he was not at all satisfied with that way of learning. It was so slow and clumsy. Worse still, it certainly did not work with a lot of children at the school. Louis decided that he must find a way by which people without sight could learn to read properly. But he failed time and again in his search for a useful method.

Many years later he heard by chance of an army captain who might be able to help him. This officer had found a way to send orders to his men at night. They could read these orders in the dark by touch. The secret was to use dots and dashes punched into cardboard.

This gave Louis Braille the vital clue for his alphabet. The Braille alphabet has been used now for over 180 years. It uses only 6 dots. These are set in a different way for each of the 26 letters which are punched into stiff paper.

## gu

| 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: |
| guard <br> guess <br> guest | guide <br> guy <br> disguise | safeguard <br> guardian <br> guarantee | guilt <br> guilty <br> guitar |

## bu

5
6

| built | buy |
| :--- | :--- |
| build | busy |
| building | business |
| builder |  |


| stage sparkle gracious choice ache eighty ceiling |
| :--- |
| pierce countries powder enormous serious national |
| idle suppose caught although biography watch obtain |

The new sports centre was a very attractive building.
'If you do take this job,' said the manager. 'I can certainly guarantee that you'll have a busy time.'

The wiring was given a thorough check and the circuit was found to be in perfect condition. The wiring was given a thorough check, and the technician said the circuit was in perfect condition.

Tom and Liz were busy building a shelf unit when they heard a knock at the door. They opened it and saw three children disguised as a pumpkin, a skeleton and a ghost. 'Trick or treat?' asked the pumpkin.

## -gn



## -gn-

4
recognise recognition

5
signal
signature dignity

6
signify
significant

| er | igh | -nge | -gine | -ine | -cious | -our |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -dy | -cy | -ice | $\mathrm{ch}^{* *}$ | $\mathrm{ge}^{*}$ | $\mathrm{gi}^{*}$ | $\mathrm{ow}^{*}$ |
| -ive |  |  |  |  |  |  |

The foreign minister finally decided to send the signal.
Michael recognised his nephew among the boys in the newspaper photograph.
The young architect was very proud of the design for the new supermarket.
Ben said he intended to resign from his office job and buy a business of his own.

## dis-

1
$\left|\begin{array}{l}\text { discover } \\ \text { distance } \\ \text { disappear }\end{array}\right|$

2
discovery
distant
display
district

## 3

discuss
discharge
dispute
distinct

4
distress
disturb
distribute distinguish

5
disappoint
discussion
distinction

## 6

disease
disaster

There is a story about a very clever and famous man who once sat on some eggs to see if he could hatch them out. He was disappointed when he found that he couldn't. However, at that time he wasn't yet a famous man - he was just a little boy. His name was Thomas, so he was called Tom for short. Thomas Edison was an American.

The tape machines we can listen to are quite common these days. Tom was probably the first person in the world to hear a machine of this kind talking to him.

That is because he invented it himself.

## -ate

| $\quad 1$ |
| :--- |
| immediate |
| immediately |
| desperate |
| unfortunate |
| delicate |
| affectionate |
| fortunate |
| private |

2
locate educate indicate candidate illustrate hesitate elevate regulate

3
penetrate operate investigate cultivate appreciate situated

4
deliberate
separate advocate
elaborate appropriate

## 20A

Thomas Edison's first recording machine was a rough and simple sort of thing. It didn't have a tape but instead used a roll or cylinder of metal.

He spoke a few words of a nursery rhyme into it, and then set it to play back to him. The funny, squeaky voice on the machine spoke to him quite clearly. It said, 'Mary had a little lamb, its fleece was white as snow.' That was well over a hundred years ago in 1877.

The first machine which was like a real tape-recorder, however, was made in Denmark in 1898. Even so, it wasn't a true tape-recorder. It used wire instead of tape.

Thomas Edison is, of course, famous for other inventions. He never stopped making things. He made an electric light bulb, and switches and fuses. He also designed a machine which could make electric power - the machine which we call a dynamo.

