



HILL WEST  
*Primary*

FOUR OAKS

# Home Learning Pack

Year 6

Autumn Term Week 1



## Home Learning Links

### Oak National Academy

Oak National Academy is an online classroom and resource hub. It provides high-quality video lessons and resources to support teachers, parents and pupils.

[www.thenational.academy](http://www.thenational.academy)

### BBC Bitesize

With BBC Bitesize it is easy to keep learning at home. You can access regular daily lessons in English, maths and other core subjects.

<https://www.bbc.co.uk/bitesize>

### World Book Online

World Book online have just made their fabulous collection of over 3,000 e-books and audiobooks available for free for children to access at home. They have books suitable for all ages. Click on the following link to access them.

<https://worldbook.kitaboo.com/reader/worldbook/index.html?usertoken=Mjk5MzQ6MTpJUjA5MjAxNjoyOmNsaWVudDE2OTc6MTY5NzoyMjE2Mjg4OjE6MTU4NDM4MDEzMzA2MjE1cw%3D%3D>

### Read Works.org

Read Works offers access to 3000+ comprehension for all age groups. Just sign up for a free account to access fantastic texts.

<https://www.readworks.org/>

### Tutortastic

An online platform with tutorials and videos for home learning.

<https://www.tutortastic.co.uk/blog/homelearning>

### Education Quizzes

A series of short quizzes for children to complete related to the National Curriculum subjects. Just select KS1 for Reception, Year 1 & Year 2 and select KS2 for Years 3-6.

<https://www.educationquizzes.com/ks1/>

### Top Marks

A range of activities here but especially good interactive activities for maths.

<https://www.topmarks.co.uk/>

### Classroom Secrets

Classroom Secrets Kids is offering free access to everyone until the end of April 2020. The platform is aimed at primary aged children and covers subjects such as maths, reading, grammar and spelling. The platform is really child-friendly so that they're able to access it on their own. There are a load of games and interactive activities from phonics to SATs

<https://kids.classroomsecrets.co.uk/>

### National Geographic

National Geographic is a great platform for learning and it's totally free. There are online games, resources and competitions, too.

<https://www.natgeokids.com/uk/teacher-category/primary-resources/>

## Reading Eggspress

Reading Eggspress has lots of reading activities including comprehension and retrieval questions to have a go at. Your child's Username and Password should be written in his Homework Book.

[https://readingeggspress.co.uk/?\\_ga=2.107706762.961348329.1601363904-660844018.1598947512](https://readingeggspress.co.uk/?_ga=2.107706762.961348329.1601363904-660844018.1598947512)

We have been learning about division this week, mostly looking in-depth at partitioning and we will transition into using the short method for division. Here are some great maths games to play on Laptops or iPads.

<https://www.topmarks.co.uk/Search.aspx?q=division>

## Times Tables Rockstars

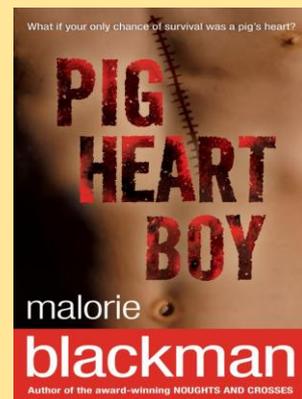
This is a great times tables game, practice all of the tables up to 12 x 12. Log-in should be in Homework book/ Reading diary.

<https://ttrockstars.com/>

# Monday and Tuesday

## English: Pig Heart Boy

LO: To explain how I use background knowledge to help me understand a text.



Handwriting: ve ve ve ve  
ve

## Punctuation and Grammar

What technique does the author Malorie Blackman use to create tension?

Can you give examples of repetition used in the text?

How could you use repetition in your writing?

*I am drowning in this roaring silence.*

*I am drowning.*

*I'm going to die.*

*I look up through the grey-white shimmer of the swimming-pool water. High, high above I can see where the quality of the light changes. The surface. But it is metres above me. It might as well be kilometres. The chlorine stings my eyes. My lungs are on fire.*

*Just one breath. Just one.*

*I have to take a breath, even though I know that I'll be breathing in water. But my lungs are burning and my blood is roaring and my whole body is screaming out for air. If I don't take a breath, I'll burst. If I do take a breath, I'll drown. Some choice. No choice.*

*I close my eyes, praying hard. And kick, kick, kick. I open my eyes. The surface of the water seems even further away.*

*I'm going to drown.*

*A fact. A fact as clear, as real as the silence around me. Part of me – a tiny, tiny part of me – laughs. I am going to drown.*

LO: To use repetition for effect.



Imagine....

**You are late for school because your alarm has not gone off.**

**Use repetition to describe your rush out of the house.**



**Challenge: Can you include fronted adverbials accurately?**

## 66 Chimney Sweep

- 71 • Must be small - most chimneys  
76 are 12 inches (30cm) wide.
- 81 • Must not require large meals  
86 - you need to remain small.
- 92 • Must not scare easily - if you  
99 refuse to go up the chimney, it  
105 might start to get quite hot!
- 111 Apply today and you could start  
117 contributing to your family by earning  
125 a wage of a few pennies a week!



## Reading Skills:

Read the text carefully in order to answer the questions on the next slide.

Click for second part of text.

## Quick Questions



1. For which job was it important to be small?  
Why?

\_\_\_\_\_



2. Find two verbs that are antonyms of each other.

\_\_\_\_\_



3. Why do you think the chimney could get hot if the child refused to go up?

\_\_\_\_\_  
\_\_\_\_\_

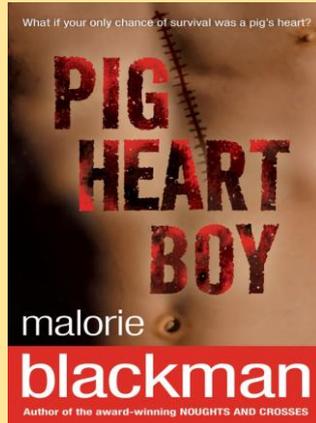


4. Summarise the main information about the factory worker job in 20 words or less.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Pig Heart Boy – Pages 9-16

What might this book be about?



What genre might this text be from?

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## Unfamiliar Language:

Chlorine

Bow out

Deafening

Thunderous

Inhaled

Bodily

Broadened

Lessened

Clamped

## Main Task: Using prior knowledge

What prior knowledge would you need, to be able to paint a picture in your mind of the opening scene?

Explain how you use your prior knowledge to help you understand how the character of Cam is feeling in the opening parts of the story.

**Challenge:** Why do you think Cam wanted to listen in on Marlon and his friends at the end of page 15?

## Maths

×	6	3	9	7
		24		56
	12	6		
5	30		45	35
4		12		28

To explain the value of any digit in six-digit numbers.

What is value of the digit 4?  <b>479,289</b>	What is 1000 more?  <b>12,894</b>
Write in <b>words</b> .  <b>39,024</b>	Write in <b>digits</b> . Nine hundred and thirty-one thousand, two hundred and two.



Misconception

Finn thinks that 100 more than 399,995 is 399,1095. Explain his mistake. (vocab: place value, column, digit, exchange.)

3

Day 1: Solve number and practical problems involving place value; Add/subtract powers of 10.

**723,456**

How we could we 'zap' each digit?

9

Year 6

## Place value number sentences

### Sheet 2

Complete these number sentences.

