Synonyms p.7

1	С	Both words mean 'to reveal'.
2	Α	Both words mean 'charming'.
3	Е	Both words mean 'lacking skill or dexterity'.
4	В	Both words mean 'to go faster, to accelerate'.
5	Е	Both words mean 'to avoid waste or extravagance'.
6	D	Both words mean 'brave'.
7	Е	Both words mean 'having no limit'.
8	Е	Both words mean 'to make a small amendment or change'.
9	Α	Both words mean 'a type of behaviour that is regularly followed'.
10	С	Both words mean 'fixed, unwavering'.
11	D	Both words mean 'a difference of opinion'.
12	С	Both words mean 'to deceive'.
13	D	Both words mean 'a portion'.
14	С	Both words mean 'to recreate'.
15	С	Both words mean 'to change'.
16	D	Both words mean 'having certain skills'.
17	В	Both words mean 'to put in danger'.
18	С	Both words mean 'to be sorry for having done something wrong'.
19	Е	Both words mean 'a final ending or conclusion'.
20	Α	Both words mean 'true to one's word or promise'.
21	В	Both words mean 'to make known'.
22	С	Both words mean 'excellent or desirable; most suitable'.
23	D	Both words mean 'showing good manners'.
24	В	Both words mean 'to make longer'.
25	В	Both words mean 'a quick look'.
26	D	Both words mean 'to become visible; to give an impression of having a certain quality'.
27	E	Both words mean 'to shout or scoff at someone unkindly'.

Comprehension p.12

——————————————————————————————————————				
1	С	A is true as lines 32 and 33 state 'he was considered to be an important figure in the Civil Rights Movement'. B is true as lines 12 and 13 state 'He was the first black recording artist to have ultimate control over his business affairs.' C is not true as lines 2 and 3 state 'he contributed to the rise of legendary singers Aretha Franklin and Marvin Gaye'. D is true as lines 15–19 talk about Cooke's stance on racism.		
2	А	Line 23 states 'Cooke married his first wife, Dolores, in 1953 and they divorced five years later.' Lines 25–25 state 'In the same year as his divorce, he married his second wife, Barbara.'		
3	D	The word 'poignant' means 'strong in mental appeal' or 'touching'.		
4	В	Line 27 states 'On 11 December 1964, Cooke was gunned down and killed in a Californian motel.'		
5	D	Lines 21 and 22 state 'had it not been somewhat overshadowed by The Beatles' high-profile appearance on an American television show around the same time.'		
6	С	Line 13 states 'Cooke achieved around 30 Top 40 chart hits'.		
7	D	Line 9 states '…and recording a mix of soul, and rhythm and blues'.		
8	В	Line 1 states 'Sam Cooke was born on 22 January 1931'. Line 27 states 'On 11 December 1964, Cooke was gunned down'.		
9	В	Lines 37 and 38 describe how the audience were to be separated.		
10	D	Lines 15–17 state 'In 1963, Cooke was moved upon hearing Bob Dylan's 'Blowin' in the Wind' and, ashamed that he hadn't written such a poignant anti-racism song himself, he embarked on the task of penning his own.'		
11	В	The word 'prolific' has the same meaning as 'productive'.		
12	Α	Line 8 states 'but he added the 'e' to signify a fresh start'.		
13	Α	Line 18 states 'Cooke released 'A Change is Gonna Come' in 1964' and line 27 states 'On 11 December 1964, Cooke was gunned down and killed…'.		
14	D	Line 38 states 'only one side of three balconies had been reserved for black audience members'.		
15	В	Line 31 states she 'highlights the fact that his injuries did not coincide with Franklin's description…'.		
16	С	Line 5 states he 'began singing, when aged six, in a group alongside his siblings'.		
17	D	Lines 42–43 state 'This sense of integrity meant that his was one of the first real efforts in civil disobedience that would send a message of protest in aid of the Civil Rights Movement.'		
18	Α	Line 9 states 'Unhappy with his deal with RCA Records'.		
19	С	Line 20 states 'This song quickly became an anthem of the Civil Rights Movement…'.		
20	D	There is no mention of Martin Luther King Jr in the text.		