He spent a lot of time improving the working of the telephone and the telegraph. He helped to design cameras for film-making. He played a part in the invention of the typewriter. He designed new ways to improve the making of cement and concrete. He built an electric train. He was still hard at work and full of new ideas when he was 80 years old.

One of the most amazing things about Thomas Edison was that he had no training as a scientist. He was a self-made and self-taught man. He is one of a very few such men in history. They were men who had a kind of genius for inventing things.

## -tial and -cial

| 1 | 2 | 3 |
| :--- | :--- | :--- |
| essential | official <br> substantial | social <br> partial |
| special <br> confidential | influential <br> impartial <br> especially <br> financial <br> artificial | circumstantial |


| surface | police | emergency | suicide | disgrace |
| :--- | :--- | :--- | :--- | :--- |
| courage | privilege | suggestion | create | separate |
| busy | signal | guide | guess | guilty |
| disguise | delicate | scheme | design | character |

Social conditions in England a hundred and fifty years ago were very bad for many people.

More and more artificial colours in foods are likely to be used in years to come.
The word "initial" can mean the first letter of a name or the first step in some sort of activity. The word initial can mean the first letter of a name or the first step in some sort of activity.

In a court action circumstantial evidence is not supposed to influence the result.

## -ant

1

| distant |
| :--- |
| instant |
| giant |
| merchant |

2

| important |
| :--- |
| elephant |
| servant |
| pleasant |

## -ance

3
4
importance
appearance
acquaintance entrance

| 4 | 5 |
| :--- | :--- |
| importance | dance |
| appearance | advance <br> acquaintance |

di-

## 6

divide
divine divorce difficult difficulty

## To advance means to move forward.

An acquaintance is someone who is not quite as close as a friend.
The word "entrance" means a way in, but I have forgotten the word which means the way out.

It is certainly important that an acrobat should have a good sense of balance.
I should think it would be rather difficult for an elephant to dance.

## -ent

1

| consent | parent |
| :--- | :--- |
| content | present |
| event | silent |
|  | student |
| current |  |

4
presence science
silence
sentence
evidence

5
difference confidence conference intelligence independence

## -ence

2

| parent | independent |
| :--- | :--- |
| present | presently |
| silent | apparently |
| student | frequently |
| current |  |

independent presently apparently frequently

3

6
defence

| fashion | suspicion | division | efficient | official |
| :--- | :--- | :--- | :--- | ---: |
| essential | associate | practice | surprise | recognise |
| circuit pleasant appearance | disappear | sergeant |  |  |
| indicate chemical campaign | chorus | guarantee |  |  |

There are four blood groups. About 45 per cent of people have blood group 0 . Blood group A is a slightly smaller percentage. Nine per cent are of blood group $B$, and only three per cent have the rare $A B$.

When blood is given out from a blood bank, doctors have to be careful about who gets what. Groups $A$ and $B$ cannot be given each other's blood. Group O can safely be given to anyone, and persons having group $A B$ can take blood of any category.

## -ssion and -ssian

| 1 | 2 |
| :--- | :--- |
| mission <br> passion <br> impression | commission <br> possession <br> discussion <br> depression |$|$| Russian |
| :---: |

## -sion and -sian

4
vision division confusion conclusion

5
explosion
decision
occasion

6
Asian
Persian


There was an instance of sudden deathly silence in the conference room after the announcement.

The young Russian was frequently named as the most likely student to win the event. However, Jim was apparently full of confidence about his own chances of winning the prize.

In 331 BC the Persian Empire was defeated in the campaigns of Alexander the Great.

## 24A

When a human heart comes to a stop the person dies. That is simply because the heart is a pump. If it stops, the body, which depends on that pump, also stops. It is this pump which keeps our blood on the move, from the end of each toe to the top of the head.

As blood circulates it collects carbon dioxide. This is the waste matter in the blood stream. The carbon dioxide makes the blood darker as it is collected. The blood then takes on the more purple colour, and it is this that we can see showing in our veins.