$430,000 + 6378 = \boxed{\phantom{000000}}$

$805,370 + 20,007 = \boxed{\phantom{000000}}$

$234,000 + \boxed{\phantom{00000}} = 234,846$

$904,678 + \boxed{\phantom{00000}} = 924,678$

$770,777 + \boxed{\phantom{00000}} = 777,777$

$504,027 + \boxed{\phantom{00000}} = 534,627$

$734,523 - 523 = \boxed{\phantom{000000}}$

$827,410 - 27,000 = \boxed{\phantom{000000}}$

$652,235 - 50,000 = \boxed{\phantom{000000}}$

$272,896 - \boxed{\phantom{00000}} = 200,896$

$645,345 - \boxed{\phantom{00000}} = 5345$

$852,462 - \boxed{\phantom{00000}} = 802,060$

### Challenge

There are 345,874 items in a museum. 300,404 are in display cases. How many are not yet on display?

1  $7000 + 80 = \boxed{\phantom{00000}}$

2  $8256 = 8000 + \boxed{\phantom{000}} + 50 + 6$

3  $8 - 1.9 = \boxed{\phantom{00000}}$

4 What number is 2000 less than 8,105?  $\boxed{\phantom{00000}}$

5 Order the numbers starting with the largest.  
Match each number with its order.

$2,040,678$

1<sup>st</sup> largest

$2,100,999$

2<sup>nd</sup>

$2,040,687$

3<sup>rd</sup>

$2,404,456$

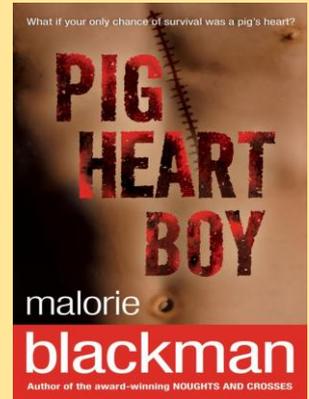
4<sup>th</sup> smallest

Answers at the end.

Wednesday

# English: Pig Heart Boy

LO: To use clues about a text that I have read to find answers



Handwriting: we we we we w  
e

## Spellings

Today, you will be tested on 15 of your spellings from last year.

On your whiteboard or a scrap piece of paper, write out the numbers 1-15 along one side in preparation for the test.

We will mark the test today, any spellings you get incorrect must be recorded to take home.

## Answers:

Leisure

Forty

Yacht

Available

According

Desperate

Soldier

Opportunity

Amateur

Ancient

Achieve

Definite

Communicate

Twelfth

### 57 To Make a Peg Doll:

63 1. Paint the peg, including a face.

72 2. Cut out circular piece of fabric double the height  
82 of the peg. Cut a small hole in the middle.

91 3. Pull the fabric over the head of the peg,  
99 using a rubber band or piece of string  
105 to secure the fabric in place.

112 4. Use a pipe cleaner to create arms.

123 5. Cut wool for hair; glue the hair onto the doll's head.

129 6. Add beads and sequins for decoration.

### Reading Skills:

Read the text carefully in order to answer the questions on the next slide.

[Click for second part of text.](#)

## Quick Questions



1. Give two examples of toys that a child from a rich family might have?

\_\_\_\_\_



2. Find two adverbs of frequency in the text.

\_\_\_\_\_



3. Why do you think that poorer children played with home-made toys?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

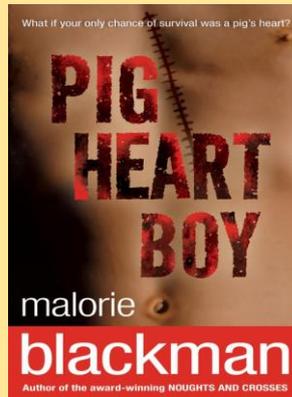


4. Why has the author used imperative verbs?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Pig Heart Boy – Page 21 to 24

What has happened so far in the text?



How would you describe Cam as a character?

[https://oldbuckenham-pri.norfolk.sch.uk/Newsite/wp-content/uploads/2020/05/pages from pig heart boy extract.pdf](https://oldbuckenham-pri.norfolk.sch.uk/Newsite/wp-content/uploads/2020/05/pages_from_pig_heart_boy_extract.pdf)

## Unfamiliar Language

Winced

Scoffed

Implant

Skin grafts

Insulin / Diabetics

Valves

Liquidiser

## Main Task: To infer meaning from the text

*In Chapter 3, Cam overhears a conversation between his parents. Can you read between the lines to work out how the character was feeling and what is going on?#*

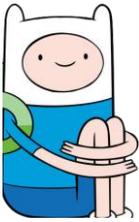
1. What does the phrase 'Mum and Dad were at it again' suggest about Cam's parents?
2. Mum's voice is described as 'lemon-bitter'. Why?
3. Cam suggests that 'this seems to be a new track on an old CD'. What does he mean by that?
4. The phrase 'hit the roof' is used on page 24. Explain what that means.

**Challenge: Why are Cam's parents fighting?**

## Maths

## Add and subtract powers of 10.

What is value of the digit 5?  <b>5,479,289</b>	What is 1999 more?  <b>12,894</b>
What is 5000 less?  <b>39,024</b>	Double.  <b>1,234,321</b>



### Misconception

Finn reads the number 456,032 as a series of digits, "four, five, six, zero, three, two." What might Finn not understand, or, what errors could this lead to? (vocab: place value, sequence, value, amount)

15

**Day 2: Solve number and practical problems involving place value; Add/subtract multiples of 1s, 10s, 100s, 1000s, 10,000s and 100,000s.**

**345,462**

What number is 1 more? Write it.	<b>345,463</b>
10 more?	<b>345,472</b>
100 more?	<b>345,562</b>
1000 more?	<b>346,462</b>
10,000 more?	<b>355,462</b>

1.  $40,200 + 30,500$

6.  $45,379 - 370$

2.  $52,300 + 1200$

7.  $39,241 - 19,040$

3.  $63,001 + 2050$

8.  $45,388 - 40,006$

4.  $177,250 + 10,007$

9.  $135,684 - 105,003$

5.  $40,901 + 206,003$

10.  $756,937 - 623,030$

**Challenge**

$46,053 + \boxed{\phantom{00000}} = 88,888$

$777,777 - \boxed{\phantom{000000}} = 123,456$

6 Complete the table

	Round 51,745
to the nearest 10,000	<input type="text"/>
to the nearest 1,000	<input type="text"/>
to the nearest 100	<input type="text"/>

7 The original price of this car is £17,999.



What is the sale price of the car?

8

Which digit is in the ten thousands place?

Round 2,458,328 to the nearest million.

### Problem solving and reasoning questions

Sketch a line 0-1,000,000

Teacher marks a mystery number (e.g. 400,000). What number have I marked? Children ask questions to guess. Repeat.

What is the smallest number between 800,000 and 900,000 which has just four digits all the same and no zero?

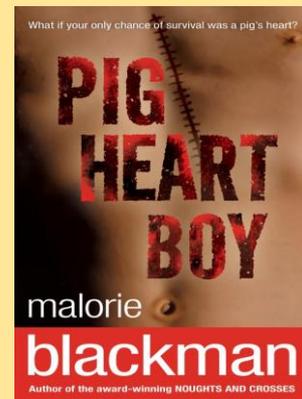
How many numbers between 100,000 and 200,000 contain exactly four 9s?

Add 1, 10 or 100 each go. How many goes to turn 98,089 into 99,999?

## Thursday

### English: Pig Heart Boy

LO: To retrieve, record and present information from a fiction text.



Handwriting: oe oe oe oe oe

# Spellings

Today, you will be tested on 15 of your spellings from last year.

