Decimals as fractions

White Rose Maths

1 Complete the sentences.

a)

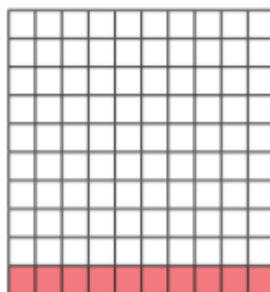| 0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

The whole has been divided into **10** equal parts.

Each part is worth **0·1**

This is equivalent to **$\frac{1}{10}$**

b)

The whole has been divided into **100** equal parts.

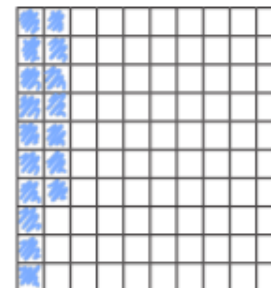Each part is worth **0·01**

10 parts out of **100** are shaded.

This is equivalent to **$\frac{10}{100}$** or **$\frac{1}{10}$**

2 a) Shade 0.17 of the hundred square.
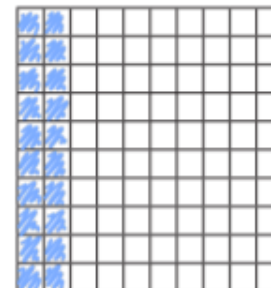

Complete the sentence.

17 parts out of **100** are shaded.

Write 0.17 as a fraction.

$0.17 = \frac{17}{100}$

b) Shade 0.2 of the hundred square.

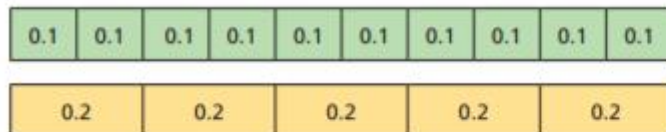
Complete the sentence.

20 parts out of **100** are shaded.

Write 0.2 as a fraction in its simplest form.

$0.2 = \frac{1}{5}$

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3

0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

0.2	0.2	0.2	0.2	0.2

Use the bar models to fill in the missing numbers.

$0.2 = \dfrac{2}{10} = \dfrac{1}{5}$

$0.4 = \dfrac{4}{10} = \dfrac{2}{5}$

$0.8 = \dfrac{8}{10} = \dfrac{4}{5}$

4 Fill in the missing numbers.

a) $0.54 = \dfrac{54}{100} = \dfrac{27}{50}$

b) $0.6 = \dfrac{6}{10} = \dfrac{3}{5}$

c) $0.3 = \dfrac{3}{10} = \dfrac{30}{100}$

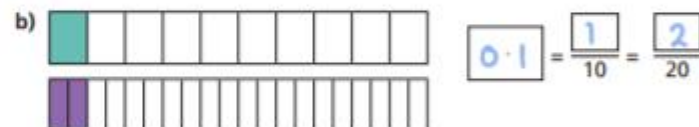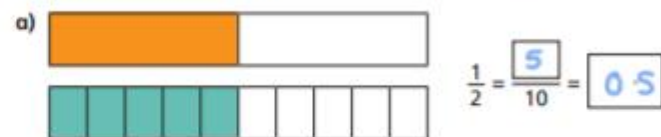d) $0.09 = \dfrac{9}{100}$

e) $0.9 = \dfrac{9}{10}$

f) $\dfrac{21}{50} = \dfrac{42}{100} = 0.42$

5 Use the bar models to fill in the missing numbers.

a)

$\dfrac{1}{2} = \dfrac{5}{10} = 0.5$

b)
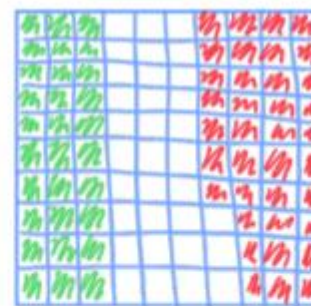
$0.1 = \dfrac{1}{10} = \dfrac{2}{20}$

6

$0.3 = \dfrac{3}{10}$ so $0.37 = \dfrac{37}{10}$

Draw a diagram to show that Ron is wrong.

