

Monday 14th September

Morning Challenge

1. _____ = 6000 + 80

2. 45,893 = 40,000 + _____ + 800 + 90 + _____

3. _____ - 785 = 410

4. _____ = 85 - 47

5. 267 - _____ = 108

6. 90,707 - 23,697 =

7. _____ + 79 = 967

Daily Timetable

1. Morning Challenge
2. GPS

BREAK

3. Spelling
4. Reading lesson

LUNCH

5. Computing
6. P.E

GPS



Spelling

Top Tips for Children Sitting a Spelling Test

- **Listen carefully** to the word your teacher says.
- **Break the word into smaller parts** (syllables) to make it easier to spell. *Example: important → im / por / tant*
- **Think about spelling rules** you have learned, such as:

"i before e except after c"

adding suffixes like *-ing*, *-ed* and *-ful*

common prefixes such as *un-*, *dis-* and *re-*

- **Look for smaller words inside bigger words.** *Example: playground contains play and ground.*
- **Use memory tricks** you have learned in class. *Example: because = Big Elephants Can Always Understand Small Elephants.*
- **Take your time.** You do not need to rush. Focus on one word at a time.
- **Check your spelling** if there is time at the end. Read each word carefully and ask yourself, "Does that look right?"

Monday 14th September

TBAT: make inferences from the text.

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. According to the text, what does the equator mark?**
- 2. How were lines of latitude established?**
- 3. Why was measuring longitude accurately so important to shipping?**

Monday 14th September

TBAT: make inferences from the text.

What happened at the end of the last chapter?

What do you think will happen next?

How do you think Michael is feeling? Use evidence from what you have heard/read.

Monday 14th September

TBAT: make inferences from the text.

Words we will find in the text

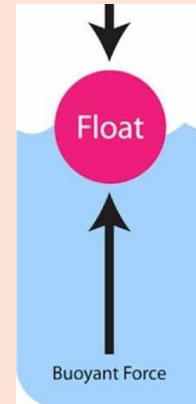
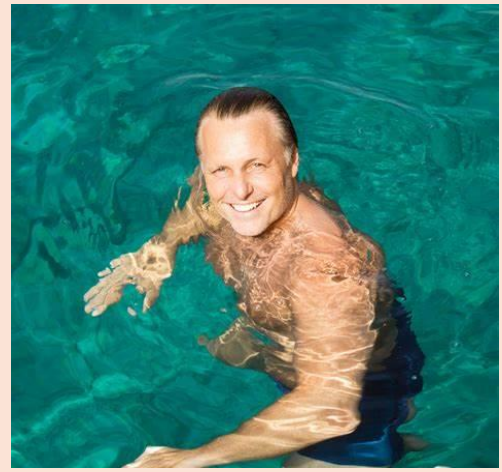
Trod water - Treading water allows you to stay afloat vertically with your face above the surface of the water.

Buoyancy – the ability of something to float.

Plaintive - sounding sad and mournful.

Gibbons – a tailless ape.

Swathe - a broad strip or area of something



Monday 14th September

TBAT: make inferences from the text.

Multiple Choice

1. Why did Michael keep singing in the sea?

He enjoyed singing

**It made him feel less alone
him**

He hoped his mum would hear

2. Which word closely matches the meaning of the word surreptitious?

suspicious

secret

loud

funny

Words in Context

1. Look at the paragraph beginning "What had first seemed like a short hike..". Find and copy a word that means 'in a way that takes considerable time and effort'.

2. What does the phrase "The whole orchestra of the jungle was tuning up" suggest about the sounds Michael could hear?

3. Find and copy 3 words that show the island is beautiful.

Monday 14th September

TBAT: make inferences from the text.

Inference

- 1. What evidence in the text is there that the water was dangerous?
- 2. Why was Michael in 'good spirits' after being stranded?
- 3. Why do you think the forest is described as 'impenetrable'?
- 4. Find and copy a group of words that suggest Stella was relying on Michael to find food and water for them.
- 5. What does this chapter tell us about Michael?

