Home Learning Pack

Year 5

Guidance and Answers

Classroom secrets KIDS

Answers – Developing Roman Numerals

Varied Fluency

1a. a) XI, XIII
b) XXXV, XXXVII
c) LXI; LXIII
2a. XV, XIX, XXXI, L
3a. >, <, =
4a. MMI

Reasoning and Problem Solving

1a. LXXX, LIV, XCIX
2a. C = 100; CC = 200
3a. 3 possibilities: XLI (41); LXI (61); LIX (59)

Answers – Developing Roman Numerals

Varied Fluency

1b. a) XLVI, XLVIII
b) LXVII, LXIX
c) XCIII, XCV
2b. XLVII, LXVII, XCI, C
3b. =, >, <
4b. DLXX

Reasoning and Problem Solving

1b. XIX, XCVIII, L
2b. C = 100; L = 50; CL = 150
3b. 2 possibilities: XIV (14); XVI (16)

Answers – Expected Roman Numerals

Varied Fluency

1a. a) CIV, CVI
b) CCLIV, CCLVI
c) DXXV, DXXVII
2a. CXCIX, CCCXC, DC, CMI
3a. >, =, <
4a. MLXVI

Reasoning and Problem Solving

1a. CDI, DLV, D
2a. M = 1,000; MMM = 3,000
3a. 3 possibilities: CXCI (191); CCIX (209); CCXI (211)

Answers – Expected Roman Numerals

Varied Fluency

1b. a) CCCL, CCCLII
b) CDVIII, CDX
c) DCXIV, DCXVI
2b. CXLII, CCLXXX, CCCXL, DCCXII
3b. <, <, <
4b. MCDLV

Reasoning and Problem Solving

1b. CCLXX, DCCCLXXV, DCVIII
2b. M = 1,000; L = 50; X = 10; MLX = 1,060
3b. 4 possibilities: CXIV (114); CXVI (116); XCIV (94); XCVI (96)

Answers – Greater Depth
Roman Numerals

Varied Fluency

1a. a) CCXXII, CCXXVI
b) CDXL, CDL
c) DCLX, DCLXXX
2a. CMXCI, DCCXC, DCXIV, DXCVIII
3a. <, <, <
4a. 1819

Reasoning and Problem Solving

1a. CDXVIII, DVI, DCCCLI
2a. M = 1,000; CD = 400; IX = 9;
MCDIX = 1,409
3a. 3 possibilities: CDXII (412); DCXII (612); DXCII (592)

Answers – Greater Depth
Roman Numerals

Varied Fluency

1b. a) CCC, CCCVI
b) CML, CMLXX
c) CDXIV, DCXIV
2b. CMXC, DCXXV, DCV, DLXIII
3b. >, <, =
4b. 1564

Reasoning and Problem Solving

1b. CDLII, DCCXLII, CDXCII
2b. M = 1,000; D = 500; C = 100; II = 2;
MMDCII = 2,602
3b. 4 possibilities: CCXIV (214); CCXVI (216); CXCIV (194); CXCVI (196)

Answers – Developing Multi-Step Problems

Varied Fluency

1a. 167 and 342
2a. 139
3a. 331
4a. 152 + 61 – 124 or 152 – 124 + 61

Reasoning and Problem Solving

1a. 954m tall
2a. If A has 141 marbles and C has 293 marbles, then B must have 66 marbles (500 – 141 – 293).
3a. Various answers, for example: Lucie needs 414g of flour for her recipe. She has 225g in her bowl and then pours in another 334g. How much will she need to remove from the bowl to make her total? The missing number is 145g.

Answers – Developing Multi-Step Problems

Varied Fluency

1b. 240 and 141
2b. 509
3b. 571
4b. 305 – 224 + 141 or 305 + 141 – 224

Reasoning and Problem Solving

1b. 935 books
2b. If A has 423 stamps and B has 198 stamps, C must have 102 stamps (723 – 423 – 198).
3b. Various answers, for example: Omar needs 317cm of string. He starts with 512cm but cuts too much, and has to add another piece which is 123cm long. How much did he cut? The missing number is 318cm.