$0.3 = \dfrac{3}{10}$

$0.37 = \dfrac{37}{100}$

Maths Lesson 1 Red and Gold Answers

Red Answers

Varied fluency

1a. $0.8 = \frac{8}{10} = \frac{4}{5}$

2a. True

3a. A. $\frac{1}{5}$, B. $\frac{9}{10}$, C. $\frac{3}{5}$, D. $\frac{4}{5}$

4a. $0.6 = \frac{3}{5}$, $0.8 = \frac{4}{5}$, $0.4 = \frac{4}{10}$, $0.5 = \frac{1}{2}$

RAPs

1a. circle = 0; pentagon = 1. No other

possibilities.

2a. $\frac{3}{5} > \frac{1}{5}$

3a. Leo is incorrect. 0.5 and $\frac{5}{10}$ are equal.

Gold Answers

Varied fluency

9a. $0.6 = \frac{60}{100} = \frac{3}{5}$

10a. False, $1.65 = 1\frac{13}{20}$

11a. A. $\frac{13}{20}$, B. $2\frac{3}{20}$, C. $\frac{7}{50}$, D. $1\frac{24}{25}$

12a. $0.28 = \frac{7}{25}$, $0.74 = \frac{37}{50}$, $1.04 = 1\frac{1}{25}$

$0.55 = \frac{11}{20}$, $1.44 = 1\frac{11}{25}$

RAPs

7a. circle = 2; pentagon = 1; triangle = 3;

hexagon = 5. No other possibilities.

8a. $1.48 < 2.12 = 1\frac{12}{25} < 2\frac{3}{25}$

9a. Saif is incorrect, 1.12 is equivalent to

$1\frac{3}{25}$ which is less than $1\frac{1}{5}$.

Deepen the moment...

Possible response:

D is the odd one out because it shows 0.3
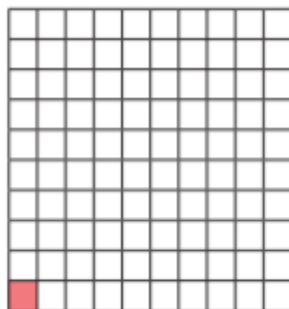
Explore how the rest represent 0.6

Maths Lesson 2 Answers
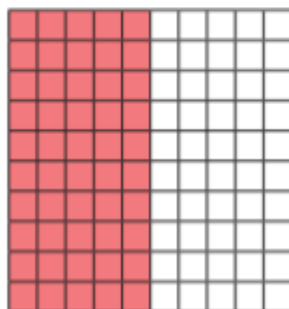
Fractions to decimals (1)

1 Complete the sentences.

a)

Each square represents $\frac{1}{100}$

$\boxed{\frac{1}{100}}$ of the whole square is shaded.

This is equivalent to $\boxed{0.01}$ as a decimal.

b)

$\boxed{\frac{50}{100}}$ of the whole square is shaded.

This can be simplified to $\boxed{\frac{1}{2}}$

This is equivalent to $\boxed{0.5}$ as a decimal.

2 a)

0   0.1   0.2   0.3   0.4   0.5   0.6   0.7   0.8   0.9   1

b)

0    $\frac{1}{10}$ $\frac{1}{5}$ $\frac{3}{10}$ $\frac{2}{5}$ $\frac{1}{2}$ $\frac{3}{5}$ $\frac{7}{10}$ $\frac{4}{5}$ $\frac{9}{10}$ 1
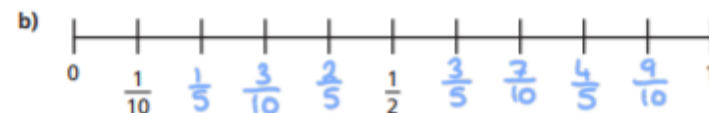
What is the same and what is different about the number lines?