The blood returns to the right-hand section of the heart, from where it is pumped to the lungs for cleaning. Then it carries on to the left section of the heart. From there the clean blood is pumped out once more to circulate round the body. This constant pumping and cleaning goes on without a stop until we die.

An amazing number of people live to be 100 years old. In such a case, that means that the heart has been pumping non-stop for a century. I do not know of any machine or engine ever made by man which has worked for 100 years non-stop.

## -cle and -fle

| 1 | 2 | 3 |
| :--- | :--- | :--- |
| article | rifle | obstacle <br> uncle |
| trifle <br> circle <br> miracle | ruffle <br> stifle | spectacle <br> chronicle |

## -ble

4
table
noble
double

5
valuable comfortable considerable vegetable miserable remarkable

6
possible horrible responsible impossible terrible possibly

## 7

tremble assemble trouble
route aloud tough brought whose occasion impression Russian initial social warm obey warning scarce unfortunate excellent confidence shove scowl father

It is a terrible thing to trifle with someone's feelings.
The person responsible for the vehicle was not in a position to answer the charges against him.

It was very comfortable sitting at the table as the food was excellent and the company enjoyable.

## per- and pur-



Jack was very angry and shouted that Tom had done it on purpose.
Tom said quite calmly that he didn't want to be personal but it would be perfectly obvious to any person of intelligence that he had not done it on purpose.

Jack kept quiet but made up his mind that he would get his revenge on Tom when he was off his guard.

## -lar

1
2
3
popular
regular similar

| particular | solar |
| :--- | :--- |
| particularly | singular |
| perpendicular | similarly |

## 4

popularity
regularity
similarity

In the middle of the eighth century, the city of Samarkand was attacked by a Chinese army. Today this city is to the south of Russia in a state which for much of the twentieth century was part of the USSR. However, at that time the people of the city were part of the Arab world.

The Chinese army was repulsed, and a number of prisoners were taken.
Among them were some men who said their trade was paper-making. Neither the Arab world nor Europe had ever heard of paper at that time. The Arabs persuaded the Chinese prisoners to work for them. They wanted to learn about the art of paper making.

## $i a_{\text {and }} \mathbf{e a}$

1
Austria
Australian
Italian Canadian
familiar peculiar

2

| variation |
| :--- |
| appreciation |
| association |

5
industrial colonial enthusiasm

3
area
idea
theatre
ideal
European

6
medium
genius
museum
beautiful magazine valuable chronicle
various purchase perform particular popular

```
    -tion -ive ph per- pur-
aw- wa- lar- -icular ge- ge-
```

One of the largest and most famous diamonds in the world came from India. It is called the Koh-i-Noor and is part of the crown jewels.

When Columbus set sail on his voyage to the west he thought he would reach Asia and that is why someone from Jamaica or Trinidad is now called a West Indian.

Russia is a powerful country bordering on several other European states.

## 28A

In the early days of paper making in England, the paper was made from cloth. The kind of cloth most used was linen. At the same time as the paper making industry was growing, so was the art of printing.

It was soon clear that linen cost too much to be made into paper. So the paper makers had to look for something else. They found the answer in wood.

Today, the paper that you read from was once part of a tree. It may have come from Canada or possibly a European country like Norway.

There is a huge amount of paper used in the world every year. In this country the paper used for each person each year weighs more than four sacks of potatoes. Only great forests can supply that amount of paper.

The world is using more and more paper every year. If man is not very careful he may run short of trees. That is why it is important to recycle paper products whenever possible.

## $-y$ -

| 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: |
| type | system | oxygen | symptom |
| style | sympathy | symbol | syrup |
| cycle | mystery | sympathetic | systematic |
| Cyprus | physical | typical | syllable |
| psychology | physician | cylinder | sympathise |


| regular | familiar | peculiar | idea | area |
| :--- | :--- | :--- | :--- | ---: |
| perhaps | pursue | particularly | possible | possession |
| Asian | association | industrial | trial | article |
| apparently | advance | evidence | genius | medium |

The island of Cyprus is one of the largest in the world.
The men made a tremendous physical effort to lift the fallen beam.
No one could explain the mystery of the peculiar lights which many people apparently saw in the sky that night.