Answers – Expected Multi-Step Problems

Varied Fluency

1a. 2,089 and 1,272
2a. 4,932
3a. 1,496
4a. 5,645 – 3,566 + 4,105 or 5,645 + 4,105 – 3,566

Reasoning and Problem Solving

1a. Yes. £4,522 + £1,897 (£4,522 – £2,625) + £3,437 (£1.897 + £1,540) = £9,856
2a. If A has 4,906 stickers and C has 3,698 stickers, B must have 688 stickers (9,292 – 4,906 – 3,698 = 688).
3a. Ryan is measuring ingredients to make lemonade. He needs 6,399ml of water. He starts with 7,866ml so needs to remove some, but he takes too much. How much does he need to add to make his total? The missing number is 2,905ml.

Answers – Expected Multi-Step Problems

Varied Fluency

1b. 2,135 and 1,440
2b. 4,490
3b. 5,251
4b. 6,234 – 3,055 – 304

Reasoning and Problem Solving

1b. 9,800 tins of pet food
2b. If A has 1,197 counters and B has 1,783 counters, then C must have 1,518 counters (4,498 – 1,197 – 1,783).
3b. Miles has £6,688 in his bank account. If he earns £2,501 in one month, how much does he spend if his final balance is £7,626 at the end of the month? The missing number is £1,563.

Answers – Greater Depth
Multi-Step Problems

Varied Fluency

1a. £2,753 and £1,978
2a. 1,775
3a. 7,151
4a. – 2,359ml; + 3,758ml; – 3,956ml

Reasoning and Problem Solving

1a. No. 2,264 (Jan) + 1,132 (Feb) + 3,630 (Mar) = 7,026
2a. A = 2,242; B = 5,501; C = 1,121 – there are 1,121 more in box A.
3a. Khadija knows that there are 8,672 items of stationery in the school cupboard. Using the table below, work out how many pencils there must be. The missing number is 3,899.