Pictures 1 p.19

B From left to right, the stripes in the circle have reversed; eliminate C and E. The shading in the inner shapes is reversed; eliminate A and D. B From left to right, the picture comprises all the smaller shapes. D From left to right, the top shape increases in size; eliminate A and C. The bottom shape increases in size, eliminate E. The background shape becomes the foreground shape and vice versa; eliminate B. A From left to right, the picture is deconstructed from 3D to its net. C From left to right, the inner shape becomes the outer shape; the outer shape becomes the inner shape and is inverted. E From left to right, the picture is rotated 90 degrees anticlockwise. From left to right, the picture is reflected. A From left to right, the picture is reflected. B D From left to right, the shading is reversed; the solid inner lines of the star are removed and the star shape outlined by the thin dotted line becomes shaded, and vice versa. B From left to right, the shading in the outer segment becomes the shading of the inner segment and the subsequent shading also moves on by one each time. C From left to right, the shape has been turned 180 degrees. The length of lines with shapes on the end have been inverted. From left to right, the shape has been turned 180 degrees. The length of lines with shapes on the end have been inverted. From left to right, the shape rotates 45 degrees clockwise and the distance between the lines is increased. From left to right, the picture has been rotated 90 degrees clockwise. From left to right, the picture has been rotated 90 degrees clockwise. From left to right, the picture has been rotated 90 degrees clockwise. From left to right, the picture has been rotated 90 degrees clockwise. From left to right, the picture has been rotated 90 degrees clockwise. From left to right, the pictures are reflected. From left to right, the pictures are reflected.					
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From left to right, the picture is rotated 90 degrees anticlockwise. The order of shapes from background to foreground has been reversed.	17	D			
foreground has been reversed.	18	В	From left to right, the pictures are reflected.		
20 D From left to right, the pictures are reflected.	19	E			
	20	D	From left to right, the pictures are reflected.		

Maths 1 p.24

1	В	There are 24 hours in a day ($\frac{14}{24}$), which, when simplified, is equivalent to $\frac{7}{12}$.
2	Е	This question is asking what is the lowest common multiple of 3, 4 and 5. The answer is 60.
3	D	1 hour and 5 minutes – a quarter of an hour (15 minutes) = 50 minutes 10:05am + 50 minutes = 10:55am
4	С	$13 \times 13 = 169$. Therefore the square root of 169 is 13.
5	Α	13 × 12 = 156
6	Е	The pattern increases by 1.5km per month. July will equal 7.5km. Therefore, August will be 9km.
7	D	$\frac{24}{60}$ is equal to 0.4 or 40%.
8	Α	The children's tickets will cost £760.00 – (£760.00 ÷ 4) = £570.00 each. Therefore, the total cost will be £760.00 + £760.00 + £570.00 + £570.00 (£2660.00)
9	С	64 is both 8^2 and 4^3 .
10	Α	Regular polygons have exactly the same number of lines of symmetry as they have sides. An octagon has eight sides and, therefore, eight lines of symmetry.
11	В	If the price has already been reduced by one-third, £24.00 must, therefore, equal two-thirds. £12.00 must equal one-third. Three-thirds must equal £12.00 \times 3 (£36.00).
12	С	$8 \times 6 + 6 = 54$ $9 \times 3 = 27$ The missing number must equal 27.
13	Е	2 + 3 + 4 = 9 162 ÷ 9 = 18. 18 × 4 = 72
14	Α	73 – 7 = 66. 66 ÷ 2 = 33. 33 + 7 = 40
15	В	The difference in the bill equals £10.50 and the difference in the orders is one Hawaiian pizza. Therefore, the cost of a pizza is £10.50.
16	E	18,422 rounded to the nearest 100 is 18,400.
17	С	£11.99 + £3.99 + £7.99 + £8.99 = £32.96. Two £20 notes equal £40.00. £40.00 - £32.96 = £7.04.
18	В	There are 9 hours between 08:00 and 17:00. This means Simon's watch will show 9×20 seconds before 17:00. This is 3 minutes before 17:00, which is 16:57.
19	D	If eight cereal bars cost £3.20, one cereal bar will cost £3.20 \div 8 (40p). 40p \times 10 = £4.00
20	Α	$4^2 = 16$ and $7^2 = 49$. $16 + 49 = 65$
21	Е	$\frac{1}{8}$ of 300ml = 37.5. 37.5 × 5 = 187.50ml