The two mechanics made a systematic search of the whole area, but the missing cylinder head bolt was not located.

## im-

1
imagine
immediate immediately important importance improve

2
improvement impression impatient imagination impulse impress import

| wh- | sh- | ch- ch- | ci ci | ce- | ce- | cer- |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| cir- | phy- | sy- | -ange | -inge | -ance | -ence |
| ia | iar | -cion | -sion | -sian | -cial | -tial |

The hospital official said there had been a slight but definite improvement overnight, and the girl was now off the danger list.

Her parents gained the impression that their daughter's condition would continue to improve.

Though he tried very hard, Michael could not immediately think of the word which meant the opposite of import.

Several others became impatient, particularly as they thought he ought to be quite familiar with the word.

## eX-

1

| explain | exist |
| :--- | :--- |
| extent | exactly |
| extend | existence <br> express <br> expense |
|  | example <br> exhaust |

3
exercise
expedition
experience
experiment
expression
excellent

4 except exchange excite exclaim expect

Although the Vikings sailed to North America around the tenth century, Christopher Columbus is regarded as the man who discovered America. For the Native Americans that discovery threatened their way of life. Before then they had used stone and wooden tools and weapons. They had travelled on foot because they had no animals except for dogs. The Europeans brought guns and horses with them. Gradually the Native Americans started to use these as well to try to defend their lands. As more and more Europeans arrived in North America the Native Americans retreated further and further west.

## -ete

1


2
ambitious conscientious contentious

The medical experiment was completely new. Many people expressed doubts about it and claimed that it was too ambitious.

At the club meeting the chairman declared that everyone knew that flying saucers existed. The excited members exchanged arguments and insults but did not reach agreement about the mystery of these flying objects.

It was not exactly a peaceful meeting.
Finally the chairman made a few comments about 'heavenly bodies' and 'down to earth' common sense and the contentious subject was dropped.

## 32A

Initially, due to their horses and guns, the Native Americans did well on the great plains of North America. They could now hunt and kill the buffalo better than before. But the buffalo herds suffered heavily and became fewer in number. Then the European settlers began to move west, building railways and seeking gold. Things became worse. The Native Americans always had to fight or to move west.

In the nineteenth century more and more Native American tribes decided to fight for their land. However, the tribes did not join with each other. They usually fought separately. It was as though an army went into war one regiment at a time. The Native Americans were fighting a strong army. Good fighters though the Native Americans were, in the end they could not hope to beat the United States Army. The last clash was in 1890, at the Battle of Wounded Knee, and the Native Americans never wore war-paint in battle again.

The remaining tribes were moved to reservations.
Years later with the rise of the film industry, people all over the world saw Hollywood films about the 'Wild West'. Some of the films were based on stories and legends of the West, although most of them did not present a true story. Both television and cinema had an influence on the way people thought about the conflict between European settlers and the Native Americans. Gradually people have understood how the Native American way of life was destroyed. Today their descendants have revived their traditional customs.

## -cient

1
ancient sufficient sufficiently
-tient
2
patient impatient patiently3
musician politician technician

| similar | system | mystery | physical | sympathy |
| :--- | :--- | :--- | :--- | :--- | :--- |
| trifle | able | uncle | exercise | type |
| purpose | silence | museum | Persian | ambitious |
| European | examine | immediate | brilliant | complete |

To be patient and to be a patient are two completely different things.
Everyone needs to take sufficient physical exercise to maintain their health.
Anyone wishing to examine ancient objects would probably go to a museum for that purpose.

Ambitious people are often impatient with others.
The brilliant detective was the only person able to suggest a solution to the mystery.