Answers – Greater Depth
Multi-Step Problems

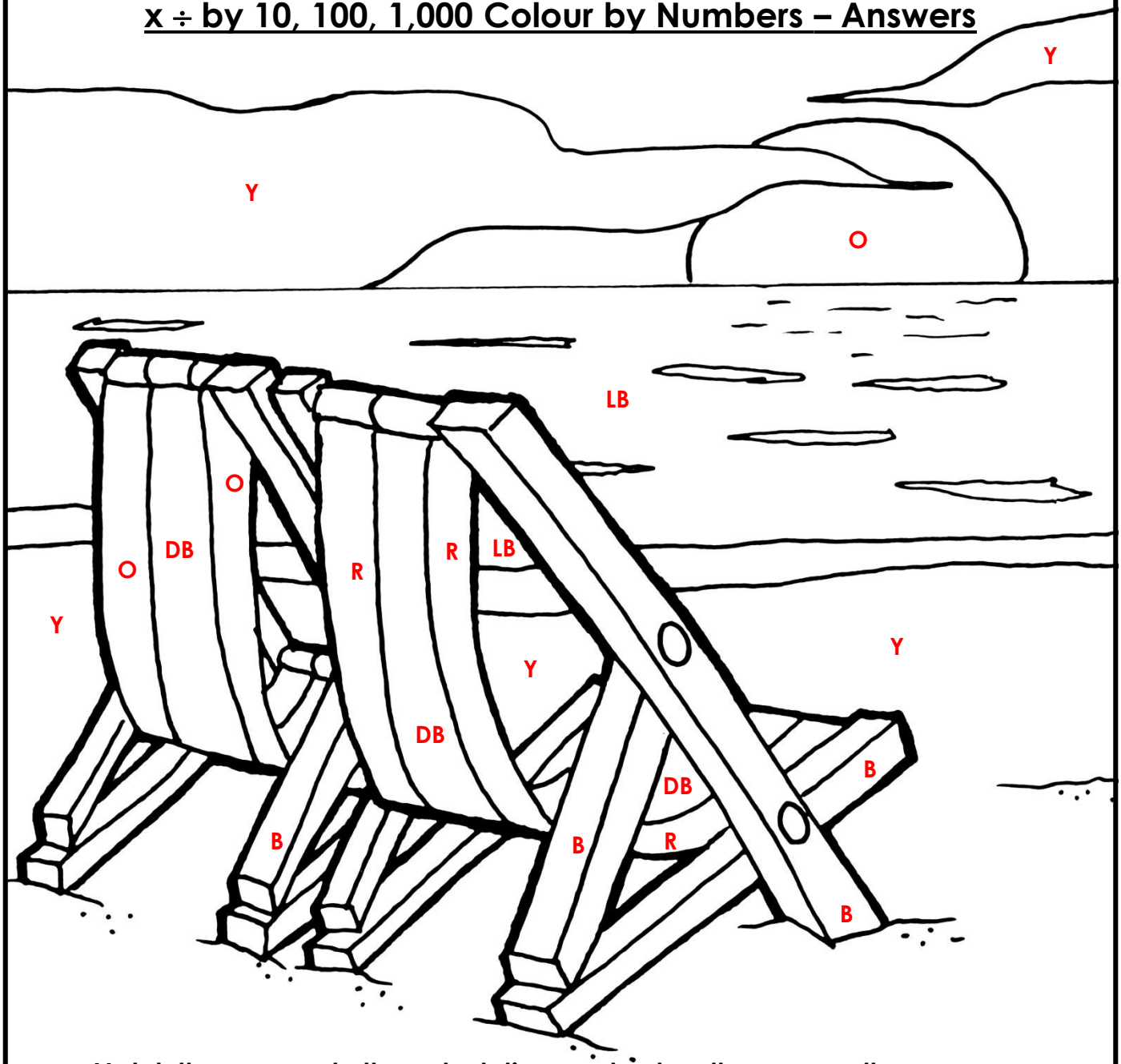
Varied Fluency

1b. £3,889 and £245
2b. 4,941
3b. 2,880
4b. + 5,988g; + 2,977g; – 8,697g

Reasoning and Problem Solving

1b. 2016 = 2,267; 2017 = 5,063; 2018 = 2,085 - the total is 9,415 bookings.
2b. A = 4,606; B = 2,303; C = 2,658 – there are 355 more in Box C.
3b. Yellow Class are analysing the results of a traffic survey. If they saw 500 more cars at 11:00, how many cars did they see in total? The total would be 9,549.

x ÷ by 10, 100, 1,000 Colour by Numbers – Answers



Match the answers to the calculations and colour them correctly.

Dark Blue (DB)
500 ÷ 100 = 5
90 ÷ 10 = 9
3 x 10 = 30

Yellow (Y)
100 ÷ 100 = 1
10 x 10 = 100
4 x 100 = 400
7 x 10 = 70
9 x 100 = 900

Red (R)
20 ÷ 10 = 2
800 ÷ 100 = 8
9 x 10 = 90

Orange (O)
400 ÷ 100 = 4
70 ÷ 10 = 7
5 x 10 = 50

Brown (B)
30 ÷ 10 = 3
6 x 100 = 600
8 x 10 = 80
2 x 10 = 20

Light Blue (LB)
60 ÷ 10 = 6
5 x 100 = 500

Now colour the rest of the picture.

Multiplying and Dividing Word Problems - Answers

1. a) 8 times a number is 200. What is 80 times the number? 2000
   b) 6 times a number is 8.4. What is 60 times the number? 84
   c) 70 times a number is 56. What is 7 times the number? 5.6
   Explain your answers to all parts.

2. Lizzie and Jane share 2690 beads equally between them. They create jewellery items to sell at the school fayre. Jane needs 7 beads per item and Lizzie needs 8 beads per item. Who, if anyone, will have the most number of beads left over? Both Jane and Lizzie will have 1 bead left over.