3 To convert a fraction to a decimal, you can use equivalent fractions to make the denominator 100

$\times 2$

$\frac{12}{50}$ = $\frac{24}{100}$ = 0.24

$\times 2$
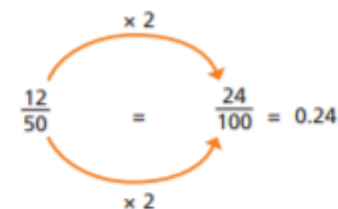
Use this method to find the equivalent decimals for the fractions.

a) $\frac{28}{50} = \frac{\boxed{56}}{100} = \boxed{0.56}$

c) $\frac{9}{25} = \frac{\boxed{36}}{100} = \boxed{0.36}$

b) $\frac{6}{20} = \frac{\boxed{30}}{100} = \boxed{0.3}$

d) $\frac{24}{200} = \frac{\boxed{12}}{100} = \boxed{0.12}$

4. Some fractions can be converted to have a denominator of 1,000 to find their decimal equivalent.

$$\frac{62}{500} \xrightarrow{\times 2} = \frac{124}{1000} = 0.124$$

$\times 2$

a) $\frac{27}{500} = \frac{54}{1000} = \boxed{0.054}$

b) $\frac{62}{250} = \frac{248}{1000} = \boxed{0.248}$

c) $\frac{51}{200} = \frac{255}{1000} = \boxed{0.255}$

d) $\frac{128}{2,000} = \frac{64}{1000} = \boxed{0.064}$

5. Convert the fractions to their decimal equivalents.

a) $\frac{1}{5} = \boxed{0.2}$ b) $\frac{1}{20} = \boxed{0.05}$

$\frac{1}{10} = \boxed{0.1}$ $\frac{2}{20} = \boxed{0.1}$

$\frac{1}{20} = \boxed{0.05}$ $\frac{3}{20} = \boxed{0.15}$

$\frac{1}{40} = \boxed{0.025}$ $\frac{6}{20} = \boxed{0.3}$

6. Tommy, Alex and Eva are working out the decimal equivalent of $\frac{60}{200}$

Tommy: You need to convert it to have a denominator of 100 to find the decimal equivalent.

Alex: I disagree. You need to convert it to have a denominator of 1,000

Eva: Both of you are right!

Who do you agree with? ___Eva___

Explain your thinking.

Tommy's method: $\frac{60}{200} = \frac{30}{100} = 0.30 = 0.3$

Alex's method: $\frac{60}{200} = \frac{300}{1,000} = 0.300 = 0.3$

They get the same answer.

7. 0.5 is equivalent to $\frac{1}{2}$, $\frac{5}{10}$, $\frac{50}{100}$

Are these the only fractions that are equivalent to 0.5?

How many fractions can you find?

Various answers.

Compare answers with a partner.

Maths Lesson 2 Red and Gold Answers

Red Answers

Varied fluency

1a. 4, 7

2a. True

3a. A = 0.8, B = 0.9, C = 0.6

4a. A = 0.5, B = 0.4, C = 0.7

RAPs

1a. Neither are correct. They are equivalent.

2a. 0.5, 0.01, 0.3, 0.9. Order: 0.01, 0.3, 0.5, 0.9.

3a. Various answers, for example: $\frac{2}{10} = 0.2$; $\frac{4}{10} = 0.4$

Gold Answers

Varied fluency

9a. 1, 5, 7, 5

10a. True

11a. A = 0.125, B = 0.75, C = 0.875   12a. A = 0.3, B = 0.8, C = 0.45

RAPs

7a. Alesha is correct. $\frac{3}{8}$ is 0.375 which is less than 0.625.

8a. 0.375, 0.625, 0.625, 0.75.
Order: 0.75, 0.625, 0.625, 0.375

9a. Various answers, for example:
$\frac{4}{32} = 0.125$; $\frac{12}{32} = 0.375$; $\frac{20}{32} = 0.625$

Deepen the moment...

Possible response:

$\frac{25}{500}$ - divide by 5, known division fact.

$\frac{125}{500}$ - double, easier than dividing 125 by 5

$\frac{40}{500}$ - divide by 5, known division fact.

$\frac{350}{500}$ - double, easier than dividing 350 by 5

Maths Lesson 3 Answers

Fractions to decimals (2)

1 Fractions can be expressed as divisions.

For example, $\frac{1}{2} = 1 \div 2$

Write the fractions as divisions.

a) $\frac{1}{3} = \boxed{1} \div \boxed{3}$

b) $\frac{2}{3} = \boxed{2} \div \boxed{3}$

c) $\frac{4}{7} = \boxed{4} \div \boxed{7}$

d) $\frac{3}{5} = 3 \div 5$

e) $\frac{3}{7} = 3 \div \boxed{7}$

f) $\frac{1}{10} = \boxed{1} \div \boxed{10}$

2 Use place value counters to find the decimal equivalent of $\frac{2}{5}$

You can draw on the place value chart to help you with exchanging.