Challenge

Put a tick in the correct box to show whether each of the following statements is fact or opinion.

	Fact	Opinion
There were gibbons living in the jungle.		
Stella and Michael were being followed by someone.		
The island is beautiful.		

Monday 14th September

TBAT: explain how data is transferred across the internet.

Knowledge Quiz

1 What is the main role of a Domain Name Server (DNS)? (Tick 1 correct answer)

- ☐ to store music files
- ☐ to match website names to IP addresses
- ☐ to print documents
- ☐ to send emails

2 What is the name for the unique number given to each device on a network?

3 What do the letters “IP” stand for in the term “IP address”?

4 Match the example to what it is: (Write the correct letter in each box)

a	192.168.4.8
b	www.example.com
c	sending a message
d	“hello”, 42, “cat”

	communication
	an IP address
	data
	a website name

Keywords

packet	small chunks of a whole file that are sent (transmitted) over a network. Each packet contains a header and a payload.
header	part of a packet that contains addressing and other data
network	a group of connected computers
payload	part of a packet that contains the message being sent

Identify what makes up a data packet



Explanation

A **packet** is a small piece of data sent across a **network**.



Izzy

It's like sending lots of small parcels instead of one big box.



Izzy

Why split a file into **packets**?

Large files are split into **packets** so they can be sent more reliably, and if part is lost, only the missing **packets** need to be re-sent rather than the entire file.

Identify what makes up a data packet



Explanation

There are two main parts to a data **packet**.

A **header** is information about the sender, receiver, **packet** order and total number of **packets**.

A data **payload** is the part of the file being sent.



True or false?

The **header** contains the message being sent.



True



False



Why?

The **header** contains key information, the **payload** holds the message.

A short message could be sent by splitting it into multiple **packets**.

Packet 1: Hello

Packet 2: , how

Packet 3: are you?

Each **packet** needs a **header** to say what part it is.

Packets are numbered so the receiving computer can put them back together in the correct order.

1. Hello
2. , how
3. are you?

Identify what makes up a data packet



Check

Which part of the **packet** directs the computer where to send it?

a

payload

b

image

c

header



d

video

Task A

Identify what makes up a data packet



Answer the following questions:

1. Why do we break data into **packets**?
2. What happens if a **packet** is missing or mixed up?
3. How does the computer know the right order?

Task A

Identify what makes up a data packet



Feedback

Answer the following questions:

1. Why do we break data into **packets**?

We break data into **packets** because it is easier and more reliable to send smaller parts.

Task A

Identify what makes up a data packet



Feedback

Answer the following questions:

2. What happens if a **packet** is missing?

The receiving computer will request/ask the sending computer to send the missing **packet** again.

Task A

Identify what makes up a data packet



Feedback

Answer the following questions:

3. How does the computer know the right order?

It looks at the number on each **packet**. The **header** says which number **packet** it is and how many **packets** there are in total.



Lucas

What is a **network**?

A **network** is a group of connected computers that can send data to each other.



Lucas

How do **packets** move?

Packets are sent from router to router until they reach the right address. Different **packets** may travel through different routes.

Data is sent in **packets** over both the internet and smaller internal **networks**.

