



BROAD HORIZON
— T U I T I O N —

11+ Tuition

Year 4

Week 9

ANSWERS

Starter Task – Quick Revision

1) Work out the difference in time between 2:37am and 7:02am.

4 Hours 25 Minutes

2) Work out the difference in time between 8:45pm and 1:25am.

4 Hours 40 Minutes

3) Work out the difference in time between 11:25pm and 3:15am.

3 Hours 50 Minutes

(3 marks)

Now work out the Mean, Mode, Median and Range of the numbers in bold on the left-hand side. You will get 1 mark for each individual calculation.

		Mode	Range	Mean	Median
4)	3, 4, 2, 3	3	2	3	3

(4 marks)

5) $8.23 \div 1000 =$

0.00823

6) $(18 - 2 \times 3)^2 - 6^2 + 2^3 =$

116

Exercise C

1. Option
2. Ache
3. Jubilant
4. Determination
5. Abrupt
6. Moment
7. Nominate
8. Anxious
9. Ponder
10. Incompetence

Answer Sheet: Key Stage 2 Maths Practice Reasoning: Solve Problems Converting Between Units of Time



question	answer	notes
1	43 minutes	Allow 42 - 44.
2	3 years 8 months	
3	3 minutes 20 seconds	
4	24 minutes	
5	6 hours 35 minutes	
6	25 days	do not count Oct 23 rd
7	16 minutes and 29 seconds	
8	13:07 or 1:07	
9	17:37 or 5:37	
10	1942	
11	4.49pm or 16:49	
12	53 seconds	
13	7 hours 37 minutes	
14	16 minutes	

Continue the Number Patterns **Answers**

Continue each pattern and write down what the rule is. The first one has been done for you!

Whole Number Patterns:

1. 20, 42, 64, 86, 108, **130**, **152**, **174**

Rule = **the pattern is add 22**

2. 109, 124, **139**, 154, 169, **184**, **199**

Rule = **the pattern is add 15**

3. 120, 108, **96**, **84**, 72, 60, **48**, **36**

Rule = **the pattern is subtract 12**

Decimal Number Patterns:

4. 0.010, 0.015, 0.020, **0.025**, 0.030, **0.035**, **0.040**

Rule = **the pattern is add 0.005**

5. 1.5, 1.7, 1.9, **2.1**, **2.3**, 2.5, **2.7**

Rule = **the pattern is add 0.2**

Fraction Number Patterns:

6. $\frac{1}{2}$, 1, $1\frac{1}{2}$, **2**, **$2\frac{1}{2}$** , 3, **$3\frac{1}{2}$** , 4, $4\frac{1}{2}$, **5**

Rule = **the pattern is add $\frac{1}{2}$ (one half)**

7. 5, $4\frac{3}{4}$, $4\frac{2}{4}$, **$4\frac{1}{4}$** , 4, **$3\frac{3}{4}$** , **$3\frac{2}{4}$**

Rule = **the pattern is subtract $\frac{1}{4}$ (one quarter)**

Continue the Number Patterns **Answers**

Continue each pattern and write down what the rule is. The first one has been done for you!

Whole Number Patterns:

1. 120, 142, 164, 186, 208, $\boxed{230}$, $\boxed{252}$, $\boxed{274}$

Rule = **the pattern is add 22**

2. 975, 930, 885, 840, $\boxed{795}$, $\boxed{750}$, $\boxed{705}$

Rule = **the pattern is subtract 45**

3. 14, 28, $\boxed{42}$, 56, $\boxed{70}$, 84, $\boxed{98}$

Rule = **the pattern is add 14**

Decimal Number Patterns:

4. 0.12, 0.23, 0.34, $\boxed{0.45}$, 0.56, 0.67, $\boxed{0.78}$, 0.89, $\boxed{1}$

Rule = **the pattern is add 0.11**

5. 12.9, 11.87, 10.84, $\boxed{9.81}$, 8.78, 7.75, $\boxed{6.72}$, $\boxed{5.69}$

Rule = **the pattern is subtract 1.03**

Fraction Number Patterns:

