Monday 8th September Morning Challenge

Questions



1. What is the name of the person who invented the term **electricus**?



2. What do you think the word **prestigious** means?



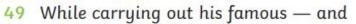
3. Look at the third paragraph. What does this section of the text focus on?



4. Thomas Edison invented the first lightbulb. Is this statement true or false? Explain your answer using evidence from the text.

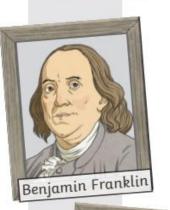
Electrical Pioneers

- 6 The history of electricity stretches back
- 12 to ancient times. However, humans did
- 20 not begin to harness its power until over
- 26 2000 years later. In the 1600s,
- 30 an Englishman (William Gilbert)
- invented the term 'electricus', which has
- 42 evolved into the familiar, modern word
- 43 'electricity'.



- 53 incredibly dangerous kite experiment,
- 59 Benjamin Franklin aimed to show the
- 63 connection between electricity and
- 69 lightning. He did this successfully. In
- 75 1753, he won a prestigious award
- 80 for his 'curious experiments and
- 83 observations on electricity'.
- 88 Improving on existing designs, Thomas
- 94 Edison invented the modern lightbulb in
- 99 1880. Lewis Latimer worked alongside
- 104 Edison inventing a carbon filament
- 112 (the wire inside a bulb) that enabled the
- 118 lightbulb to stay alight for longer.







Edison

TBAT: loop from the letter 'g'

gl, gi, gr, ga, gg	
Bigger	
Bigger Gigantic	
Angle	
Angle Algorithm	
Dangerous	
Dangerous Rough Stranger	
Stranger	

Challenge – Use each word in a correctly punctuated sentence.

TBAT: read, write and compare 6-digit numbers.

3 in 3

$$1.12 \times 5 =$$

$$2.2/5 + 1/5 =$$

$$3.898 + 34 =$$

Tickets for a cricket match cost £10.50 for children and £15.40 for adults.

How much will it cost for 4 children and 1 adult?

TBAT: read, write and compare 6-digit numbers.

B/G discussion – order these numbers in descending order.

40	05	.6	9	9
		,	-	*

W	HTh	TTH	Th	Н	T	0
		00			•	

10,296,571

One million, four hundred and twenty thousand, seven hundred and ten

TBAT: read, write and compare 6-digit numbers.



Use these digit cards to make the number with the greatest value.

Use these digit cards to make the number with the smallest value.

Write this number in numerals.

Three hundred and sixty eight thousand, two hundred and one

TBAT: read, write and compare 6-digit numbers.

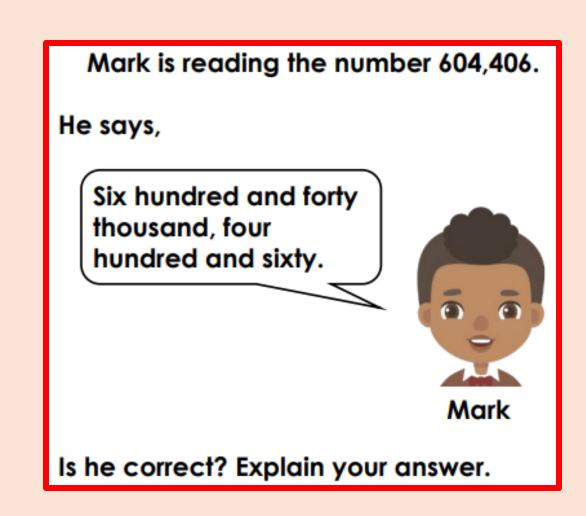
Write these numbers in words.

345,678

783,283

892,419

183,653



TBAT: read, write and compare 6-digit numbers.

Fill in the missing digits.

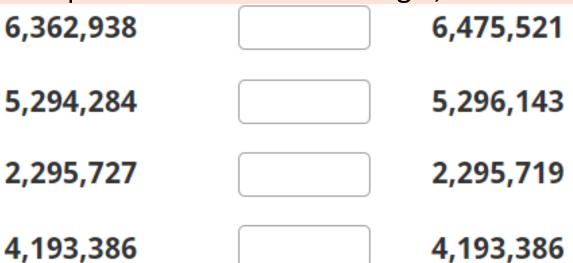
Challenge - Which of these statements gives the smallest answer?

8,597,807 - 390,000

8,207,807 + 390,000

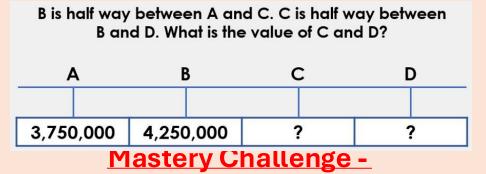
TBAT: read, write and compare 6-digit numbers.

Complete the statements using <, > or =.



Put the numbers in ascending order.

Challenge -



George thinks that the largest possible missing

number is 210.

705,847 + 200,000 > 904,637 + ?

Do you agree? Explain why.

Mastery with Greater Depth -

Scientists are researching the number of insects in a forest. Use the clues and the digit cards to work out how many of each type of insect there could be.

Explore the possible solutions and order them from greatest to smallest.

Insects	Total Clues (all are 6-digit numbers)			
Woodlouse	There are more woodlice than beetles. The last two digits show a prime number.	($\overline{}$	_
Ant	This is the largest number and is a multiple of 10.		0	1
Beetle	When rounded to the nearest 10,000, this number rounds to 200,000.		2	3
	This number is more than 300,000. The first and last	Į		
Greenfly digits are both multiples of three.		1		
Housefly	This is the second smallest amount. It is an odd number.		7	9

Challenge -

B is half way between A and C. C is half way between B and D. What is the value of C and D?