## -cise

exercise
criticise
precise precisely

## -ual

3

| individual | actual <br> gradual |
| :--- | :--- |
| mutual |  |
| gradually | spiritual <br> perpetual <br> eventually |
|  |  |

5
usual unusual usually

$$
\begin{gathered}
\text { ch ch } \\
\text {-cion }
\end{gathered} \text {-sion }- \text {-sian }- \text {-cient } \quad \text {-tient }
$$

The two world famous boxers had a mutual respect for each other.
John eventually admitted that he could find nothing to criticise about the new car.
For many years scientists tried to discover the secret of perpetual motion.
The voice on the telephone said, 'At the third stroke it will be 20 ' clock precisely'.
The challenger gradually drew ahead, kept his lead, and consequently won the individual European championship.

## -tory

1
history
victory
factory
territory
satisfactory

## -CC

2
accuse
account
accomplish
accurate

3
accur
according
accordingly
accustom
accompany

Though oil has been used by man for thousands of years, the oil industry is a relatively modern development.

Most people are not aware that oil has been known to man for more than two thousand years.

The Chinese used it for burning, and it was used in the same way in the ancient empire of Persia. Marco Polo mentioned it in the history of his travels through Persia many centuries later.

In all those early periods of time, the oil was obtained from near the surface of the ground. It was dug out or scooped out for immediate local use.

It was in America, in the eighteen-fifties that the new story of oil began.

1

| measure | pressure |
| :--- | :--- |
| treasure | assure |
| pleasure |  |
| exposure |  |

## -ture

$$
\begin{array}{ll}
3 & 4
\end{array}
$$

capture creature feature future nature mixture
adventure departure temperature furniture manufacture natural

## 5

 pasture picture torture structure fracture venture| ew | au | -tious |  | -tient | -cient | shr- | str- thr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| scr- | per- | pur- | -ence | -ance | -dual | -tory |  |

The contours on a map give us information about the natural features of the ground.

A fracture can be something to do with the human body, or with metal or with glass.

A thermometer is an instrument to measure temperature and a barometer is an instrument to measure pressure. However, not all pressure is measured by a barometer.

## 36A

The oil industry grew as a direct result of the motor car. More precisely, it was because of the internal combustion engine, which burns the petrol made from oil.

Oil is formed from the remains of plants and creatures living millions of years ago. The weight of tons of rock pressed on those remains. This caused a gradual chemical change. Crude oil is the end result of that process.

To obtain the oil a gigantic drill works its way down from the surface and breaks into the lake of oil. The liquid, which has been trapped and compressed under the weight of the rock above it, rushes to the surface.

There are two main problems for the oil industry. First of all scientists have to locate the oil-bearing rocks. Then the oil men have to drill at exactly the right spot. Some drills have to bite into the ground as deep as four miles down before oil is found.

When the oil is found, it has to be moved, usually by pipeline. Some pipeslines are over 1000 miles in length, and they can be well over a metre across. From the end of the pipe-line the oil may be shipped in oil-tankers to the refineries. In Britain, France and the Netherlands for instance, these are usually close to the sea. This makes loading and unloading easier.

Large amounts of oil are used for fuel. Industry uses oil to make products such as paint and plastics. There is a danger that the world will eventually run short of oil as oil wells run dry. Sources of renewable energy, such as wind and solar power, are slowly becoming more popular.

| 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| union <br> opinion <br> million | period curious | studio radio | lion <br> violent <br> violence <br> pioneer <br> riot <br> violin | superior <br> warrior <br> interior <br> junior |

measure usually ancient oxygen patient ocean
actual style gradually satisfactory accomplish

A man who plays the violin is usually called a musician, but a man who can't play the violin may also be a musician.

When there is a riot we can be sure that there will be violence.
Curiosity drives explorers and scientists to try and find out more about the secrets of the oceans of the world.

Richard the Lionheart was a famous English warrior king.
The pioneers of the American frontier gradually worked their way deeper into the interior of the continent.