3. Daniel gets €592.50 when he exchanges £500. He decides to exchange another £300. How much is this in Euros? €355.50

4. It takes 12 weeks for a sunflower to grow 15cm. How many minutes is this? 120,960 minutes

5. 14 x ☐ x ☐ = 1694
   The same number is missing from each box. What is the missing number? 11

Add and Subtract Fractions

1. With a partner, play the game below.

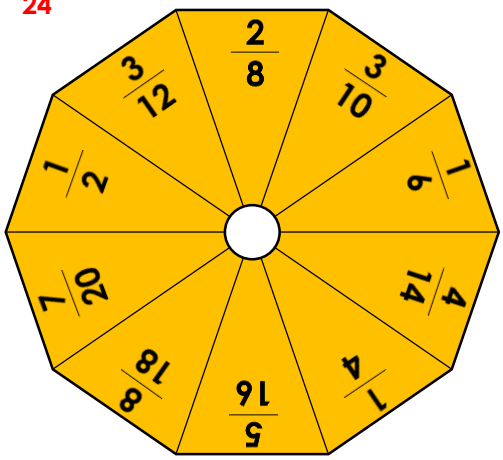
Cut the spinners out and take it in turns to spin!
Each spinner will give you a fraction.
Add the two fractions together.
A point is received for each correct answer.
The person with the highest number of points after 10 spins is the winner.

Were some pairs easier to add together? Why?

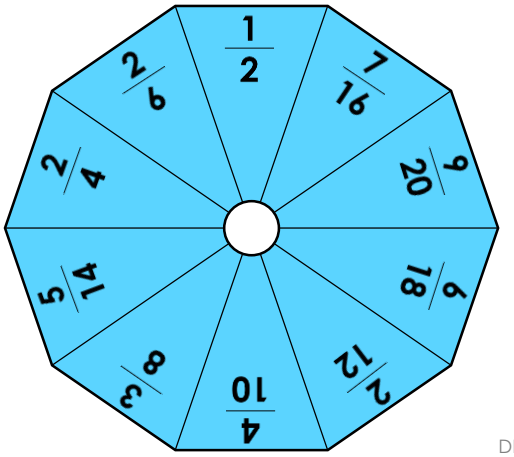
Various answers, for example: some fractions have the same denominator.

$\frac{3}{12} + \frac{3}{8} = \frac{15}{24}$

Spinner 1



Spinner 2



DP

2. Play the game with a partner. You need a different coloured pencil each. Choose two fractions to subtract. If the answer is less than one half, shade both boxes. The first person to travel from one side of the board (in any direction) to the other is the winner. You cannot choose fractions with the same denominator.

Various answers, for example, one player might make the following moves:

$\frac{9}{12}$	$\frac{5}{16}$	$\frac{3}{5}$	$\frac{4}{6}$	$\frac{2}{3}$
$\frac{8}{10}$	$\frac{7}{9}$	$\frac{11}{8}$	$\frac{3}{4}$	$\frac{15}{12}$
$\frac{5}{6}$	$\frac{4}{5}$	$\frac{15}{9}$	$\frac{5}{8}$	$\frac{9}{10}$
$\frac{14}{8}$	$\frac{20}{16}$	$\frac{1}{4}$	$\frac{2}{6}$	$\frac{14}{12}$
$\frac{7}{4}$	$\frac{12}{9}$	$\frac{17}{10}$	$\frac{5}{3}$	$\frac{8}{5}$

$\frac{4}{6} - \frac{3}{4} = \frac{1}{12}$

$\frac{5}{8} - \frac{2}{6} = \frac{7}{24}$

$\frac{7}{9} - \frac{5}{6} = \frac{1}{18}$

$\frac{5}{3} - \frac{8}{5} = \frac{1}{15}$

DP

Answers – Developing Fronted Adverbials

Varied Fluency

1a. B

2a. Eventually, we all made it to Harriet's birthday party.