Maths 2 p.30

1	07	The tables of four can accommodate a total of 16 people. Therefore, the remaining 14 customers will be accommodated on $14 \div 2 = 7$ tables.
2	63	21 × 6 = 126. 50% of 126 = 63 books.
3	06	(12 netball) + (14 football) = 26. 32 - 26 = 6
4	10	If the mean age is 27, the ages must total $27 \times 4 = 108$. 44 + 42 + 12 = 98 108 - 98 = 10, so Aayon is 10 years old.
5	05	$4 \times 8 = 32$. $12 \times 4 = 48$. $48 + 32 = 80$. $100 - 80 = 20$. Therefore, Anya will need to buy five more packs of batteries (5 × 4 = 20)
6	67	180 – 1 = 179. 179 – 45 = 134. 134 ÷ 2 = 67
7	80	$\frac{2}{9}$ of 360 = 80. Therefore 80 bananas need to be thrown away.
8	24	Priya will need 4 tiles for the width and 6 tiles for the length. $4 \times 6 = 24$
9	17	Bianca can have either 13, 14, 15, 16, 17, 18 or 19 books. If she divides 13 by 2, 1 book is left over. Dividing by 3, 1 book is left over. If she divides 14 by 2, 0 books are left over. Dividing by 3, 2 books are left over. If she divides 15 by 2, 1 book is left over. Dividing by 3, 0 books are left over. If she divides 16 by 2, 0 books are left over. Dividing by 3, 1 book is left over. If she divides 17 by 2, 1 book is left over. Dividing by 3, 2 books are left over. If she divides 18 by 2, 0 books are left over. Dividing by 3, 0 books are left over. If she divides 19 by 2, 1 book is left over. Dividing by 3, 1 book is left over. Therefore, Bianca must have 17 books.
10	30	The recipe would need to be multiplied by 5. (4000ml \div 800ml = 5) $5 \times 6 = 30$ pineapples
11	07	525 ÷ 75 = 7
12	15	20 in a ratio of 1:3 is equal to 5:15.

Antonyms p.43

1	Е	The word 'calm' means 'peaceful', therefore the antonym would be 'turbulent'.
2	С	The word 'true' means 'correct', therefore the antonym would be 'false or fictitious'.
3	С	The word 'important' means 'not trivial', therefore the antonym would be 'trifling'.
4	Е	The word 'composed' means 'calm; under control', therefore the antonym would be 'flustered'.
5	D	The word 'centre' means 'in the middle', therefore the antonym would be 'outskirts'.
6	С	The word 'fortunate' mean 'lucky', therefore the antonym would be 'unlucky'.
7	В	The word 'encourage' means 'persuade; coax', therefore the antonym would be 'deter'.
8	Α	The word 'waste' means 'using something carelessly', therefore the antonym would be 'conserve'.
9	D	The word 'obscure' means 'unclear; concealed', therefore the antonym would be 'obvious'.
10	Е	The word 'formal' means 'smart', therefore the antonym would be 'casual'.
11	С	The word 'broken' means 'damaged', therefore the antonym would be 'intact'.
12	Е	The word 'despairing' means 'having no hope', therefore the antonym would be 'hopeful'.
13	D	The word 'dirty' means 'stained', therefore the antonym would be 'spotless'.
14	D	The word 'provoke' means 'make angry', therefore the antonym would be 'pacify'.
15	Α	The word 'improve' means 'to get better', therefore the antonym would be 'deteriorate'.
16	Е	The word 'fake' means 'not genuine', therefore the antonym would be 'authentic'.
17	Е	The word 'notice' means 'to spot something', therefore the antonym would be 'miss'.
18	С	The word 'publicity' means 'information made known to the public', therefore the antonym would be 'privacy'.
19	В	The word 'attractive' means 'looking good', therefore the antonym would be 'repulsive'.
20	Е	The word 'ally' means 'friend', therefore the antonym would be 'opponent'.
21	D	The word 'plain' means 'not decorated', therefore the antonym would be 'ornate'.
22	Α	The word 'outside' means 'exterior', therefore the antonym would be 'interior'.
23	Α	The word 'illuminate' means 'to light up', therefore the antonym would be 'darken'.
24	С	The word 'honesty' means 'freedom from deceit', therefore the antonym would be 'deceit'.
25	Е	The word 'remove' means 'to take something out', therefore the antonym would be 'place'.
26	С	The word 'incapable' means 'unable to do something', therefore the antonym would be 'skilful'.