On your whiteboard or a scrap piece of paper, write out the numbers 1-15 along one side in preparation for the test.

We will mark the test today, any spellings you get incorrect must be recorded to take home.

## Answers:

Recommend

Occupy

Conscious

Equipment

Thorough

Symbol

Environment

Occur

Physical

Vegetable

Desperate

System

Parliament

Stomach

Rhyme

## Pig Heart Boy – Chapter 3

What is Cam's precarious situation?



How is Cam feeling about Dr Bryce's visit?

[https://oldbuckenham-pri.norfolk.sch.uk/Newsite/wp-content/uploads/2020/05/pages from pig heart boy extract.pdf](https://oldbuckenham-pri.norfolk.sch.uk/Newsite/wp-content/uploads/2020/05/pages%20from%20pig%20heart%20boy%20extract.pdf)

## Unfamiliar Language

Bred

Preamble

Immunologist

Transplanting

Expertise

Permission

Donor

Eavesdropping

## Main Task: Retrieval

1. In Chapter 1 find an example of personification.
2. In Chapter 2 find an example of a simile.
3. On page 14 find 2 examples of an adverb.
4. In chapter 2 find an example of alliteration.
5. In Chapter 2 how does Cam describe the shower water?
6. On page 22 find a synonym for the word 'Misshape/ Disfigure'
7. Which word on page 26 suggests that Dr Bryce is good at transplants?

**Challenge:** Can you write a fiendish retrieval question for your partner?

## Main Task: Retrieval Answers

1. 'roaring silence/blood' or 'body is screaming out..'
2. 'like and angry monster'
3. 'sharply' 'breathlessly' 'anxiously'
4. 'daredevil dive'
5. 'Warm/ foul-tasting'
6. 'Deform'
7. (area of) 'Expertise'

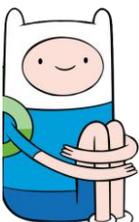
**Challenge:** Can you write a fiendish retrieval question for your partner?

## Maths

×			4	
2		16	8	18
6	30	48	24	
	35	56	28	
3	15		12	

Locate numbers up to 10 million on a number line.

More than, less than or equal to.  43,099    43,908	Halfway.  18,000 ? 27,000
Nearest 10, 100, 1000.  46,624	Ascending order.  5, 0, 3, -7, 2, -5



Misconception

Finn says 130.65 is bigger than 131 because it has more digits. Why is he incorrect? (vocab: decimal, place value, digit)

**Day 1: Locate numbers up to 10 million on a landmarked line; Use this to compare/order numbers.**

If we are comparing numbers between the same multiples of 10,000, we need to draw a line between those multiples.

If we are comparing numbers not between the same multiples of 10,000, but between the same multiples of 100,000, we need to draw a line between those multiples.

Compare 34,574 and 37,838.

What multiples shall we mark on the line? ?

30,000

40,000

Compare 128,500 and 154,100.

What multiples shall we mark on the line? ?

100,000

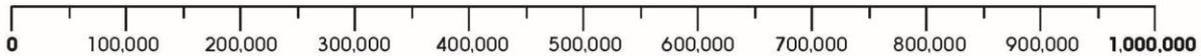
200,000

**Comparing numbers up to a million**

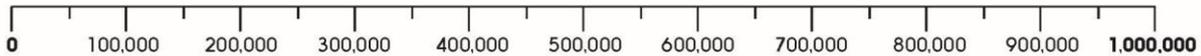
**Sheet 2**

Look at the numbers below each number line and mark them in the correct places.

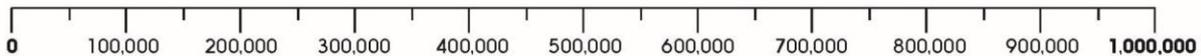
**Populations of 20 UK cities (2011)**



- |                      |                      |
|----------------------|----------------------|
| 1. Aberdeen 189,000  | 5. Lancaster 138,000 |
| 2. Cardiff 346,000   | 6. Leeds 751,000     |
| 3. Edinburgh 468,000 | 7. Liverpool 466,500 |
| 4. Glasgow 603,000   |                      |



- |                     |                        |
|---------------------|------------------------|
| 8. Belfast 333,900  | 12. Exeter 117,800     |
| 9. Bradford 522,400 | 13. Leicester 329,800  |
| 10. Bristol 428,200 | 14. Manchester 503,100 |
| 11. Derby 248,800   |                        |



- |                                 |                     |
|---------------------------------|---------------------|
| 15. Newcastle-upon-Tyne 280,170 | 19. Swansea 239,020 |
| 16. Oxford 151,910              | 20. York 198,051    |
| 17. Portsmouth 205,050          |                     |
| 18. Sheffield 552,690           |                     |

**Challenge**

Choose two numbers on one of your lines. Write the number that comes half way between these. Be careful which two you choose - it makes a difference!

**1**

Write these numbers in ascending order.

6, -7, 8, 7, 0, -3

<input type="text"/>					
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**2**

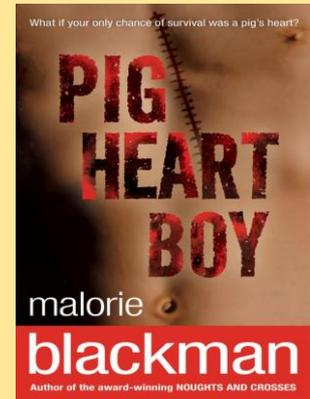
The numbers in this sequence decrease by the same amount each time.  
Fill in the missing numbers.

<input type="text"/>	,	11,	7,	3,	<input type="text"/>	,	-5,	<input type="text"/>	,	<input type="text"/>
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## Friday

### English: Pig Heart Boy

LO: To discuss and evaluate how the author uses language for effect



Handwriting: fe fe fe fe fe fe

### Punctuation and Grammar

What kind of speech is shown in this passage?

What are the hallmarks of **DIRECT SPEECH**?

How do we accurately use direct speech?

'Cam, are you all right?'

I opened my eyes. Marlon stood in front of me, his green eyes dark and huge with concern. I inhaled sharply, waiting for the roaring in my ears to subside. The pain in my chest took a little longer. 'Course! I'm fine,' I replied a little breathlessly.

'What were you doing?'

'Just sitting down.'

Marlon frowned. 'Is that smart?'

'I was just sitting down. Don't fuss. Sometimes you're worse than Mum and Dad,' I said.

'If your parents find out that you're here every Tuesday instead of at my house, I'm the one who'll get it in the neck – and every other bodily part,' Marlon pointed out.

I smiled. 'If you don't tell them, I won't.'

'How can you be so calm about it? Every time we come here, I'm terrified some grown-up who knows your family is going to spot you and tell your parents.' Marlon looked around the pool anxiously, as if expecting his words to come true at that precise moment.

'Marlon, you worry too much.' My smile broadened as the pain in my chest lessened.

## LO: To use direct speech accurately



Imagine....

You were late for school  
because your alarm didn't  
go off.

Now you are at school, you  
need to explain what  
happened to your teacher.



**Challenge:** Can you include  
fronted adverbials accurately?

- 67 **Known for:** Establishing nursing as a respectable  
73 profession for women - in 1860 her  
76 nursing school opened.
- 81 Working hard to make hospitals  
83 more hygienic.
- 89 She wrote over 200 books and  
90 pamphlets.
- 96 **Known as:** 'The Lady with the  
101 Lamp' because when she was  
105 checking her patients during  
112 the night she held a lamp in  
114 her hand.