$\frac{2}{5} = 2 \div 5 = \boxed{0.4}$

Ones	Tenths

3 Fractions can be converted to decimals by using the short division method.

For example, $\frac{1}{8} = 1 \div 8$

$\frac{1}{8} = 0.125$

Use the short division method to find the decimal equivalent of the fractions.

a) $\frac{1}{4} = \boxed{0.25}$

b) $\frac{4}{5} = \boxed{0.8}$

c) $\frac{3}{8} = \boxed{0.375}$

4 Find the decimal equivalents for these fractions.

a) $\frac{7}{8}$ = `0·875`

c) $\frac{1}{16}$ = `0·0625`

b) $\frac{7}{5}$ = `1·4`

d) $\frac{9}{16}$ = `0·5625`

5

To find $\frac{19}{20}$ as a decimal, I found $\frac{1}{20}$ as a decimal, then took it away from 1

Here is Dora's working out.

		0	.	0	5
2	0	1	.	¹0	¹⁰0

$1 - 0.05 = 0.95$

$\frac{19}{20} = 0.95$

Use Dora's method to find the decimal equivalent for $\frac{49}{50}$

		0	.	0	2
5	0	1	.	¹0	0

$1 - 0·02 = 0·98$

`0·98`

6

I converted $\frac{1}{2}$ to a decimal and got the answer 2

Jack is incorrect.

Explain the mistake that Jack has made.

He did 2 ÷ 1 when he should have done 1 ÷ 2

7 Filip is thinking of a fraction.

When he converts it to a decimal, it is smaller than 0.5 but greater than 0.4

What fraction could Filip be thinking of?

Are there any other possible answers? Talk to a partner.

e.g $\frac{9}{20}$

8 Use the short division method to find the decimal equivalent of $\frac{1}{3}$

`0·33333....`

Compare answers with a partner.

Maths Lesson 3 Red and Gold Answers

Red Answers

Varied fluency

1a. 0.8

2a. 0.4

3a. True

4a. 0.2, 0.75

RAPs

1a. A) < B) <

2a. C) 0.4, B) 0.5, A) 0.6, D) 0.8

3a. Susie is not correct as 40 ÷ 8 = 5. The answer should be 0.75.

Gold Answers

Varied fluency

9a. 1.25

10a. C) 1.833

11a. False. The answer is 2.571

12a. 1.556, 2.375, 2.444

RAPs

7a. A) < B) <

8a. D) 2.05, C) 2.25, A)2.6, B)2.69

9a. Scarlett is correct as 23 ÷ 9 = 2.5555555556, which is 2.556 rounded to 3 decimal places.

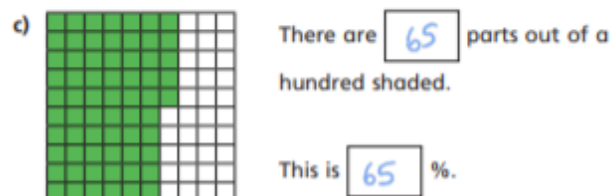Deepen the moment...

Rosie is correct and Tommy is incorrect.

Tommy has divided 8 by 2 rather than 2 divided by 8 to find the answer.

Maths Lesson 4 answers
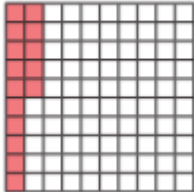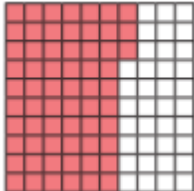
Understand percentages

1 Complete the sentence for each diagram.

a) There are **9** parts out of a hundred shaded.

This is **9** %.

b) There are **24** parts out of a hundred shaded.

This is **24** %.

c) There are **65** parts out of a hundred shaded.