Maths 3 p.48

1	D	£1.75 × 2 = £3.50. £3.50 + £1.95 = £5.45. £10.00 - £5.45 = £4.55
2	J	30% of £7.00 = £2.10. £7.00 - £2.10 = £4.90
3	F	£48.00 shared at a ratio of $6:2 = £36.00$ and £12.00. The smaller amount is £12.00.
4	Е	£15.60 ÷ $3 = £5.20$
5	В	19:00 + 9 hours = 04:00. 04:00 - 5 hours = 23:00
6	G	14:00 + 7 hours = 21:00. 21:00 + 5 hours = 02:00 (the next day)
7	Е	14:00 – (3 hours + 3 hours) = 08:00
8	С	19:00 + 12 hours = 07:00. 07:00 + 7 hours = 14:00
9	G	1800 ÷ 90 = 20
10	Α	$£25 \times 2 = 50$
11	Н	560 ÷ 1.4 = 400
12	F	There is one hour of maths each day, so 5 hours in a week.
13	С	English = (1 hour each day + 1 hour extra on Mondays)
15		6 hours – 5 hours = 1 hour
14	В	ICT = (1 hour Tuesday + 1 hour Thursday) 2 hours. DT = 1 hour on Wednesdays. 2 hours + 1 hour = 3 hours
15	Е	Drama = 1 hour on Wednesday. 1 term = 12 weeks (1 × 12 = 12)
16	J	PE = 1 hour Monday and 1 hour on Thursday. $2 \times 12 = 24$ hours
17	D	The total journey = 40 minutes.
17		40 miles in 40 minutes = 1 mile per minute, which is 60mph.
18	Н	If Maya covered 44 miles in 55 minutes, she would have travelled 4 miles in 5 minutes. (5 minutes \times 12 = 60 minutes) Therefore, her speed would have been $(4 \times 12) = 48$ mph.
19	I	If Ravi travels 4 miles in 20 minutes, he will be travelling at $(4 \times 3) = 12$ mph.
20	Α	864 ÷ 12 = 72mph

Pictures 2 p.54

1 & 2	D&C	The clocks are advancing by 75 minutes in each picture.
3 & 4	F&E	In each picture, every point rotates anticlockwise into the position of the next point. The shaded section at the centre rotates clockwise each time.
5 & 6	A & D	The black squares alternate between vertical and horizontal with each picture. The shaded squares move one position anticlockwise each time. The arrows rotate 90 degrees clockwise.
7 & 8	D&E	The pictures alternate between containing squares and circles. In each picture, the number of shaded shapes at the bottom left increases by two, and the number of shaded shapes in the rest of the picture decreases by two.
9 & 10	B & A	In each picture, the crescent becomes larger and the star becomes smaller. Shadings alternate between black and white.
11 & 12	A & C	In each picture, the number of small black circles increases by one. The number of internal lines within the circles decreases by one.

Pictures 2 (cont.)