### Reading Skills:

Read the text  
carefully in order  
to answer the  
questions on the  
next slide.

[Click for second part of text.](#)

# Quick Questions



1. Why was Florence Nightingale so-called?

\_\_\_\_\_



2. Which word means the same as 'regarded by people to be good'?

\_\_\_\_\_



3. Why do you think Florence wrote over 200 books and pamphlets?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



4. Why has the author used bold sub-headings?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Pig Heart Boy – Chapter 4

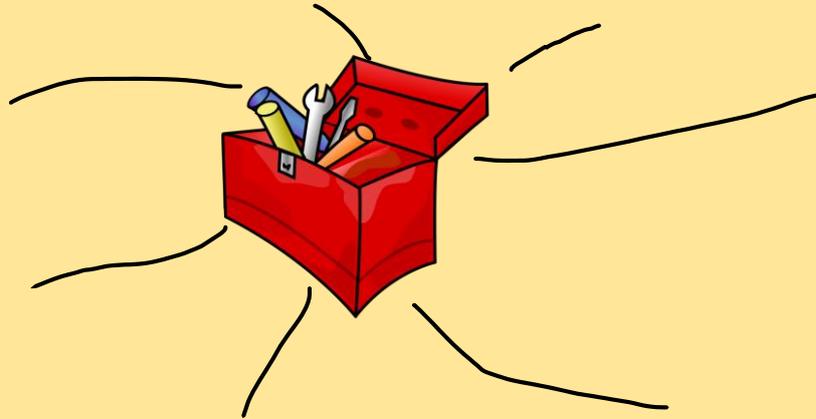
Who is Dr Bryce?



What do we know about the character of Cam's Dad?

<https://primarysite-prod-sorted.s3.amazonaws.com/abbeywood-first-school/UploadedDocument/739856d2e1e047e4a151ddca29eed1cb/english-pig-heart-boy-chapter-4.pdf>

## Malorie Blackman's Writer's Toolkit



### Main Task: Language for Effect

Write a paragraph explaining how Malorie Blackman uses language in her writing to for effect. Think about..

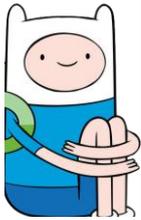
- Phrases that she uses effectively
- Her choice of language
- Figurative language she uses
- Her style of description

Maths

W	W	W	18
X	X	Y	14
Y	X	X	14
18	10	18	

To round numbers with up to six digits to the nearest 100, 000.

Nearest 1000. <b>87,498</b>	To nearest 10. <b>19,996</b>
Estimate (nearest 1000). <b>34,398 + 6,108</b>	Find the difference. <b>-9 and 7</b>



Misconception

Finn is rounding a number to the nearest 10 and 100. He rounds 345,649 to 345,650, then rounds to 345,700. What error has he made?

14

Day 2: Place numbers on lines and round to ten, a hundred, a thousand, as appropriate.

The distance in kilometres from London to Wellington in New Zealand is 11,686 miles or 18,805km.

Where does 11,686 belong on this line?

11,000 12,000

Where does 18,805 belong on this line?

18,000

19,000

Work with a partner to round 11,686 to the **nearest 1000**, to the **nearest 100** and to the **nearest 10** miles.

Work with a partner to round 18,805 to the **nearest 1000**, to the **nearest 100** and to the **nearest 10** kilometres.

Remember that numbers ending in 5 round up.

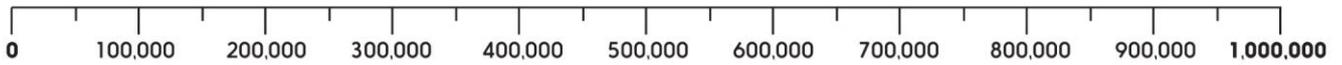
17

Year 6

## Rounding in geography Sheet 2

### Areas of islands round the world (square km)

Round each area in turn as instructed. How far towards Gold can you get?



1. Sri Lanka 65,600 (*to the nearest 1000*)
2. Java, Indonesia 126,700 (*to the nearest 1000*)
3. Vancouver Island 32,150 (*to the nearest 100*)
4. Cuba 110,860 (*to the nearest 100*)



5. Madagascar 587,040 (*to the nearest 100,000*)
6. Borneo, Indonesia 744,360 (*to the nearest 10,000*)
7. New Guinea 821,030 (*to the nearest 100*)



8. Sumatra, Indonesia 473,600 (*to the nearest 100,000*)
9. Great Britain 229,880 (*to the nearest 10,000*)
10. Mauritius 1865 (*to the nearest 100*)

18

Year 6

### Problem solving and reasoning questions

Round 124,949 to the nearest 10, to the nearest 100, to the nearest 1000 and to the nearest 10,000.

How many numbers round to 550,000 as the nearest 10,000 and to 555,000 as the nearest 1000?

Sketch a line from 680,000 to 690,000. Mark the 10,000s. Write two consecutive numbers between each pair of marks – one must round up to the nearest 1000 and the other down to the nearest 1000. Say the numbers aloud.

My answer has six digits. Four of the digits are identical and the other two are both 9. It rounds to 560,000 as the nearest 10,000. Write two different possible answers.