Mastery Challenge -

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0

2

TBAT: explain the meaning of words in context.

3 in 3

For centuries, mankind has found it useful to divide up the world using the ideas of longitude and latitude. These are imaginary lines that circle the world in an east-west direction for latitude and a north-south direction for longitude. The most well-known lines of latitude are the equator, which marks a line of equal distance between the two poles, and the tropic of Cancer and the tropic of Capricorn, which are 23.5° north and 23.5° south respectively. These were easy to establish by noting the position of the sun at midday. Longitude was more difficult to measure, yet extremely important because ships needed to know exactly where they were. Even small mistakes could lead to shipwrecks.

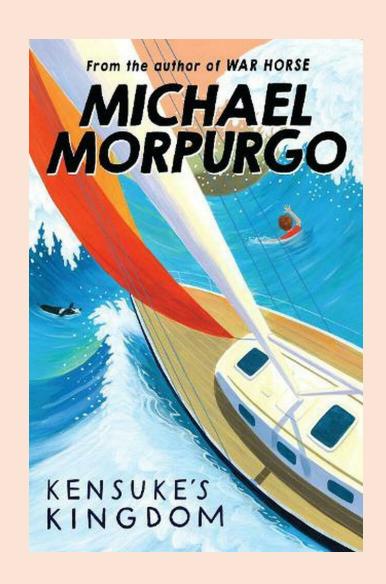
- 1. Find and copy one word from the first sentence that means 'split'.
- 2. According to the text, which lines of latitude are the most well-known?
- 3. Which tropic is 23.5° south?

TBAT: explain the meaning of words in context.

Partner discussion -

Who is the main character of the story?

Can you predict what is going to happen in the story?



TBAT: explain the meaning of words in context.

Words we will find in the text:

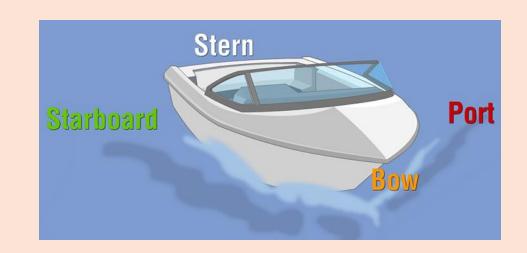
Bow - the forward part of the hull of a ship or boat, the point that is most forward when the vessel is underway.

Stern - the back part of a ship. It is exactly opposite the front part of the boat, called the bow.

Porpoises - a small toothed whale with a low triangular dorsal fin and a blunt rounded snout.

Sextant - an instrument with a graduated arc of 60° and a sighting mechanism, used for measuring the angular distances between objects.

Skipper - captain of a ship or boat.







TBAT: explain the meaning of words in context.

Multiple Choice

1. Which word would you use to describe below the deck of their boat?

cosy damp ship dark

2. At school, which subject was Michael not good at?

writing maths history science

<u>Retrieval</u>

- 1. What was the name of Michael's boat?
- 2. How old was Michael when they set sail on their trip around the world?
- 3. Identify three things Michael's mum taught him.

TBAT: explain the meaning of words in context.

Words in Context

- 1. On page 19, find and copy a word meaning inactive.
- 2. What does the phrase **mountainous seas** suggest about the water?
- 3. What is a synonym for talisman?
- 4. What does the phrase 'He just shrugged and said, "Mom's the skipper." suggest about Michael's parents?

Challenge – How does Michael feel about being on Peggy Sue? Use evidence from the text to support your answer. (3 marks)

Monday 8th September TBAT: identify and critically evaluate online content.

Quick Quiz

Finish the sentences using what you have learnt about online safety.

- 1. If a stranger asks you to send a picture of yourself, you should...
- 2. My friend told me that somebody has been calling him mean names on an online game. I am going to...
- 3. To create a safe password, you should use...

TBAT: identify and critically evaluate online content.

B/G partner discussion -

Who are these toys for?

How do you know?





Monday 8th September TBAT: identify and critically evaluate online content.

Discuss these questions with your partner and then answer.

What is a stereotype?

How can stereotypes be helpful? How can they be unhelpful?

How are these reinforced online? (Why?)

Monday 8th September TBAT: identify and critically evaluate online content.

- 1. Do you think there is enough choice online which isn't driven by gender, race, ethnicity, ability? (games, emojis, apps etc)
- 2. What should change online to make games/apps etc more inclusive?

Challenge – Explain how you feel about advertisements being targeted to you based on your age, gender or other things about you.

Monday 8th September TBAT: identify the key features in throwing a football



SCORING:

- Touchdown = 6 points
- One (1) point after touchdown (PAT) from the 5-yard line. Must be a passing attempt. = 1 Point
- Two (2) points after touchdown (2PAT) from the 12 yard. Can be either a running or passing attempt. = 2 Points
- If a defender intercepts a PAT or 2PAT pass and returns it to the opposition endzone.
 (PAT return) = 2 points.
- A safety occurs when the ball carrier is ruled down within their own endzone. A ball carrier is ruled down by being tackled, a flag falling out, stepping out of bounds or fumbling the ball.

DEFENDING:

- A legal flag pull takes place when the ball carrier is in full possession of the ball.
- Defenders can leave the floor and dive to pull the ball carriers flag but cannot impede, hold or hit the ball carrier.
- It is illegal to attempt to strip or hit the ball out of the ball carrier's possession at any time.
- Interceptions are returnable for touchdowns and for 2 points on both PAT and 2PAT attempts.
- Once the quarterback has lowered their hands (simulating a handoff) the defence are able to cross the line of scrimmage and tackle offensive players. This is the only time a quarterback can be sacked.