13 & 14	C & E	In each picture, the arrow rotates 45 degrees clockwise. The cube alternates between facing to the right and left.
15 & 16	F&D	In each picture, the outer shape alternates between black and white, as do the smaller shapes inside. The arrows alternate between pointing upwards and downwards.
17 & 18	D&B	In each picture, the banks of triangles rotate by 90 degrees anticlockwise and the shading is reversed. First, one of the white triangles is removed then, in the following picture, one of the black triangles is removed.
19 & 20	E&F	With each picture, one more square rotates to become a diamond shape. The triangle moves clockwise. There is only one white shape in each picture.

Cloze passage 1 p.58

Scientists believe that bees first <u>evolved</u> around 100 million years ago, during the Cretaceous period. Bees are vegetarian, eating pollen and nectar from plants, and flying from flower to flower in search of food.

Most species of bee have stingers, which they can use to <u>defend</u> themselves if they feel threatened. If you've ever been stung by a bee, then you'll already know that a bee sting can be quite painful, but isn't really that serious. The skin may swell up and be a little <u>itchy</u> for a couple of days, but a single bee sting usually doesn't require a trip to the doctor. However, a small number of people are allergic to bee stings. For them, a bee sting can cause a very serious allergic reaction, such as dizziness or difficulty breathing. For this small group of people, urgent <u>medical</u> attention should be <u>sought</u>.

Cloze passage 2 p.58

Some types of bee, such as the honeybee, can only sting an enemy once. This is because the stinger gets stuck in their enemy's skin, and gets pulled apart from the <u>rest</u> of the bee's body when it flies away. This means the bee dies after it stings you. Other types of bee, such as bumblebees, don't lose their stinger after they <u>attack</u>. This means that, just like wasps, they can sting you as many times as they like.

Honeybees live in giant, <u>highly</u> organised colonies that are made up of over 60,000 individual bees. A honeybee colony is made up of different types of bee, each playing an indispensable <u>role</u> within the hive. Worker bees are female, and are responsible for a large number of <u>tasks</u> throughout their short lives. They take care of the queen, help to feed young bees that have recently hatched, and guard the hive entrance to protect it from invaders.

Cloze passage 3 p.58

During the spring and summer months, worker bees also leave the hive daily to gather pollen, nectar and water, bring it back to the hive and use it to produce honey. The hive <u>relies</u> on this honey as its only <u>source</u> of food during the winter, when there are no flowers in bloom.

Each colony has only one queen at any one time. The queen is about twice the size of the <u>average</u> worker bee and spends all of her time laying eggs. The queen can lay up to 1500 eggs per day, and can live for several years. If a bee colony becomes too <u>crowded</u>, a second queen will hatch and leave the hive with about half of the worker bees to <u>establish</u> a new colony elsewhere.

Cloze passage 4 p.58

Honeybees are one of the most well-<u>known</u> species of bee because we humans also like to use the honey and beeswax that honeybees produce. Their hives contain honeycomb — sheets of hexagonal cells created from beeswax.

But not all species of bee live in hives. In fact, across the world around 85% of bee species live <u>solitary</u> lives. They don't produce honey, and they <u>create</u> only small nests that are large enough to fit just a few eggs.

Carpenter bees, for example, build their nests out of wood and will typically reside in a tree hollow.

Plasterer bees prefer to dig holes in the ground, while other bee species simply take advantage of <u>existing</u> materials they can find in the wild, like an empty snail shell.

Shuffled sentences p.61

1	F	Clare bought herself a new electric car
2	С	she had been waiting for a while
3	В	I am looking forward to my holiday
4	Н	there was a queue at the station
5	Е	Seth finally conquered his fear of flying
6	В	Ali made a model out of clay
7	G	Danielle abseiled down the jagged rock face
8	Α	we moved house twice in two years
9	D	Angus arranged his books into alphabetical order
10	F	young babies need constant care and attention
11	С	Jakob is very modest about his achievements
12	Н	the dog rolled over onto its back
13	Α	Ed wrote a song for the occasion
14	Е	someone had left the window wide open