34

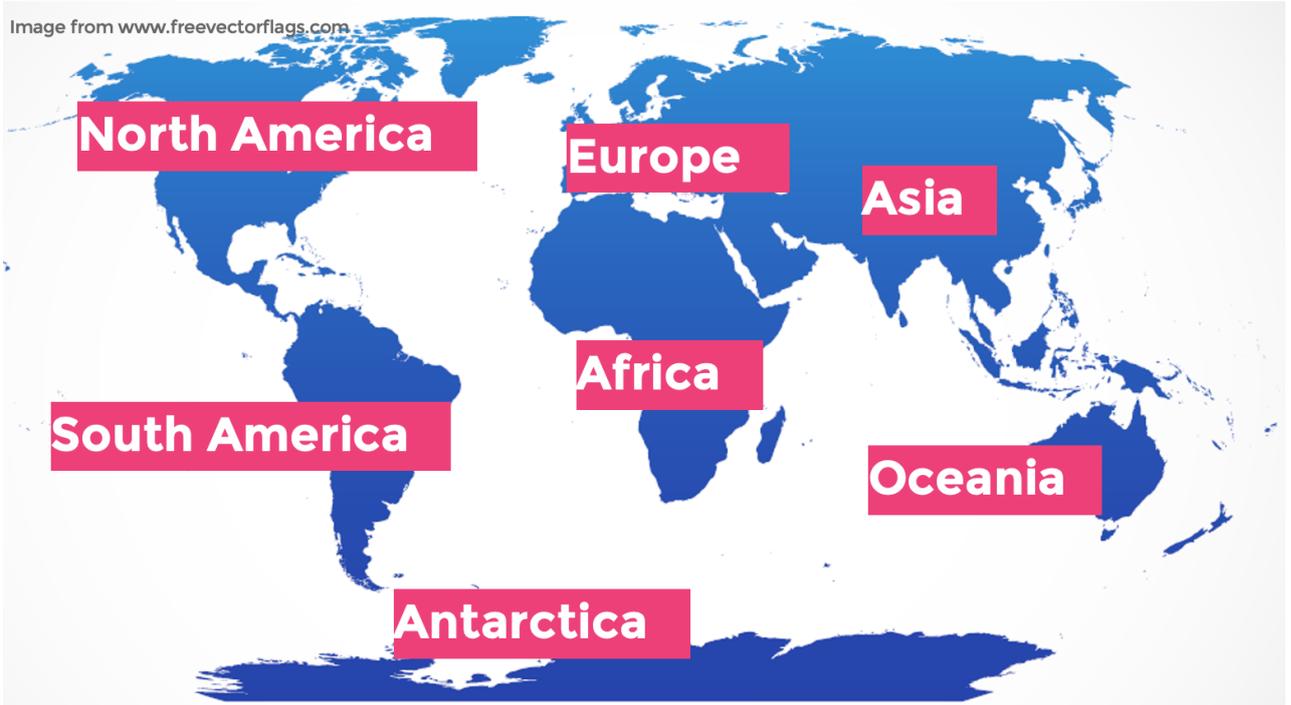
Year 6

Answers at the end

# Geography

## Countries of Europe

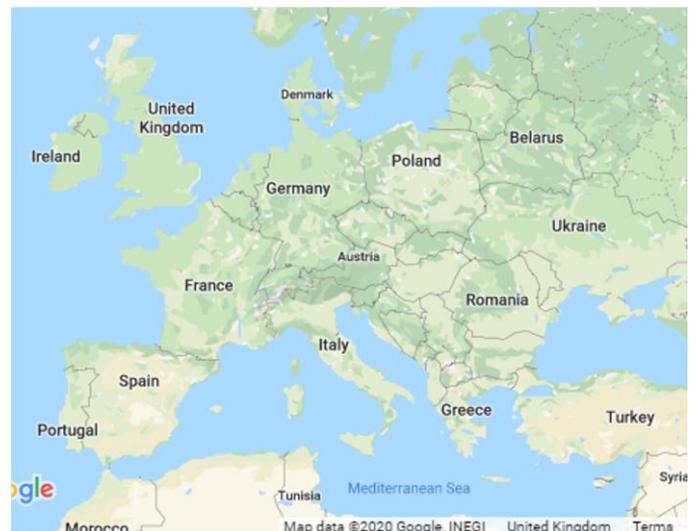
### ANSWERS



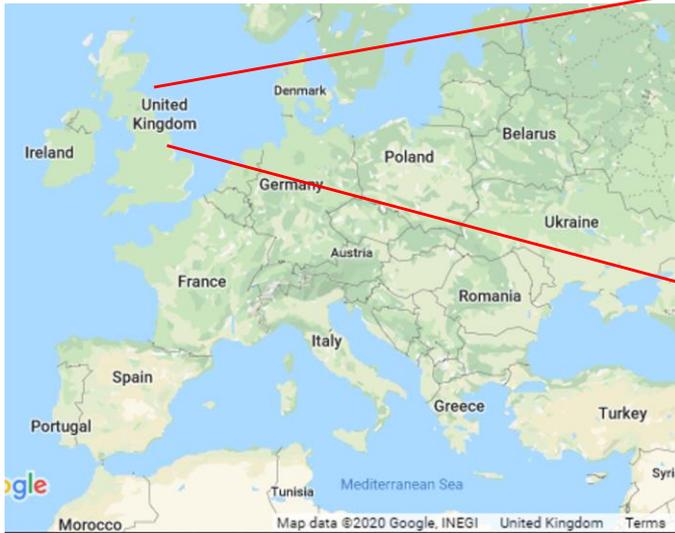
Europe is the sixth (out of 7) largest continent in the world.

In Europe, Russia is the largest and most populous, which means it has the highest population of people.

Europe has a total population, as a whole, of 747 million people as of 2020.



# United Kingdom



Notice the difference in the symbols.

10

## Northern Europe

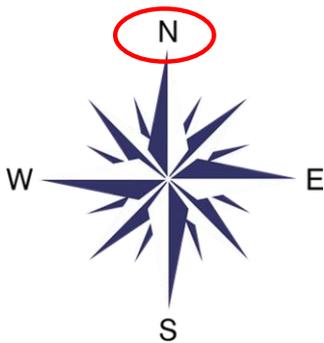


Image from Pixabay



We're going to split Europe into **FOUR** parts. Northern, Eastern, Southern, Western.

---

**Find the countries on  
your maps and label  
them.**





Answers at the end

Friday

Computing

# LO: To understand GIS and how it works

## 5 Key Research Questions

1. What is GIS?
2. When was GIS introduced?
3. Why do we use GIS?
4. How does GIS work?
5. Where has GIS been implemented?

## History

**Stick in knowledge organiser.**

Date

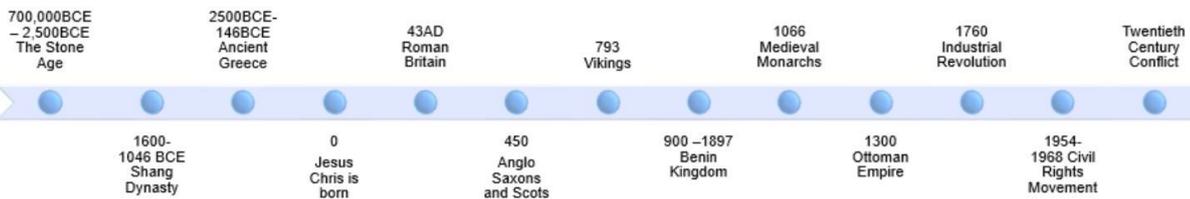
The Victorian era and the British Empire

**Read through vocabulary box**

## YEAR 6 | INDUSTRIAL REVOLUTION | AUTUMN ONE

Vocabulary		Legal Act	
Industry	The process of making products by using machines and factories.	1829 Metropolitan Police Act	Robert Peel created the Metropolitan Police Service (the first police force) with headquarters in Scotland Yard, London.
Industrial Revolution	A time of great change in Britain between 1760-1900. Shift to mass-production of products.	1833 Factory Act (applied to large textile factories)	Banned children under 9 from working, 2 hours education a day for children under 11, lowered working hours.
Population	The number of people living in a particular place.	1842 Mines Act	Banned boys under 10, women and girls from working in mines.
Economy	The system of how money is used and products distributed within a particular country.	1844 Factory Act	3 hours education a day for children under 13, lowered working hours.
Agriculture	Process of producing food by farming: growing crops and rearing animals.	1850 The 10 Hour Act	Set working hours to 10.5 hours per day for all.
Poverty	The lack of basic human needs such as clean water, food, healthcare, education and shelter.	1867 Factory Act	Previous rules applied to all workshops with 50+ workers.
Mass production	Process of making multiple products of the same standard quickly, e.g. textiles.	Invention	
Era	Clear period of time or history.	The water frame 1767 Richard Arkwright	A machine powered by water to spin cotton into yarn quickly and easily. Could be used by unskilled workers. Allowed factories and mills to be built.
Sanitation	Process of cleaning drinking water and getting rid of sewage (waste).	The spinning Jenny 1764 James Hargreaves	A machine which spins more than one ball of yarn at a time, making it easier and faster to make cloth. Allowed more workers to make cloth more cheaply and increased the amount of factories built.
Child labour	Employment of children in a business or industry.	The steam engine 1712 Thomas Newcomen	Replaced water and horse power in a wide range of industries, including trains, ships, factories.
Important person		The locomotive 1825 Stephenson	A new high-pressure steam engine which could be used to reliably move goods and passengers on the railway tracks.
Robert Peel	Created the first Metropolitan Police force in London in 1829, to try to reduce crimes including robbery and violence.		
Dr John Snow	Prove that cholera spread through contaminated water in 1854.		
Queen Victoria	Queen of Great Britain from 1837 to 1901 and Empress of India from 1876 to 1901.		