3a. True. *From the corner shop* is an adverbial of place. The sentence could read: From the corner shop, I bought an expensive chocolate bar.

4a. *This morning,* I parked my car under the bridge

Application and Reasoning

1a. Excitedly, Niamh ran home to see her birthday cake.

2a. Libby's adverbial 'outside' fits best.

3a. Jenny is correct because this sentence flows well. *In the morning,* the postman will deliver our letters.

Answers – Developing Fronted Adverbials

Varied Fluency

1b. A

2b. Sadly, Emma lost her dog at the beach.

3b. False because *in the top cupboard* is an adverbial of place. The sentence could read: In the top cupboard, you will find many tasty snacks.

4b. *At midnight,* the ladies were still dancing in high heels.

Application and Reasoning

1b. Happily, the team captain jumped up when they scored a goal.

2b. Finn's adverbial 'this morning' fits best.

3b. Riley is incorrect because this sentence does not flow well. *Into his mum's car,* Shaun finds it hard to get.

Answers – Expected Fronted Adverbials

Varied Fluency

1a. B

2a. On a Monday evening, my children both have dancing lessons with different teachers.

3a. True. Frequently, the mouse was seen running around in the kitchen, avoiding the cat.

4a. *Somewhere near here*, the driver pulled over and frantically ran out of the car towards the river.

Application and Reasoning

1a. In the distance, the children in Miss Treacle's class could barely see the luxurious cruise ship.

2a. Beth's adverbial would fit best. As soon as they were told, the children returned to their seats without a sound.

3a. Linda is incorrect because the sentence would be disjointed and wouldn't make sense. Went to the local park, every Friday afternoon, Charlie to play rounders with his friends until late.

Answers – Expected Fronted Adverbials

Varied Fluency

1b. C

2b. Before long, the lost dog returned unharmed to his relieved owner.

3b. True. Usually, my sister is in trouble when she sulks in her bedroom and ignores everyone.

4b. *Earlier than planned,* he left the party so he could rest before his important cricket match the following day.

Application and Reasoning

1b. Since 2010, Michael had been living in his grandmother's house with his labrador.

2b. Simon's adverbial would fit best. Below the sea, the deep sea divers discovered an old, ruined pirate ship.

3b. Kieran is correct because the sentence flows and still makes sense. With her cousin, Laurie runs to the ice cream van and buys them both a tasty treat.

Answers – Greater Depth
Fronted Adverbials

Varied Fluency

1a. B

2a. To annoyingly make matters worse, after being delayed in the airport for three hours, Ben's suitcase couldn't be located.

3a. False because the sentence doesn't flow as smoothly if *rarely* is placed at the front of the sentence.

4a. *Before a big race,* it's really important to eat more carbohydrates than usual as the muscles in your body will store more energy allowing for plenty of exercise.

Application and Reasoning

1a. During the summer holidays, once or twice, the teenagers had been camping with their friends.

2a. In large groups, dolphins are known to occasionally follow ships far out at sea.

3a. William is incorrect because 'to the local homeless shelter' is not a complete fronted adverbial on its own.

Answers – Greater Depth
Fronted Adverbials

Varied Fluency

1b. A

2b. A few hours later that day, despite Olive's repeated presses of the doorbell, nobody answered and she began to worry.

3b. False because the sentence doesn't flow as smoothly if *normally* is placed at the front of the sentence.

4b. *For a long time,* Melanie had wanted a promotion in the company although it was unlikely to happen now as her manager wasn't very fond of her.

Application and Reasoning

1b. At the weekend, with huge grins on their faces, they went to the waterpark because of the steep slides inside.

2b. In a strange turn of events, without any warning, the egg started to move and cracked open.

3b. Carrie is incorrect because 'the next door neighbours' is not a complete fronted adverbial on its own.

Answers – Developing Recognising Parenthesis

Varied Fluency

1a. A uses a pair of commas. B uses a pair of dashes.