This is **65** %.
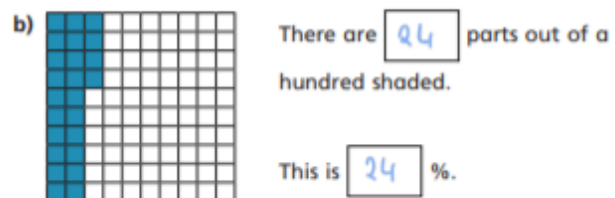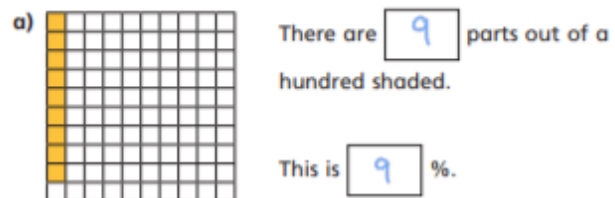
2 Complete the table.

Hundred square	Percentage
	15%
	63%
	82%

3 Shade 15% of the hundred square red.

Shade 32% of the hundred square blue.
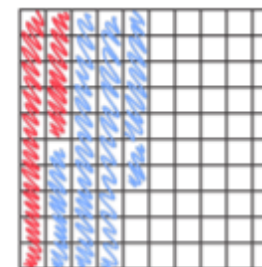
What percentage of the hundred square is **not** shaded? **68** %

4 a) Is 1% of this bar model shaded? _No_

1%									

Explain your reasoning.

It's split into 10 parts so each part is 10%

_____

b) What percentage of each bar model is shaded?

30 %

70 %

5 Passengers are boarding a plane.

The plane has 100 seats.

a) 10% of the seats are already full.

How many passengers are already on the plane? `10`

b) 15% of the seats have not been booked.

How many seats have been booked? `85`

c) How many passengers still need to board the plane? `75`

6 Dexter has £1 to spend.

He buys some stickers.

I got 35p change.

What percentage of his money did Dexter spend?

`65` %

7 Aisha and Brett have been selling tickets for the school play.

There are 100 seats available.

- On Monday they sold 34% of the tickets.
- On Tuesday they sold 42 tickets.
- By the end of Wednesday, 95% of the tickets had been sold.

How many tickets did they sell on Wednesday?

On Wednesday they sold `19` tickets.

8 Shade 85% of this bar model.

Compare answers with a partner.

Maths Lesson 4 Red and Gold Answers

Red Answers

Varied fluency

1a. 30%

2a. False, the grid represents 72%.

3a. 50 blocks shaded

RAPs

1a. B is the odd one out because it represents 40%. A and C represent 41%.

2a. 5%, 10%, 35 parts per 100, 50%, 70 parts out of 100, 90 parts per 100

3a. Lily is not correct because 7 rows of 10 blocks and 2 individual blocks are shaded so 72% is shaded altogether.

Gold Answers

Varied fluency

7a. A – 25%, B – 68%, C – 40%

8a. A – 45%, B – 52%

9a. A – 14 blocks shaded, B – 35 blocks shaded

RAPs

7a. C is the odd one out because it represents 45%. A, B and D represent 48%.

8a. 27%, 14 parts per 50, 6 parts per 20, 4 parts out of 10, 51%, 11 parts out of 20

9a. Milo is correct because the bar model is split into 20 parts. Percentages are the number of parts out of 100 so 12 needs to be multiplied by 5 to find the percentage

Deepen the moment…

56%
65 out of 100
50 out of 100
50%

Mo needs 44
Annie needs 35
Tommy needs 50

Maths Lesson 5 – End of Block Assessment Answers

Year 6

Decimals

Name _____

1 Donna makes a number using some counters.

Complete the sentences

There are __3__ ones, __2__ tenths and __5__ hundredths. | 1 mark |

Donna has made the number ___3.25___ | 1 mark |

2 In the number 32.8 which digit is in the ones place?

___2___

In the number 32.8 which digit is in the tenths place?

___8___ | 2 marks |

3 What is 1.603 + 5 hundredths

___1.653___ | 1 mark |

4 Filip writes a number in a place value grid.

H	T	O	•	Tth
		1	•	9

Filip multiplies his number by 10

Write down his answer in the place value grid below.

H	T	O	•	Tth
	1	9	•	0

| 1 mark |

Flip multiplies his starting number by 100

Write down his answer in the place value grid.