6. $6\frac{4}{6}$, $6\frac{3}{6}$, $\boxed{6\frac{2}{6}}$, $\boxed{6\frac{1}{6}}$, 6, $5\frac{5}{6}$, $\boxed{5\frac{4}{6}}$, $5\frac{3}{6}$, $\boxed{5\frac{2}{6}}$, $5\frac{1}{6}$, $\boxed{5}$

Rule = **the pattern is subtract $\frac{1}{6}$**

7. $4\frac{1}{5}$, $\boxed{4\frac{2}{5}}$, $4\frac{3}{5}$, $4\frac{4}{5}$, $\boxed{5}$, $\boxed{5\frac{1}{5}}$, $5\frac{2}{5}$, $5\frac{3}{5}$, $\boxed{5\frac{4}{5}}$

Rule = **the pattern is add $\frac{1}{5}$**

Negative Numbers and Temperature **Answers**

1.

- a. -8°C , -6°C , -4°C , -1°C , 2°C ,
- b. -15°C , -11°C , 6°C , 10°C , 14°C
- c. -25°C , -23°C , -13°C , 12°C , 16°C , 18°C , 20°C

2.

- a. -4°C
- b. -8°C
- c. -17°C
- d. -6°C

3.

- a. 11°C
- b. 13°C
- c. -2°C
- d. 8°C
- e. 18°C
- f. -11°C
- g. -9°C
- h. 15°C

Word Problems Involving Negative Numbers: Answers

question	answer
1	15°C
2	-7
3	23
4	£11
5	-2
6	-7°C
7	-£35
8	£600

Question	Answer
1	$56 - (-89) = 145$. The answer is 145°C
2	$\pounds 1750 - \pounds 1346 = \pounds 404$
3	$18 - (-28) = 46$. The temperature is 46°C .
4	$-\pounds 25 - \pounds 134 = -\pounds 159$. $\pounds 159$ overdrawn.
5	$-31 - (-12) = -19$. The temperature falls by 19°C .
6	<p>Total bills: $\pounds 234.97 + \pounds 132.17 + \pounds 108.34 = \pounds 475.48$</p> <p>Balance: $\pounds 456.75 - \pounds 475.48 = -\pounds 18.73$. The balance is $\pounds 18.73$ overdrawn.</p>

Year 4 Week 8 Page 16-21

1. A

In the text it says Narcissus rejected his admirers because "he thought that none of them were good enough."

2. B

In the passage it says that nymphs are "divine creatures who kept the plants, trees and animals alive."

3. C

In the passage it says that Narcissus rejected Echo, so he did not love her.

4. C

Echo's heart was broken by Narcissus, so she wanted to go somewhere away from him.

5. E

It was a reflection so it disappeared when the water moved.

6. B

In the passage it says "The sun rose and set many times", which shows that many days had passed while he was at the spring.

7. E

This story is a warning against being obsessed with your looks, as Narcissus fell in love with his reflection and died.

8. E

'famous' is closest in meaning to "renowned". Both words mean 'well known'.

9. D

'conceited' is closest in meaning to "arrogant". Both words mean 'thinking highly of yourself'.

10. C

'enticed' is closest in meaning to "lured". Both words mean 'tempted'.

11. D

The proper noun is 'Thespieae'. It is a proper noun because it is the name of a place.

12. C

"kept" and "gazed" are verbs. These are action words.

13. B

The wolves recognise that it is a human baby, and a baby wolf is a cub.

14. A

New-born babies cannot walk, and in the passage it says the baby "could just walk".

15. C

Father Wolf picks the baby up carefully, so that "not a tooth even scratched the skin".

16. B

He is explaining that the child could easily be killed by the wolves.

17. B

In the passage it says that the baby pushed his way in amongst the cubs "to get close to the warm hide" and to take "his meal with the others".

18. E

Father Wolf may have seen human children before, but Mother Wolf says, "I have never seen one."

19. B

Tabaqui calls Shere Khan "My Lord". This shows that he is a follower of Shere Khan.

20. E

'used to' is closest in meaning to "accustomed to". Both mean 'familiar with'.

21. A

'skin' is closest in meaning to "hide" here — "hide" is an animal's skin.