2a. The children ⊖ who were going to the zoo on a school trip ⊖ had to be in school for half past eight.

3a. The trim-trail, which had been recently installed in our playground, was enjoyed by all the children.

4a. A is false (brackets have been used). B is true.

Application and Reasoning

1a. A

2a. Cian has correctly used a pair of commas for parenthesis. Hafsa has missed a comma before 'which'.

3a. B does not use punctuation for parenthesis, it uses a comma in a list.

Answers – Developing Recognising Parenthesis

Varied Fluency

1b. A uses a pair of brackets. B uses a pair of commas.

2b. The spotty dog ⊖ which lives at the end of our street ⊖ chases after the postman.

3b. The alien – which was green with yellow eyes – had three heads.

4b. A is true. B is false (there is no parenthesis).

Application and Reasoning

1b. B

2b. Sean has correctly used a pair of dashes for parenthesis. Chuan has only used one dash instead of a pair. There should be another dash after 'day'.

3a. A does not use punctuation for parenthesis, it uses a comma in a list.

Answers – Expected
Recognising Parenthesis

Varied Fluency

1a. A uses a pair of brackets. B uses a pair of dashes.

2a. The old, decrepit castle (,) which sat on top of the hill (,) had been abandoned for hundreds of years and nobody dared to enter it.

3a. The vegetable patch – which sat in the allotment – was looked after by my grandad and I used to help him with it during the summer holidays.

4a. A is false (there is no parenthesis). B is true.

Application and Reasoning

1a. C

2a. Sean has correctly used a pair of commas to show parenthesis. Hannah has used a comma to separate clauses in her sentence.

3a. A does not use punctuation for parenthesis, it uses a comma to separate a clause.

Answers – Expected
Recognising Parenthesis

Varied Fluency

1b. A uses a pair of brackets. B uses a pair of commas.

2b. The old, brown box (,) which had been sat in the corner of the attic for many years (,) was covered with dust and cobwebs but the key was surprisingly clean.

3b. The elegant ballerina – who was about to star in her own stage show – had been training for many years and now her dream had come true.

4b. A is true. B is false (there is no parenthesis).

Application and Reasoning

1b. A and C

2b. Gabriel has correctly used a comma to show parenthesis. Steph has used a comma to separate clauses in her sentence.

3b. B does not use punctuation for parenthesis, it uses a comma to separate a clause.

Answers – Greater Depth
Recognising Parenthesis

Varied Fluency

1a. A uses a pair of brackets. B uses a pair of dashes.

2a. As morning came, the damage from the storm (,) which had been causing havoc throughout the night (,) could be seen clearly across the village and some people were unable to open their doors.

3a. As the misty, grey fog cleared from the sky, the spectacular views of the city could now be seen, which made the climb worthwhile.

4a. A is true. B is false (there is no parenthesis).

Application and Reasoning

1a. A and B

2a. Alice has correctly used commas for parenthesis. Johnny has used commas for a list and fronted adverbial.

3a. B does not use punctuation for parenthesis, it uses a comma in a list.

Answers – Greater Depth
Recognising Parenthesis

Varied Fluency

1b. A uses a pair of dashes. B uses a pair of brackets.

2b. As the fog finally cleared, the aeroplane (–) which had been grounded for over three hours (–) was given the signal to prepare for take off and the passengers sighed with relief.

3b. As we sat around the campfire with the family, my brother – who is a great musician – started to play a soft tune on his guitar and we all began to sing along.

4b. A is true. B is false (there is no parenthesis).

Application and Reasoning

1b. B and C

2b. Ben has correctly used a dash to show parenthesis. Jake has used a comma after a subordinate clause.

3b. B does not use punctuation for parenthesis, it uses a comma after a fronted adverbial.

Summer Sunset – Vocabulary – Answers

Write the definitions for each of these words.