### 1. When did the Industrial Revolution take place? What happened before? What happened after?



### The Victorian Era

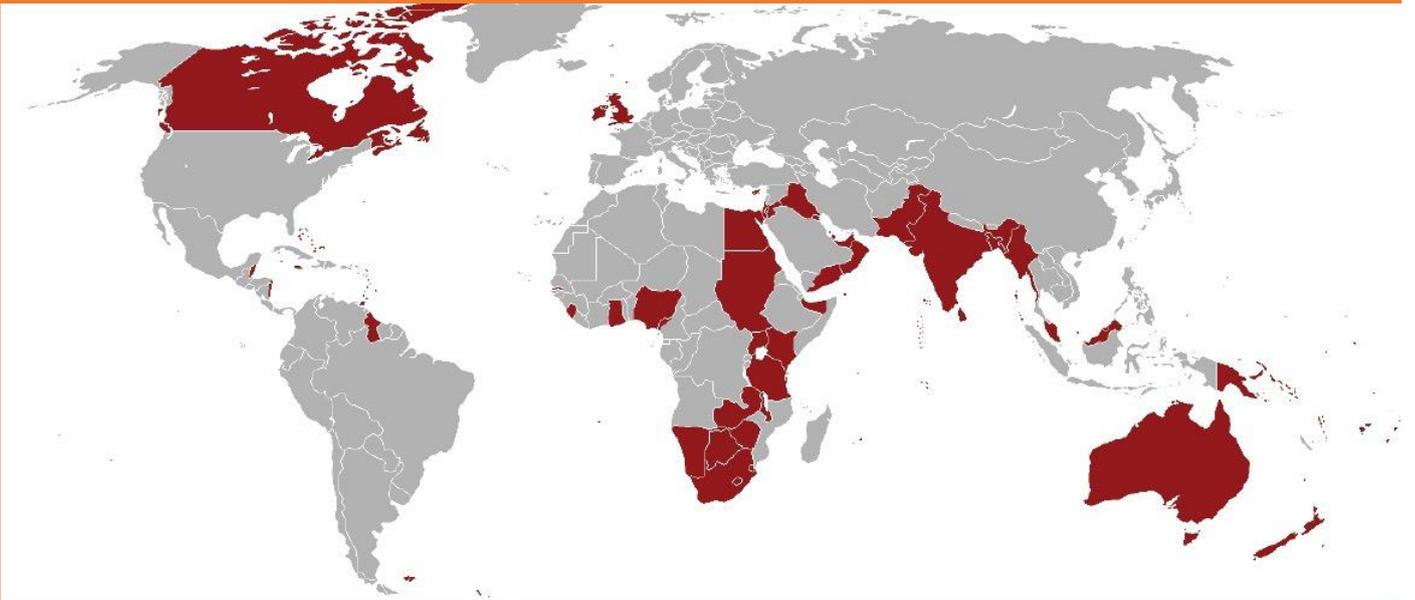
Queen Victoria ruled Great Britain from 1837 to 1901. During this time, many changes took place in the living and working conditions of people in her country. Developments in health and technology led to an increase of wealth in Britain, as well as the population size increasing.

### The British Empire

From the 1400s to the 1900s, Britain ruled a number of countries around the world. Whilst Queen Victoria ruled Britain, the empire expanded into Asia, with Victoria being crowned the Empress of India in 1876.



Summarise the two paragraphs.



Can you work out some of the countries that were part of the British Empire?

## Answer Learning Review

### What were the key features of Victorian society?

- What were the key dates in the period.
- The nature of the class system.
- That population grew massively through this period.

The key features of Victorian society were \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_. The Industrial Revolution began in \_\_\_\_\_ and the Victorian era took place between \_\_\_\_\_ and \_\_\_\_\_. Victorian society was divided into three social classes \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_. Due to \_\_\_\_\_ and \_\_\_\_\_ the population grew massively. The increase in population was \_\_\_\_\_ for the British economy. Although it had negative effects such as \_\_\_\_\_.



## L.O. To understand the impact of rights on the classroom.

I can name three different rights.

I can express my views and opinions courteously.

I can explain the role of and importance of the Convention of the Rights of the Child (CRC).

I can contribute towards a class charter.



## What is the CRC?

UNICEF is the world's leading organisation for children and their rights.

In 1989, governments across the world promised all children the same rights by adopting the UN Convention on the Rights of the Child.

The rights are *international law*.

Most countries in the world have signed to make this domestic law in their country.



# UN Convention on the Rights of the Child In Child Friendly Language



"Rights" are things that every child should have or be able to do. All children have the same rights. These rights are listed in the United Nations (UN) Convention on the Rights of the Child. Almost every country has agreed to these rights. All the rights are connected to each other, and all are equally important. Sometimes, we have to think about the rights in terms of what is the best for children in a situation, and what is critical to life and protection from harm. As you grow, you have more responsibility to make choices and exercise your rights.

#### Article 1

Everyone under 18 has these rights.

#### Article 2

All children have these rights, no matter who they are, where they live, what their parents do, what language they speak, what their religion is, whether they are a boy or girl, what their culture is, whether they have a disability, whether they are rich or poor. No child should be treated unfairly on any basis.

#### Article 3

All adults should do what is best for you. When adults make decisions, they should think about how their decisions will affect children.

#### Article 4

The government has a responsibility to make sure your rights are protected. They must help your family to protect your rights and create an environment where you can grow and reach your potential.

#### Article 5

Your family has the responsibility to help you learn to exercise your rights, and to ensure that your rights are protected.

#### Article 6

You have the right to be alive.

#### Article 7

You have the right to a name, and this should be officially recognised by the government. You have the right to a nationality (to belong to a country).

#### Article 8

You have the right to an identity – an official record of who you are. No one should take this away from you.

#### Article 9

You have the right to live with your parent(s), unless it is bad for you. You have the right to live with a family who cares for you.

#### Article 10

If you live in a different country than your parents do, you have the right to be together in the same place.

#### Article 11

You have the right to be protected from kidnapping.

#### Article 12

You have the right to give your opinion, and for adults to listen and take it seriously.

#### Article 13

You have the right to find out things and share what you think with others, by talking, drawing, writing or in any other way unless it harms or offends other people.

#### Article 14

You have the right to choose your own religion and beliefs. Your parents should help you decide what is right and wrong, and what is best for you.

#### Article 15

You have the right to choose your own friends and join or set up groups, as long as it isn't harmful to others.

#### Article 16

You have the right to privacy.

#### Article 17

You have the right to get information that is important to your well being, from radio, newspaper, books, computers and other sources. Adults should make sure that the information you are getting is not harmful, and help you find and understand the information you need.

#### Article 18

You have the right to be raised by your parent(s) if possible.

#### Article 19

You have the right to be protected from being hurt and mistreated, in body or mind.

#### Article 20

You have the right to special care and help if you cannot live with your parents.

#### Article 21

You have the right to care and protection if you are adopted or in foster care.

#### Article 22

You have the right to special protection and help if you are a refugee (if you have been forced to leave your home and live in another country), as well as all the rights in this Convention.

#### Article 23

You have the right to special education and care if you have a disability, as well as all the rights in this Convention, so that you can live a full life.

#### Article 24

You have the right to the best health care possible, safe water to drink, nutritious food, a clean and safe environment, and information to help you stay well.