22. C

'shoved' is closest in meaning to "thrust". Both words mean 'pushed'.

23. D

"up" is a preposition — it shows where the child looks

24. D

"square" is an adjective — it describes the shape of Shere Khan's head.

TYPE EIGHT:

laze

cash

pets

sung

sat

stir

part

sat

won

name

art

dear

seat

strap

dank

calm

came

tube

cart

test

Year 4 Week 8 Page 25

Shuffled Sentences

Test 8

1. he paused at the side of the road and checked it was safe to cross
2. deserts have fewer centimetres of rainfall than anywhere else
3. waves pounded the rocks during the terrible storm
4. ducks quacked loudly at the passing boat
5. the acrobat enthralled them with his tricks
6. windows are usually made of glass
7. running is a healthy way to get fit
8. she was tired after her long run
9. children were building sandcastles on the beach
10. mice were scuttling everywhere in the abandoned house

Year 4 Week 8 Page 27-30

1. **C** — In the passage Roger says "Robert Pershing Wadlow, the tallest man that ever lived, was nine years old. That's the same age as me!" This shows that Roger is nine years old.
2. **B** — In the passage, it says that Roger's father "was a teacher".
3. **D** — In the passage Roger's father replies "wearily" with "What now?" and falls asleep — this suggests that he is uninterested in Roger's questions.
4. **C** — The 'World's best-selling book' is not mentioned in the passage.
5. **C** — In the passage, it says that Mr Cherry "only had himself to blame" because "It was his idea to buy Roger his first 'Book of World Records'".
6. **D** — "fascinating" means 'interesting'. Both words mean 'something that grabs your attention'.
7. **B** — "sprouted" means 'grown'. Both words mean 'to have produced something'.
8. **C** — A "killer question" means 'a difficult question'. Roger likes to ask questions that his dad won't know the answer to.
9. **truth** — Both words mean 'something that is real'.
10. **uncommon** — Both words mean 'difficult to find'.
11. **mixture** — Both words mean 'combination'.
12. **weighty** — Both words describe something that weighs a lot.
13. **rich** — Both words describe someone who has a lot of money.
14. **countless** — Both words mean 'lots'.
15. **slim** — Both words mean 'not very wide'.
16. **remember** — Both words mean 'recollect'.
17. **A** — 'my class **went** on a school trip'
18. **B** — 'The lemurs **seemed** very intelligent'
19. **A** — 'I saw them **being** fed'
20. **C** — '**the** penguins made me laugh'
21. **C** — '**However**, my favourite part'
22. **A** — 'It was much **bigger** than I expected.'
23. **A** — 'It **towered** above us'
24. **C** — 'the tallest **branches** of the trees'
25. **B** — 'a large pond **by** the fence'
26. **B** — 'We were all **completely** drenched'
27. **seal** — 'Open' means 'move to allow access', whereas 'seal' means 'close'.
28. **feeble** — 'Strong' means 'powerful', whereas 'feeble' means 'weak'.
29. **direct** — 'Subtle' means 'lightly implied', whereas 'direct' means 'clearly stated'.
30. **tardy** — 'Early' means 'before an agreed time', whereas 'tardy' means 'after an agreed time'.
31. **sincere** — 'False' means 'not genuine', whereas 'sincere' means 'genuine'.
32. **trivial** — 'Vital' means 'important', whereas 'trivial' means 'unimportant'.
33. **risky** — 'Safe' means 'not dangerous', whereas 'risky' means 'dangerous'.
34. **indifferent** — 'Curious' means 'interested', whereas 'indifferent' means 'uninterested'.
35. **empty** — 'Full' means 'filled', whereas 'empty' means 'not filled'.
36. **scorching** — 'Cool' means 'low in temperature', whereas 'scorching' means 'very high in temperature'.
37. **meal** — The other four are names of meals.
38. **chase** — The other four mean 'jump'.
39. **pasty** — The other four are always sweet foods.
40. **wren** — The other four are types of insect.
41. **saucer** — The other four are containers that you drink from.
42. **oak** — The other four are types of herb.