Mediterranean	the sea that divides southern Europe and northern Africa
coastal	land that is adjacent to a stretch of ocean or sea
dusk	the period of day at the end of twilight and just before total darkness
environment	the surroundings or conditions in which a person, animal or plant lives
twilight	the diffused light from the sky during the early evening or morning
antiquated	old or old-fashioned
temperate	conditions that are neither too hot nor too cold
sparsity	a small amount of, lack of something
climate	the local environment, weather conditions of a particular area
luminescence	lit up from natural or artificial light, glowing in that light
inhabitants	a person or animal that lives in or occupies a place
traditional	long-established, customary, existing or part of a tradition

Sorting Advertisement Vocabulary – Answers

Write the vocabulary in the correct column in the table.

20% off! Whilst stocks last.

Bang! The firework exploded…

Cut along the dotted line.

For a limited time only!

This roaring, red, racing car is the must have toy of the year.

Cool trainers, designed for cool kids!

Many thanks for your reply…

The Moon orbits the Earth.

Do you want bright, white teeth?

I am writing to request…

Snow closes local schools!

"What do you want for tea?" asked Mum.

The tangy, orange flavour will tickle your taste buds.

Smart people choose smart prices!

I should use these in an advertisement	I should NOT use these in an advertisement
20% off! Whilst stocks last.	Bang! The firework exploded…
For a limited time only!	Cut along the dotted line.
This roaring, red, racing car is the must have toy of the year.	Many thanks for your reply…
Cool trainers, designed for cool kids!	The Moon orbits the Earth.
Do you want bright, white teeth?	I am writing to request…
The tangy, orange flavour will tickle your taste buds.	Snow closes local school!
Smart people choose smart prices!	"What do you want for tea?" asked Mum.

Dinosaurs – Comprehension – Answers

Section A

Which is not a period of the Mesozoic Era?

Jurassic		Cretaceous		Triassic		Prehistoric	✓

Which is considered to be one of the earliest known dinosaurs?

Stegosaurus		Coelophysis	✓	Allosaurus		Ankylosaurus	

Which dinosaur appeared in the Jurassic period?

Triceratops		Allosaurus	✓	Plateosaurus		T-Rex	

According to their diets, which dinosaur does not belong in this group?

Ankylosaurus	✓	Velociraptor		Allosaurus		Coelophysis	

Which of these dinosaurs had the biggest skull?

Coelophysis		Stegosaurus		T-Rex	✓	Velociraptor	

Number the dinosaurs in the order they appeared in history.

Stegosaurus	3	Coelophysis	1	Plateosaurus	2	T-Rex	4

Section B

Use the information in the text to decide whether these statements are true or false.

	True	False
The Tyrannosaurus rex and the Brachiosaurus roamed the Earth at the same time.		✓
An apex predator, like the Tyrannosaurus rex, is a predator at the top of its food chain.	✓	
The Jurassic period of the Mesozoic Era was more than 250 million years ago.		✓
By the end of the Triassic period, rainfall increased and the oceans rose.		✓
The Triceratops is renowned for its trademark frill and three facial horns.	✓	
Experts believe a giant asteroid caused the extinction of the dinosaurs.	✓	

Section C

Choose one dinosaur from each period to complete this fact chart. Various answers, for example:

Name	Period	Length	Weight	Diet	Notable feature
Coelophysis	Triassic	3m	15 – 20kg	Carnivore	Fast and agile
Allosaurus	Jurassic	9m	2300kg	Carnivore	Dozens of serrated teeth
Ankylosaurus	Cretaceous	1.7m	6000kg	Herbivore	Covered in armour; club on tail

Section D

Use a dictionary to find the meaning of the following words from the text.

apex predator	a predator at the top of a food chain
bipedal	uses two legs for walking
conifer	a tree that bears cones and has evergreen needle-like leaves
excavate	to make a hole by digging
foliage	plant matter; vegetation
forelimbs	the front limbs of an animal
palaeontology	the branch of science concerned with fossilised animals and plants
serrated	having a jagged, saw-like edge