#### Article 25

If you live in care or in other situations away from home, you have the right to have these living arrangements looked at regularly to see if they are the most appropriate.

#### Article 26

You have the right to help from the government if you are poor or in need.

#### Article 27

You have the right to food, clothing, a safe place to live and to have your basic needs met. You should not be disadvantaged so that you can't do many of the things other kids can do.

#### Article 28

You have the right to a good quality education. You should be encouraged to go to school to the highest level you can.

#### Article 29

Your education should help you use and develop your talents and abilities. It should also help you learn to live peacefully, protect the environment and respect other people.

#### Article 30

You have the right to practice your own culture, language and religion – or any you choose. Minority and indigenous groups need special protection of this right.

#### Article 31

You have the right to play and rest.

#### Article 32

You have the right to protection from work that harms you, and is bad for your health and education. If you work, you have the right to be safe and paid fairly.

#### Article 33

You have the right to protection from harmful drugs and from the drug trade.

#### Article 34

You have the right to be free from sexual abuse.

#### Article 35

No one is allowed to kidnap or sell you.

#### Article 36

You have the right to protection from any kind of exploitation (being taken advantage of).

#### Article 37

No one is allowed to punish you in a cruel and harmful way.

#### Article 38

You have the right to protection and freedom from war. Children under 15 cannot be forced to go into the army or take part in war.

#### Article 39

You have the right to help if you've been hurt, neglected, or badly treated.

#### Article 40

You have the right to legal help and fair treatment in the justice system that respects your rights.

#### Article 41

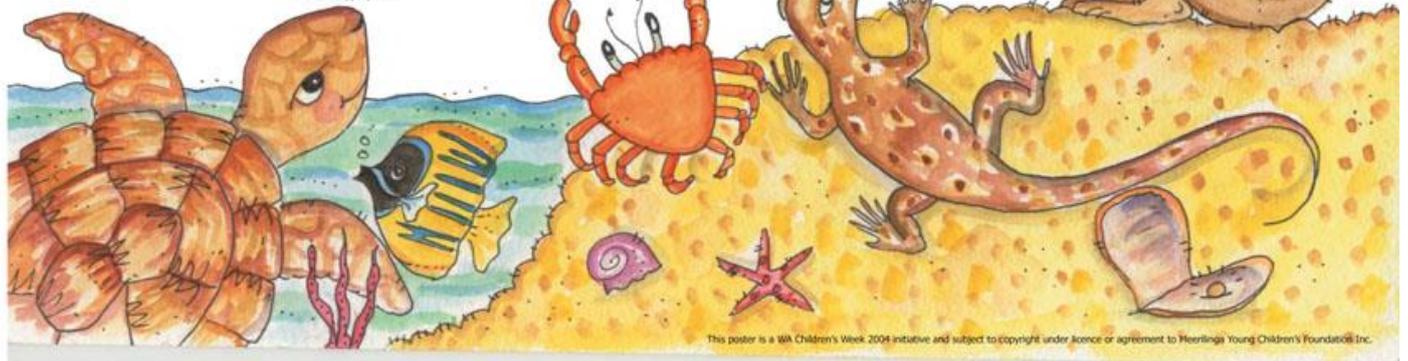
If the laws of your country provide better protection of your right than the articles in this Convention, those laws should apply.

#### Article 42

You have the right to know your rights! Adults should know about these rights and help you learn about them, too.

#### Article 43 to 54

These articles explain how governments and international organisations like UNICEF will work to ensure children are protected with their rights.



## What are our 5 most popular?



## Class Charter



Answers

## To explain the value of any digit in six-digit numbers.

What is value of the digit 4? <b>479,289</b> 400,000/four hundred thousand/ 400 thousands...	What is 1000 more? <b>12,894</b> <b>13,894</b>
Write in <b>words</b> . <b>39,024</b> Thirty-nine thousand and twenty-four.	Write in <b>digits</b> . Nine hundred and thirty-one thousand, two hundred and two. <b>931,202</b>
Finn has not used place value correctly. In each column the digit will never exceed 9 before exchanging takes place. The answer should be 400,095.	



## Day 1 Sheet 2 Place value number sentences

$$430,000 + 6378 = 436,378$$

$$234,000 + 846 = 234,846$$

$$770,777 + 7000 = 777,777$$

$$734,523 - 523 = 734,000$$

$$652,235 - 50,000 = 602,235$$

$$645,345 - 640,000 = 5345$$

$$805,370 + 20,007 = 825,377$$

$$904,678 + 20,000 = 924,678$$

$$504,027 + 30,600 = 534,627$$

$$827,410 - 27,000 = 800,410$$

$$272,896 - 72,000 = 200,896$$

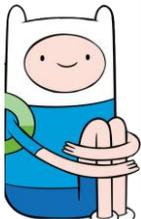
$$852,462 - 50,402 = 802,060$$

### Challenge

45,470 items are not on display.

## Add and subtract powers of 10.

What is value of the digit 5? <b>5,479,289</b> 5,000,000/five million...	What is 1999 more? <b>12,894</b> 14,893
What is 5000 less? <b>39,024</b> 34,024	Double. <b>1,234,321</b> 2,468,642
<p><u>Misconception</u> Finn is reading the numbers in sequence. This could show he may not understand the value of each digit in a number or how to read larger numbers correctly.</p>	



16

- $40,200 + 30,500 = 70,700$
- $52,300 + 1200 = 53,500$
- $63,001 + 2050 = 60,051$
- $177,250 + 10,007 = 187,257$
- $40,901 + 206,003 = 246,904$
- $45,379 - 370 = 45,009$
- $39,241 - 19,040 = 20,201$
- $45,388 - 40,006 = 5,382$
- $135,684 - 105,003 = 30,681$
- $756,937 - 623,030 = 133,907$

### Challenge

$$46,053 + \boxed{42,835} = 88,888$$

$$777,777 - \boxed{654,321} = 123,456$$

### Problem solving and reasoning answers

Sketch a line 0-1,000,000. Teacher marks a mystery number (e.g. 400,000). *What number have I marked?* Children ask questions to guess. Repeat. *What strategies do children use to identify the numbers marked?* e.g. locating 500,000 as halfway along the line and other significant markers such as 250,000 and 750,000. Do children make the connection that 400,000 is getting towards halfway, the equivalent of 40 on a 0-100 line? Note that although in earlier years children may have completed a similar exercise with numbers to 1000 or 10,000, some may find the larger numbers intimidating so ensure lots of practice correctly reading and writing 6-digit numbers. Some numbers may sound large, e.g. 10,000 but are, within the context of a 0-1,000,000 line, relatively small. 10,000 is the equivalent of just 1 on a 0-100 line!

What is the smallest number between 800,000 and 900,000 which has just four digits all the same and no zero? **811,112**

Most children will realise that the number has four 1s but may put them in different places, e.g. 821,111.

How many numbers between 100,000 and 200,000 contain exactly four 9s? **45**

The four 9s can occupy the 5 remaining places in 5 different ways:

199,99\_    199,9\_9    199,\_99    19,\_999    1\_9,999

The remaining digit can be any one of the digits 0-8, i.e. 9 choices, so there are  $9 \times 5 = 45$  possible answers.

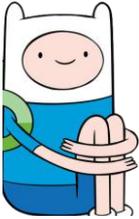
Look for how systematically children set about this task, for example listing every possibility where the 9s are in the last 4 places.