H	T	O	•	Tth
1	9	0	•	0

| 1 mark |

5 Fill in the missing numbers.

$27 \div 10 = \boxed{2.7}$ $25.9 \times 10 = \boxed{259}$

$3.65 \times \boxed{100} = 365$

| 3 marks |

6 Tom travels 2.3 miles to school.
Amy travels 4 times further than Tom.
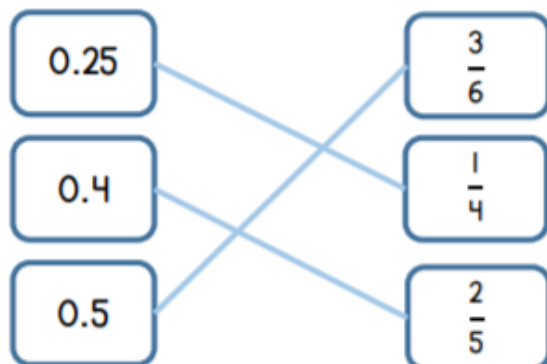How far does Amy travel?

9.2 miles

7 What is 6.9 divided by 3

2.3

8 Match the decimals with the equivalent fraction.

0.25		$\frac{3}{6}$
0.4		$\frac{1}{4}$
0.5		$\frac{2}{5}$

1 mark for 2 correct.

9 A pack of pens costs 3 times as much as a single pen.
Together they cost £7.20
How much does a single pen cost?

1 mark for correct method with 1 error.

£ 1.80

10 Lisa says that $\frac{23}{50}$ is less than 0.5
Do you agree with Lisa?
Explain your answer.

Yes because 0.5 is equivalent to a half, and $\frac{23}{50}$ is less than a half.

11 Sally and her friends share 3 chocolate bars.

They each get 0.75 of a chocolate bar.
How many friends did Sally share the chocolate bar with?

3

12 Bargain Busters sell four cans of soup for £3.76
Cost Cutters sell three cans of soup for £2.85
Which shop sells the cheapest soup?
Explain your answer.

Bargain Busters: 94p per can
Cost Cutters: 95p per can
Bargain Busters is cheaper.
1 mark for working out the correct cost of soup at one shop.

Circle how confident you feel with decimals.

1 2 3 4 5

Not confident   Very confident

Maths Lesson 5 – Optional Arithmetic Test Answers

question	answer	marks
1	243	1
2	1065	1
3	3.6	1
4	130	1
5	6509	1
6	438	1
7	12	1
8	$\frac{1}{5}$ or $\frac{2}{10}$	1
9	96	1
10	2.111	1
11	125	1
12	6.011	1
13	4900	1
14	$\frac{1}{3}$ or $\frac{2}{6}$	1
15	16014	1
16	5300	1
17	12.16	1
18	598	1
19	70	1
20	514	1
21	6700	1

question	answer	marks
22	72 474	1
23	2.18	1
24	14.74	1
25	1178	2
26	$\frac{1}{24}$	1
27	253	2
28	73.6	1
29	42	1
30	130 455	2
31	$\frac{1}{6}$	1
32	4	1
33	$1\frac{7}{10}$	1
34	88	2
35	$\frac{7}{30}$	1
36	$1\frac{7}{12}$	1
		Total 40

English Lesson 1 – Reading Comprehension –Answers

World War II reading comprehension – Golden Skies

Answers guidance: Chapter one - Wrath of the Luftwaffe – a first person narrative

Read and retrieve: Copy a group of words from the first paragraph which show that the children were surrounded. (1 mark)

1.

   all around us / around us

Read and retrieve: Which **two** places did the family choose to keep themselves safe from the air raid? (1 mark)

2.

   cellar steps
   under the kitchen table

Infer: As the air raid happens, why do you think their mother told Obediah and Mabel to stay where they were, instead of joining her? (1 mark)

3.   Bonus word to use: **suggest** (1 mark)

   Telling the children to stay where they are suggests that they are in the safest place they can be and moving could put them in more danger.

Author's choice: Why do you think the author decided to tell this story? (1 mark)

4.

   To help the reader understand / imagine what it was like to be in an air raid; because people faced frightening situations like this in the war.

Read and retrieve: Name a part of the church from the text. (1 mark)

5.

   pews / stained glass windows

Infer: Find the paragraph which begins: '**We spent the rest of the night in the church**'. What do you think the word '**stoically**' might mean, when describing their mother?

6.   Give your reasons. (1 mark)

   The word means with strength or determination; this contrasts with the character wanting to give in, feeling hopeless.