## com-

1

| combine | commission <br> compare <br> compittee |
| :--- | :--- |
| complete | companion <br> completely |
|  |  |

## -ic

5

| magic | economic |
| :--- | :--- |
| music | democratic |
| public |  |
| traffic |  |

3
4

| competition | comfort <br> comparison |
| :--- | :--- |
| comfortable |  | common command commence community

## -ical

7
electric
domestic
mechanic
politics

8
chemical
medical
musical

9
historical political practically

| -cian | -sian | -sion | -cion | -cial | -tial |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| -cient | -tient | -tious | -sure | -ture | -dual |  |
| phy- | sy- | -cise | ch- ch- | io | io | -iar |

It has often been said that our political and democratic ideas are copied from those of ancient Greece.

It is practically impossible for us to imagine the lack of domestic comfort which was common in Britain in the nineteenth century.

The growth of public health, economic wealth, medical services and, of course, road traffic since then has been astonishing.

## con-

1 contain control content contract conduct

2
consent
concern
consist
conceal

3
conclude connect confess constant conquer

4
continue continent contrary consequence
condition confidence conference connection

$$
5
$$

6
conversation consideration considerable
typical completely individual actually precisely
pleasure sufficient territory accustom musical

Someone, ages ago, must have been the first person to think of using rollers to move heavy loads. It could be argued that he gave the first clue to the invention of ball bearings.

The principal of ball bearings is quite simple. They are made of extremely hard steel. They run in a hardened steel channel between the moving part and the rigid part of, for instance, a wheel. The hub, or centre-piece, of the wheel revolves freely round it. Without ball bearings such a thing as a bicycle wheel would not be nearly so efficient as it is.

## sub-

1
submit
subdue
submerge subject

2
substance substantial substitute submarine

```
    com- cer- con- cir- ci- ci- per-
    pur- cy- cy- igh aw oi
        -ieve -ce -ance -ence -ge
-ange -nge -ic -ical -fle -cle -ceive
    -sure -ture -cian -dual -cious -cient
```

There was a considerable amount of conversation on the subject, but no conclusion was reached.

In a struggle, one side attempts to subdue or conquer the other and make them surrender or submit.

Plastic is a substance which has become a substitute for many things such as wood, metal or glass.

A submarine is a boat which can submerge below the surface of the sea. The Germans made substantial use of them in both World wars, and called them 'Undersea' boats.

## 40A

On the Western Front, late in 1914, it had become clear that the armies were stuck. There were great deep trenches everywhere. It was impossible to break through.

A British officer suggested that a new kind of weapon was required. It would have to be armour-plated and driven by a powerful engine. It should also be able to cross rough and muddy country.

By 1916 a number of these new weapons had been constructed. Winston Churchill helped arrange for them to be made quickly, although he was actually in charge of the Navy at the time.

One serious problem concerning the new weapons was how to get them to the front line in secret. Churchill had the answer to that. He gave orders that each one should have a big wooden box fixed round it. On each box was the label 'TANK'. Any enemy spy who saw the boxes might have wondered why the British army wanted so many large water containers in France.

We do not know whether they spotted these big wooden crates or not. What we do know is that Churchill had invented a new meaning for the word 'Tank'.

## -ology

1
psychology
apology
biology
geology
astrology

| union | history | according | command | condition |
| :--- | :--- | :--- | :--- | :--- | :--- |
| musician | curiosity | experience | syrup | concern |
| imagine | economic | music | practical | colonial |
| failure | virtue | feature | capture | treasure |

The practice of astrology has gone on throughout the world for centuries.
Some people claim that psychology is not a real science because it is human nature that makes our behaviour so uncertain.

After the disturbance which spoiled the football match, the referee was pleased when he received an apology from one of the team managers.