Describe how packets move across networks

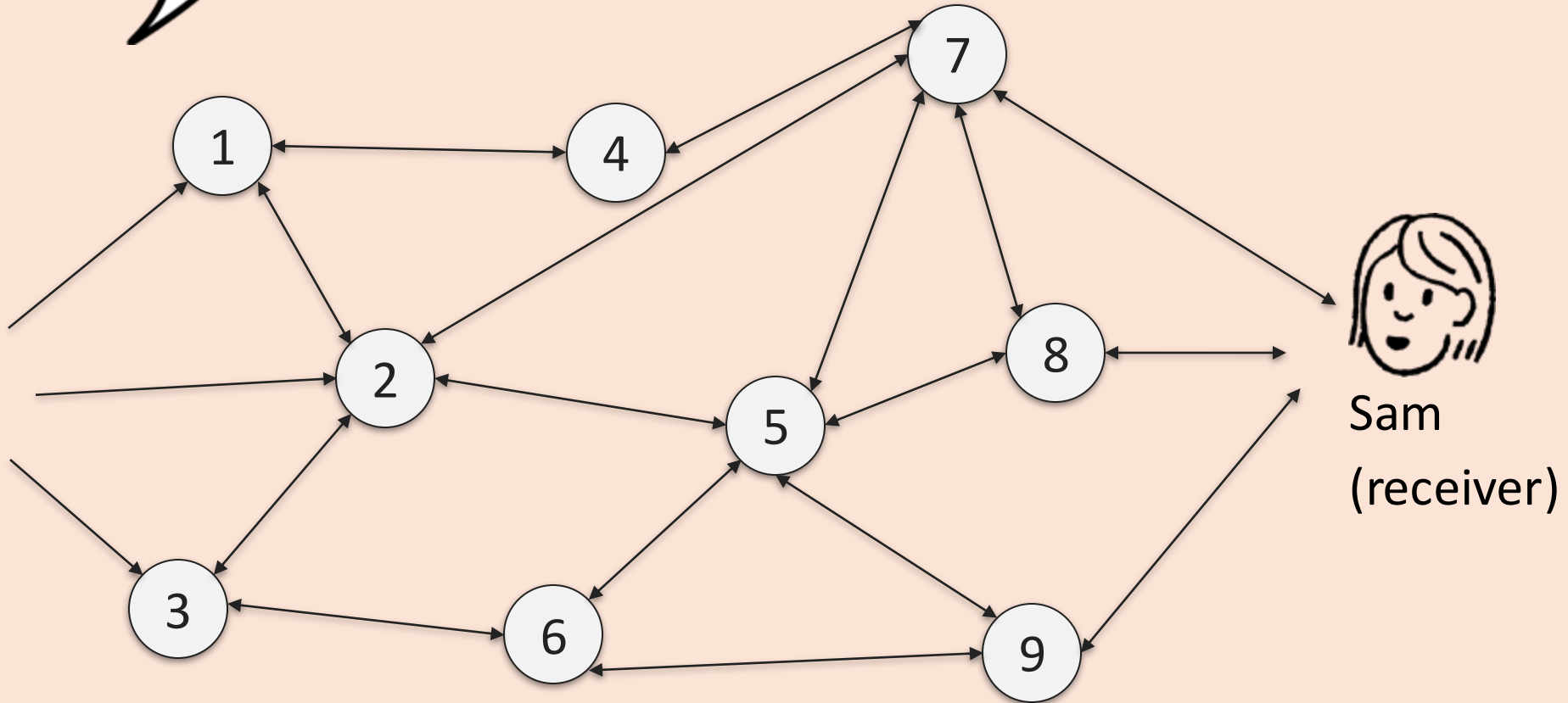
There are many different routes through **networks**.



Lucas



Izzy
(sender)



Not all **packets** take the same route. For example:

packet 1 goes through routers 1, 4 and 7

packet 2 goes through routers 2, 5 and 8

packet 3 goes through routers 3, 6 and 9



Sam

They all take different paths but end up in the same place.



Jun

What ensures that **packets** get to the right place?

The **packet header** identifies/states/says the destination for the data, it includes:

- the sender's IP address
- the receiver's IP address
- the **packet** number and the total number of **packets**

This information tells routers where to send the **packet** to.

True or false?

The **packet** numbers tells routers where to send the **packet**.

T True

F False ✓

Why?

The IP address is used to identify where the **packet** is being sent.

When all **packets** arrive at the destination, the device reassembles them using the **packet** numbers in the **header**.