Section 1 — Complete the Series

- 1. C**
The triangle and the ellipse alternate in each series square.
- 2. C**
The number of lines increases by one in each series square.
- 3. A**
In each series square, the rocket rotates 45 degrees clockwise. The colour of the circle alternates between black and white.
- 4. A**
In each series square, the circle moves down and the black ellipse moves up.
- 5. C**
In each series square, the black shading moves up one shape.

Section 2 — Complete the Grid

- 1. A**
Working from top to bottom, the black shading turns grey.
- 2. B**
Working from left to right, the colour of the large triangles changes from black to grey and the small inner triangle rotates 180 degrees.
- 3. B**
Working from left to right, the line extends along one more side of the grid square.
- 4. C**
Working from left to right, the figure rotates 45 degrees clockwise in each grid square.

Section 3 — Find the Figure Like the First Two

- 1. B**
All figures must be black curved arrows.
- 2. B**
In all figures, both arrowheads must point towards the curved lines.
- 3. C**
All figures must have a black rectangle. The two ends of each semicircle must point towards the trapezium.
- 4. B**
In all figures, the ribbons must be the same colour as the circle. The white star must have six points.
- 5. D**
All figures must have two small black circles inside the large white shape and two white circles outside it.

Section 4 — Look at the Figure from the Top

- 1. B**
There should be five blocks visible from above, which rules out options A, C and D.
- 2. A**
There should be four blocks visible from above, which rules out options B and C. There are two blocks next to each other at the back on the right of the figure, which rules out option D.
- 3. D**
There should be four blocks visible from above, which rules out options A and B. There should be three blocks at the back of the figure, which rules out option C.

4. C

There should be four blocks visible from above, which rules out options A and B. There should be a line of three blocks along the back of the figure, which rules out option D.

Section 5 — Odd One Out

- 1. D**
All other figures are hatched horizontally. (D is hatched vertically.)
- 2. D**
All other figures have five white triangles.
- 3. B**
If all the figures are rotated so the sheep is upright, the sheep's head is on the left in all other figures.
- 4. A**
In all other figures, the dashed line is next to a white section of the circle.
- 5. D**
If the figures are rotated so the curved line coming out of the figure is at the bottom, the line curves to the left in all other figures.

Section 6 — Reflect the Figure

- 1. D**
Options A and B have the wrong shapes. Option C has the wrong shading.
- 2. B**
Option A has not been reflected and the black stripe is on the wrong white rectangle. Option C is a 180 degree rotation. Option D has the wrong shading.
- 3. A**
Options B and C have the wrong shading. Option D is the wrong shape.
- 4. D**
Options A and B have the wrong number of triangles. Option C has the wrong shading.
- 5. A**
Option B is a 180 degree rotation. Options C and D are the wrong shapes.

1) A book reading club starts at 19:30 and lasts 125 minutes, what time does it end?

21:35

2) Charlie is looking forward to the school fair which is in 18 days. If today is 17th April, what date will the fair take place on?

5th May

3) Three friends ran a 100m race, these were their race times: 15.2 seconds, 25.3 seconds and 35.1 seconds. What was the average/mean of their race times?

25.2

4) Workout the difference between 29 minutes 17 seconds and 60 minutes 37 seconds.

31 Minutes 20 Seconds

5) Explain **how** to subtract two numbers when the first number is smaller than the second number in the sum?

Flip the subtraction around and put a – in your answer

6) $17 - 37 =$

-20

7) $254 - 587 =$

-333

8) If a supermarket carpark is on floor -4 and you are on floor 3, how many floors must you descend before you reach the carpark?

7

9) Which direction do you move the decimal point if you are dividing a decimal number by 1000?

Left

How many times will you move it?

3

What do you do if there are not enough spaces to move in that direction?

Fill it in with 0s

Vocabulary 8

Exercise A

1. Inaccurate
2. Encourage
3. Observe
4. Penalty
5. Lifetime
6. Fabulous
7. Merciless
8. Outlive
9. Manufacture
10. Oversee

Exercise B

1. Encourage
2. Inaccurate
3. Penalty
4. Lifetime
5. Observe
6. Fabulous
7. Outlive
8. Oversee
9. Merciless
10. Manufacture