Add 1, 10 or 100 each go. How many goes to turn 98,089 into 99,999? **20 goes.** Quickest will be to add 100s, then a final 10, the sequence is:

<b>98,089</b>	98,189	98,289	98,389	98,489	98,589	98,689	98,789	98,889
98,989	99,089	99,189	99,289	99,389	99,489	99,589	99,689	99,789
99,889	99,989	19 x 100 added	<b>99,999</b>	+ 10				

Locate numbers up to 10 million on a number line.

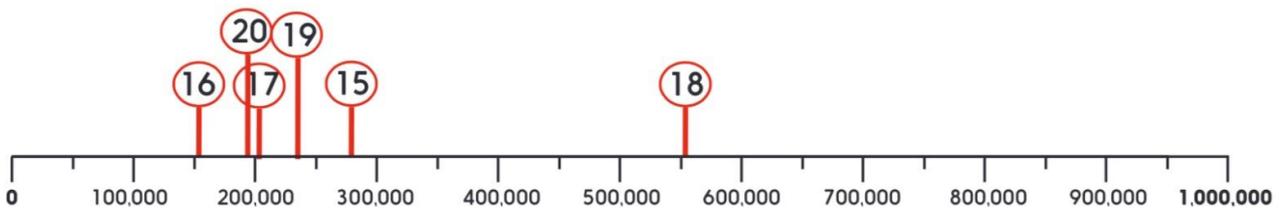
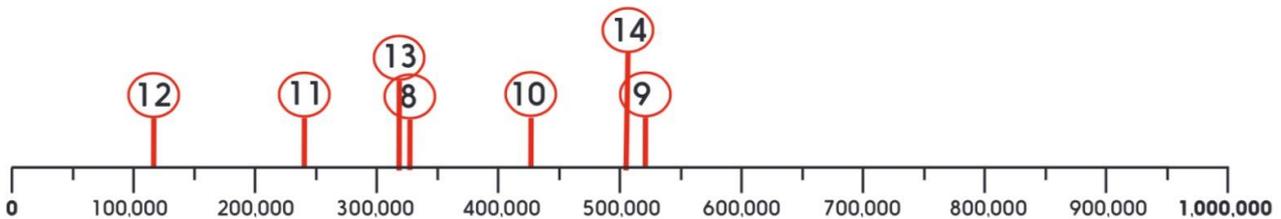
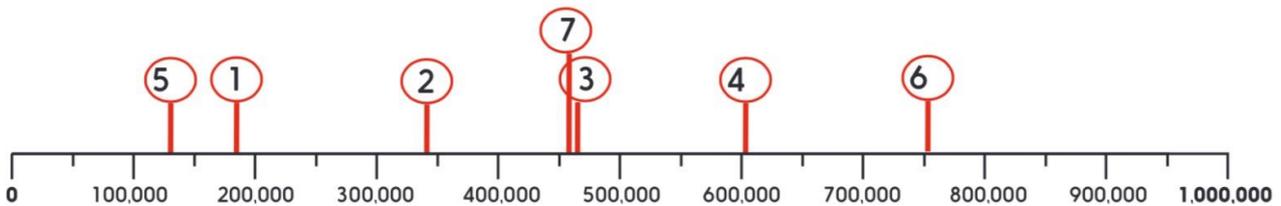
<p>More than, less than or equal to.</p> <p><b>43,099 &lt; 43,908</b></p>	<p>Halfway.</p> <p>18,000 <b>22,500</b> 27,000</p>
<p>Nearest 10, 100, 1000.</p> <p><b>46,624</b></p> <p><b>46,620 46,600 47,000</b></p>	<p>Ascending order.</p> <p><b>5, 0, 3, -7, 2, -5</b></p> <p><b>-7, -5, 0, 2, 3, 5</b></p>



Misconception

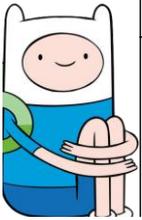
We can use place value and the digits to compare, we know  $131 > 130$ , so the amount of digits doesn't always increase the value of a number.

**Day 1 Sheet 2 Comparing numbers up to a million**



To round numbers with up to six digits to the nearest 100, 000.

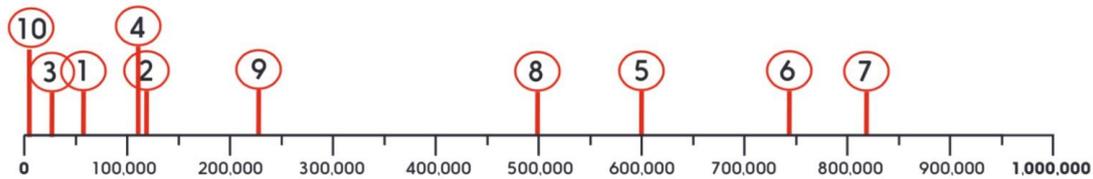
Nearest 1000. <b>87,498</b> <b>87,000</b>	To nearest 10. <b>19,996</b> <b>20,000</b>
Estimate (nearest 1000). <b>34,398 + 6,108</b> <b>40,000</b>	Find the difference. <b>-9 and 7</b> <b>16</b>



Misconception

Finn has rounded and already rounded number. Answer should be 345,600.

## Day 2 Sheet 2 Rounding in geography



- |            |            |            |            |
|------------|------------|------------|------------|
| 1. 66,000  | 2. 127,000 | 3. 32,200  | 4. 110,900 |
| 5. 600,000 | 6. 740,000 | 7. 821,000 | 8. 500,000 |
| 9. 230,000 | 10. 1900   |            |            |

### Challenge

**Distances in Middle Earth.** Make up your own answers, using each clue!

Exactly how far is it from...

- Hobbiton to Bree? (60 km to the nearest 10) *any number from 55 to 64 inclusive*
- Bree to Rivendell? (200 km to the nearest 100) *any number from 150 to 249 inclusive*
- Edoras to Minas Tirith? (250 km to the nearest 10) *any number from 245 to 254 inclusive*
- Hobbiton to Mount Doom? (1000 km to the nearest 1000) *any number from 500 to 1499 inclusive*
- Isengard to Mount Doom? (0 km to the nearest 1000) *any number up to 499*

### Problem solving and reasoning answers

Round 124,949 to the nearest 10, to the nearest 100, to the nearest 1000 and to the nearest 10,000.

- 124,950 (to the nearest 10)
- 124,900 (to the nearest 100)
- 125,000 (to the nearest 1000)
- 120,000 (to the nearest 10,000)

Note that it is important to go back to the original number each time, answers of 125,000 (to the nearest 100) or 130,000 (to the nearest 10,000) suggest that children have not done that.

How many numbers round to 550,000 as the nearest 10,000 and to 555,000 as the nearest 1000? **500 numbers**

All of the numbers 554,500-554,999. If children are stuck, reviewed on a 550,000 – 560,000 number line.

Sketch a line from 680,000 to 690,000. Mark the 10,000s. Write two consecutive numbers between each pair of marks – one must round up to the nearest 1000 and the other down to the nearest 1000. Say the numbers aloud.

Do children correctly mark and sequence the 1000s, 681,000 – 689,000?

Between any pair of marks, e.g. 687,000 and 688,000 the number rounding down must end in 499 or less, the one rounding up must end in 500 or more, e. 687,391 rounds down whereas 687,623 rounds up.

My answer has six digits. Four of the digits are identical and the other two are both 9. It rounds to 560,000 as the nearest 10,000. Write two different possible answers.

The number must begin 55 in order to round to 560,000 so must have four 5s. There are 6 possibilities:

- 559,955   559,595   559,559   555,995   555,959   555,599