Packet 3: packets

Packet 1: Data is

Packet 2: transferred in

Packet 1: Data is

Packet 2: transferred in

Packet 3: packets



Lucas

What happens if something goes wrong?

If a **packet** is missing, the receiver asks for it again. This ensures the full message is received.



Why is it important that the **packets** are numbered?

a

so the colours are brighter

b

so they can be sent faster

c

so they can be put back together in the right order

d

so the **header** is shorter



What types of data can be sent in **packets**?

- images
- videos
- audio
- files
- text

All of these are broken into **packets** to be sent.

Order the **packet** journey.

the steps of the journey	number
Each packet is given a header .	
The device reassembles the message.	
The message is split into packets .	
Packets arrive out of order.	
Packets are sent across a network .	

Order the **packet** journey.

the steps of the journey	number
Each packet is given a header .	2
The device reassembles the message.	5
The message is split into packets .	1
Packets arrive out of order.	4
Packets are sent across a network .	3

Monday 14th September

TBAT: explain how data is transferred across the internet.

Exit Quiz

1 Which of these best describes a network? (Tick **1** correct answer)

- ☐ a group of connected computers
- ☐ a single laptop
- ☐ a type of software
- ☐ a printer

2 What is the name for a small chunk of data sent across a network?

3 Which statement is correct about how data travels over the internet? (Tick **1** correct answer)

- ☐ Data is sent all at once in one big file.
- ☐ Data is hidden in pictures.
- ☐ Data is split into packets and sent separately.
- ☐ Data is only sent at night.

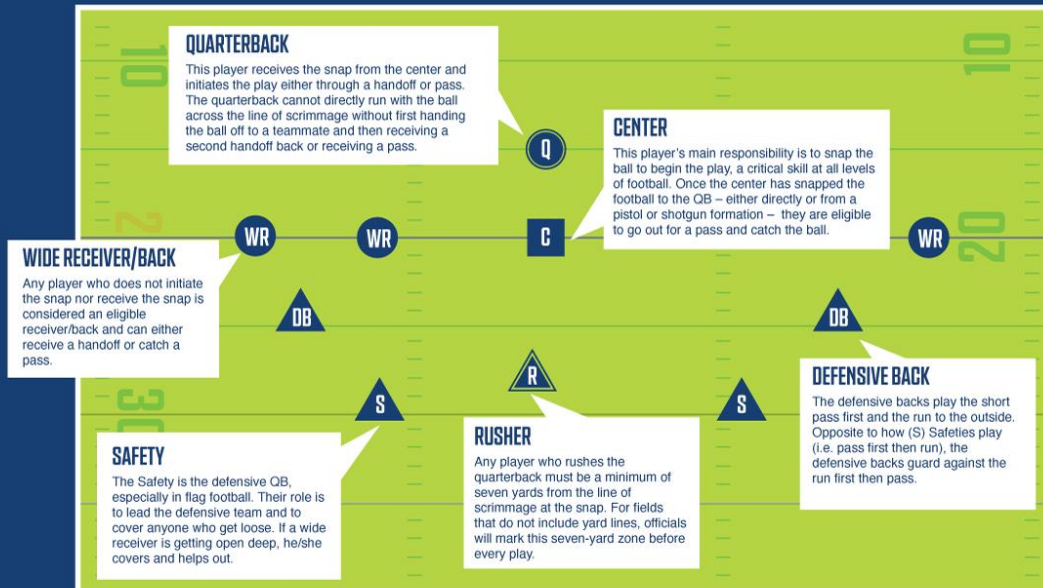
4 Why is it better to send data in packets rather than as one big file? (Tick **1** correct answer)

- ☐ It can travel different routes and be resent if lost.
- ☐ It looks better.
- ☐ It uses more colours.
- ☐ It makes the file smaller

Monday 14th September

TBAT: identify how to defend

OFFENSE vs DEFENSE



FLRG PLAY BOOK

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.