Two well known practical branches of science are geology and biology.
-X-
1
$\left|\begin{array}{l}\text { anxious } \\ \text { anxiously } \\ \text { anxiety } \\ \text { luxury }\end{array}\right|$

## -CC

## 2

accep
succeed
success
access
successfully
accelerate
3
$\left|\begin{array}{l}\text { successfully } \\ \text { accelerate }\end{array}\right|$

4
accident
successful
succession
successor

| ai | kn- | qu- | ir | -dge | ge- ge- | sub- | ch- ch- | phy- | sy- |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ia | iar | gi- gi- | -tial | -cial | -cion | -sion | -tient | -ology | -cise |

When fog is about it is advisable not to accelerate but to slow down in case of accidents.

A person can succeed someone by coming after them, but to succeed in a competition he should come before anyone else.

The technical expert said she was quite certain of the success of the experiment.
After hearing the news, Jack was anxious about his mother's safety and Ben could sense his anxiety from the way he behaved.

## -gue

1
vague rogue vogue tongue

2
plague prologue dialogue catalogue vaguely

## -que

3
unique antique oblique opaque mosque

4 technique physique picturesque grotesque

| committee <br> accept | success | politician | anxious psychology |
| :--- | :--- | :--- | :--- |

Through the opaque glass of the door he saw the vague outline of a woman.
There was a picturesque view looking out over the valley from the kitchen window.
There was a picturesque view looking out over the valley from the kitchen window.

People may be able to buy a unique work of art at an antiques fair.
If they prefer modern art they could look through the catalogue of a local art gallery.

## pro-

1
product
profit provide proper propose promise produce

2

| probably | protect <br> property <br> professor |
| :--- | :--- |
| protest <br> production | process <br> proceed |
|  | progress |


| accident | electric | technical | substance | continue |
| :--- | ---: | ---: | ---: | ---: |
| biology | anxiety | vague | unique | league |


| spl- | spr- | -ous | -tion | sur- | sure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| per- | -ive | -dual | ph | pur- | -ture |
| -cian | cy- cy- | -our | -cious | -cient |  |

The professor was a charming but vague character.
Electric fuses are meant to provide protection to the circuit and in that way help to prevent accidents.
The house was advertised as a unique property which was sure to increase rapidly in value.

The production manager said he could promise that the new process would produce a profit within the next twelve months.

## 44A

Although the human body can go very deep under water, for every three metres of depth, the pressure increases by 4 kilos per square metre. The weak parts of the human body which can be particularly affected are the ears and the lungs.

If a diver descends to about a hundred metres there is real danger. Because of pressure, our bodies are unable to get rid of the nitrogen which we breathe in. At this depth the nitrogen being absorbed into the bloodstream begins to affect the brain. The diver becomes confused and gets into a condition described as 'raptures of the deep'.

If he then comes quickly to the surface, the nitrogen will cause his blood to bubble, and he can die. This danger is generally known as the 'bends'. The only way for the bends to be avoided used to be by the diver coming up to the surface very slowly. The modern method is for him to go into a special tank which is termed a 'decompression chamber'. In this chamber the pressure is the same as it was under water. Very gradually the pressure is adjusted, until it is equal to that at ground level.

So the next time you dive, and feel the pressure on your ears, take care! Don't go too deep!

## pre-

1
prepare prevent preserve pretend prevail precaution

2
preference
prejudice
president
preparation

3
presume precede predict prefer prescribe previous

Before going off on holiday it is wise to take the precaution of turning off the water, especially in winter.

When it comes to ice-cream I much prefer strawberry flavour to plain vanilla.
The doctor prescribed just rest and quiet, with no special medicine.
It was a bright sunny morning in contrast to the previous day.
The climbers made careful plans and completed all their preparations with plenty of time to spare.
"Pride and Prejudice" is a famous novel by Jane Austen and has been adapted for film and TV.
'Pride and Prejudice' is a famous novel by Jane Austin which has been televised.