Choice: Why did the author end this episode with a question? (1 mark)
Bonus words to use 'gives a sense of' (1 mark)

7.

   The cliff hanger ending give a sense of suspense; we want to know what will happen next to the character now they have to leave the city.

English Lesson 2 – Reading Comprehension –Answers

1. In which year did Germany invade Poland? Tick one.
   - ○ 1919
   - ○ 1932
   - ⊘ 1939
   - ○ 1942

2. By which year were Jewish people banned from many public places? Tick one.
   - ○ 1919
   - ⊘ 1933
   - ○ 1939
   - ○ 1945

3. List two countries whose soldiers liberated concentration and extermination camps.
   Accept two of the following: United Kingdom; United States of America; China; Soviet Union.

4. What was the Soviet Union?
   The Soviet Union was a group of countries in eastern Europe.

5. **These laws were anti-Semitic: they discriminated specifically against Jewish people.**
   Define what is meant by the word **discriminate**.
   Pupils' own responses, such as: Discriminate means when you treat one person or group differently to everyone else just because of who they are.

6. Discuss why German citizens may not have tried to stop the Nazi Party's actions.
   Pupils' own responses, such as: German citizens may not have tried to stop the Nazi Party because they knew that they would be killed as well if they did.

7. Explain why most victims of the Holocaust were killed.
   Pupils' own responses, such as: Most victims of the Holocaust were killed because they belonged to a particular racial or religious group, or they disagreed with Nazi policies.

8. **Exactly 17 million people lost their lives as the result of Nazi policies**. Is this statement true? Explain how you know.
   Pupils' own responses, such as: This statement is not true. I know this because the text says that no historical records exist to prove how many people were killed so we cannot know that it is 17 million people for certain.

9. Why do you think that Hitler recruited more people into Germany's armed forces?
   Pupils' own responses, such as: I think that Hitler recruited more people into the German armed forces so that they would be able to have more success with invading countries and apprehending Jewish people.

10. Summarise the final paragraph of this text in 20 words or less.
    Pupils' own responses, such as: Although countries from around the world united to defeat Germany, over 17 million people had already been killed.

Reading for Productivity – Answers

1 – Geography

1. How much oil does a single palm oil tree produce in a year? Tick one

   ○ 30 kilograms
   ⊘ **40 kilograms**
   ○ 35 kilograms
   ○ 95 kilograms

2. Explain in your own words why the palm oil industry is mainly based in countries such as Indonesia and Malaysia.

   Pupil's own response, such as: The palm oil industry is mainly based in countries such as Indonesia and Malaysia as they are near the equator and it says in the text that the palm oil tree thrives in hot and humid conditions. Countries near the equator are very hot and some receive a lot of rainfall.

3. Why do you think that the palm oil industry is described as being a 'controversial' topic? Explain fully referring to the text in your answer.

   Pupil's own response, such as: I think that the palm oil industry is described as being controversial because there are positive and negative aspects to it. For example, the palm oil industry provides jobs and economic stability to lots of developing countries who now depend on it to grow. However, there are lots of negative aspects such as deforestation, the decline in biodiversity and the negative impact that it has on indigenous people.

4. How does deforestation affect the wildlife of the rainforest? Explain your answer fully.

   Pupil's own response, such as: Deforestation affects the rainforest because it destroys the natural habitats and homes of animals and wildlife that are already endangered. It also reduces the biodiversity which means that those animals have less food to eat so they could starve to death.

5. Fill in the missing words in the sentence below:

   As deforestation occurs, **tribal** groups are often forced to **relocate** to areas where resources are **scarce** and where they have to change their way of life.

6. Why is it becoming increasingly important that palm oil is produced in a sustainable way? Explain fully referring to the text in your answer.

   Pupil's own response, such as: It is becoming increasingly important that palm oil is produced in a sustainable way because the global population is growing and it says in the text that the demand for it has grown rapidly since 1995.

<u>1 – Geography</u>

7. Find and copy a word that means *ideologies*.

   Principles

8. What percentage of the world's palm oil producers are members of the RSPO? Tick one.

   ○ 30%
   ○ 35%
   ✓ **40%**
   ○ 20%

9. Why is palm oil used in chocolate?

   Palm Oil is used in chocolate because it gives it a shiny, smooth appearance.

10. How can shoppers help to reduce the impact that the palm oil industry has on the environment. Explain your answer fully.

    Pupil's own response, such as: Shoppers can help to reduce the impact that the palm oil industry has on the environment by only buying products that contain palm oil that has been sustainably produced. They need to look for the RSPO or the Green Palm labels on the products.

Reading for Productivity – Answers

2– Design and technology

Harmful microbes can commonly be found on:	
Raw meat	X
Raw fish	X
Fruit and vegetables	X
Yoghurt	

The best way to destroy harmful microbes on food is to:	
To make sure food is cooked on the outside	
Cook food as quickly as possible	
Cook food thoroughly	X
To make sure food is warm before we eat it	

Meat and vegetables should be:	
Sorted on the same shelf in the fridge	
Cut on different chopping boards	X
Cut with the same knife	
Stored in a warm cupboard	

Refrigeration:	
Kills all microbes	
Speeds up microbe growth	
Only stops microbes growing, it doesn't kill them	X
Should be set to 4°C or below	X

Reading for Productivity – Answers

3 - Spanish

Q1) How old is Valle? 10 years old

Q2) Name two things Valle likes to do after school.
Two from this list:
- go shopping
- play at the park
- do gymnastics

Q3) Valle and her little sister like to have *leche con colacao*. What is colacao? It is a sugary chocolate drink that tastes like chocolate milk.

Q4) Why do Valle's mum and dad have to drive her to school? Valle's school is far away.

Q5) *'Valle attends a bilingual school'* – What do you think the word bilingual means? Clue: The word 'lingual' comes from the word 'language'. Bilingual means that you can speak two languages.

Q6) Describe Valle's apartment. It has 3 bedrooms, a small kitchen with small kitchen appliances, a living room, a balcony with a view of the city and one bathroom. You have to take some stairs or an elevator to get to it.

Q7) Explain why there isn't much street parking for cars near Valle's apartment. Most people in Madrid use public transportation such as trains, buses or the metro, so many people do not need a parking space.

Q8) Who has this text been written by? What is the purpose of this text? This text has been written by Valle's English tutor and it has been written to help children from other countries know what a day in the life is like in Madrid. It helps us understand Spanish daily life for a child.

Reading for Productivity – Answers

4 – Science

<u>Answers</u>

1. Where was Thomas Edison born? Ohio, America

2. As a child, why did Edison have hearing problems? Because he had scarlet fever.

3. How did he get his first job as a telegraph operator? He saved a three-year old boy from being hit by a train, and the father was so grateful that he offered him a job.

4. How did his boss find out he was doing experiments while he was at work?
Sulphuric acid from his experiment dripped through the floor onto his boss's desk.

5. Name one thing about Edison that made him a great inventor. He thought carefully about all the things that could go wrong in his projects and put them right.

6. True or false?
- As a teenager, Edison sold perfume on trains. F
- Edison was 19 when he started a new job in Kentucky. T
- In 1879 he became known as the 'Wizard of Waverly Place'. F
- Almost everyone in the world has at least one of his inventions. T

7. Look at the section headed 'His legacy'. What do you think the word 'legacy' means? It means the achievements (or inventions) that he left to the world.

8. Do you think Edison was more or less important in the history of discoveries about electricity that Alessandro Volta who we looked at last week (he invented the battery). Give a reason for your answer. Range of acceptable answers that refer to the work of both scientists.

Reading for Productivity – Answers

5 - Computing

A biography of Tim Berners-Lee: the inventor of the World Wide Web

Answers

1. Complete the missing information:

Year	Event
1955	Tim Berners-Lee was born
1969	The internet was first used to send a message
1991	The first website went live

2. What does a web browser do?

interprets information / make information readable to all / makes it possible to share information no matter where you are / it's an interpreter - it works with languages

3. What was the content of the first web page?

instructions and information on how to join the WWW community / instructions on how to create a website

4. Why do you think Tim Berners-Lee chose to use this content on the first web page?

to help build up the community / to add more information/computers to the WWW / to help the WWW community grow / to show people how he made the WWW / to explain something that is difficult to do

5. Read the section on the differences between the internet and the World Wide Web. For each statement below, put a tick in the correct box:

Statement	Part of the Internet	Part of the WWW
Information on a computer		✓
A server	✓	
Communication rules (protocols)		✓