## -ative

| 1 |  |  |
| :--- | :---: | :---: |
| relative <br> negative <br> tentative | demonstrative <br> comparative | imaginative <br> argumentative <br> representative |


| figure | superior | future | picture | picturesque |
| :--- | :---: | :---: | :---: | :---: | :---: |
| violence | ocean | difference | resistance | promise |
| gigantic | physically | probably | public | submit |
| prevent | prepare | independent | rogue | tongue |

Positive and negative are opposite words which sometimes mean the same as plus and minus.

The foreign representative put forward a tentative suggestion on how to break the tension between the two countries.

Some of the most imaginative writers and composers have been quiet people, not at all demonstrative as might have been expected from their work.

There was a period of comparative calm after the earthquake before a series of aftershocks shook the city.

There is an old saying that blood is thicker than water, but there is no doubt that many people have relatives who can sometimes be the most difficult, argumentative people.

```
figure superior future picture picturesque violence ocean
difference resistance promise gigantic physically probably public
submit prevent prepare independent rogue tongue
```

```
ci- ci- -cian ch- ch- -tial -iar ce- ce- -cial phy- sure
    -inge cy-cy- -cion -ic sy- -cise -ange cir- -sion
    -ology -dual pro- cer- -sian -ture ia pre- pre-
```

No one is sure exactly why or when Stonehenge was erected. It seems possible that some religious influence was the motivation for its creation. It is believed that the famous ancient circle was established there before 1000 BC.

Stonehenge consists of two concentric circles of stones which surround two horse-shoes of stones. The outer circle is approximately thirty metres in diameter. Its vertical stones weigh about 25 tons each and stand more than three and $a$ half metres above the ground. They are made of local Wiltshire stone. They stand in pairs and they have a top, or lintel, stone on each pair.

The inner circle is of 'blue' stones from Wales. Within it are the horseshoe arrangements of local and Welsh stones.

People have long wondered what Stonehenge was created for. Another interesting puzzle is how such gigantic blocks of stone were moved and handled all those years ago. Like the pyramids and the Sphinx in Egypt, Stonehenge stands silent, suggesting no solution to the mystery.

| temperature | procedure | electrician | production | nature |
| :--- | :---: | :---: | :---: | :--- |
| previous | opinion | period | example | process |
| substitute | machinery | issue | improve | symbol |
| account | antique | preparation | catalogue | company |

```
sur- pur- pro- per- pre- pre- -ceive -ance cy- cy-
-ence -sure -ture -ble -ology -cle -ous -our
    -ieve -cious -cient -tious -tient -cian
```

Jack made up his mind to prepare a special birthday surprise for his young sister Katherine.

The deeper one submerges under water the greater the pressure, and the higher one ascends on a mountain the lower the temperature.

During the period of the American civil war the renowned General Custer had been one of the youngest colonels in the Union cavalry.

It is fascinating to study the annual phenomenon of bird migration and discover the remote destinations to which the birds return.

The survival of the human race may depend on successful scientific research into revolutionary new medicines.

The designer of the new tyre claimed that the process of production in the factory was quite unique.

## 48A

We all know that one guarantee that a bottle of milk is pure is when it is marked 'Pasteurised'.

The man who gave his name to this process was born in France in 1822. He came from a humble family, and like the American inventor Edison, his name was to become a household word. But unlike Edison, Louis Pasteur was a trained scientist - a chemist in fact.

He was a quiet, modest person. The history of his work and the story of his discoveries and theories give an indication of the variety of his achievements.

When he was 32 he became Professor of Chemistry at Lille. Not long after that he began work on research into germs in liquids - in wine, beer, vinegar. He found answers to these impurities. However, when he claimed that millions of tiny microbes lived in the air around us he was laughed at. Others criticised him for his conviction that many of those germs were so small that only the best microscopes could reveal them.

His later work in animal and poultry diseases added to his achievements. Finally he explained the causes of the dreaded disease of rabies. The modern use of inoculation to stop diseases owes much to him. He is also one of the foremost names in the history of food hygiene.

Louis Pasteur died in 1895. Many leading research institutes have since been named after him. Millions of people all over the world, who have never heard of him, have been saved from death by his work.

