

Monday



Forests the size of your playground!



*Pictured: An urban forest in Downtown Taipei, Taiwan
Source: Person-with-No Name*

Hundreds of tiny forests the size of a school playground are springing up in towns and cities all around the world. Using a method first created in Japan, the soil is prepared with nutrients and native trees are planted close together to produce a rich, dense forest in only a few years. Described as 'resilient bubbles of nature', they create a small ecosystem, an environment where lots of different plants and animals can live together and thrive. Dutchman, Daan Bleichrodt, from Tiny Forest IVN said, 'We're densely populated in Holland, but every neighbourhood has about 200 square metres of barren land that can be converted into a natural forest.' The British government has allocated funding for twelve mini forests to be built in the UK, but will this be enough to affect climate change? Daan replied that thousands of square metres would be needed to make any real change. However, he was confident that it would benefit the world in a different way. 'We can educate a generation of kids to learn how to restore forests,' he said.

Nigerian town's new ambulance

When pregnant women in Nigeria need to get to hospital to have their babies, most people have no transport. They rely on neighbours, who may have a car or even a motorbike. So, a woman called Halima, living in the village of Bardo, called a meeting. She said, 'Women in the village are a team and we make sure issues that affect us are resolved.' They decided to put funds together to buy an emergency vehicle to transport women to hospital quickly when they are about to have their babies. They named the vehicle 'Haihuwa Lafiya', which means 'safe motherhood'. Families pay a small amount of money to use it. The driver, Yunusa Mohammed, drives his emergency 'ambulance' very carefully. He said, 'I always make sure that I keep calm when I drive. I do this job with a lot of pride. I see it as my duty.'



*Pictured: Most towns and villages rely on donkey or ox and cart for transport
Source: Rod Waddington*



Hughie's beads of courage

Ten-year-old Hughie regards The Royal Manchester Children's Hospital as his second home. Because he has an illness called leukaemia that affects his blood, he has visited more than fifty times, often for checks on his blood. The doctors and nurses there have been so kind. They gave Hughie a necklace so that each time he has his blood taken, he is given a black bead to add to it. He already has fifty-six 'beads of courage' on his necklace for each arm or thumb prick he has endured. His best friend, Freddie wanted to do something to say thank you to the hospital for helping his pal to be brave, so he ran two kilometres every day to raise some money for the hospital. When he appeared on BBC Breakfast on Christmas Day, two generous viewers topped up Freddie's total from £185,000 to a whopping £200,000! Both Hughie and Freddie adore music,



Pictured: Hughie (right) with his best friend, Freddie before his diagnosis

Source: @GabSutton

so, they agreed that some of the money should be spent on music therapy. Some of the remainder will be spent on a Belmont infuser. This piece of equipment warms up blood donations so that when blood transfusions are given to patients like Hughie, the blood is the same temperature as his body and does not cause hypothermia.

Your thoughts on last week's news...

I think our lives would be different because we would have to walk everywhere.
Logan – age 9

Transport is very important in our lives as we can travel places and get lots of food.
Esther – age 10



What was your opinion on this week's news? Visit our discussion area, found here:

www.picture-news.co.uk/discuss
to share your thoughts!

Our lives would be different with no transport because we use transport so much, the bus, the car as well as trains and walking! No transport means that we couldn't fulfil many tasks but it won't be that bad because it would help with air pollution.
Fannie K – age 10

/ think...



YOUR
COMMENTS

Share your thoughts on our online
discussion board:
www.picture-news.co.uk/discuss

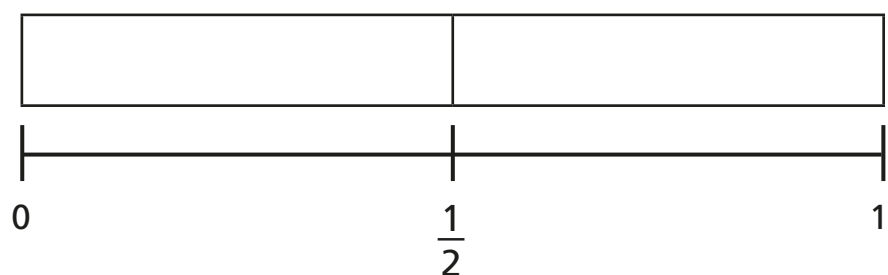
Email: help@picture-news.co.uk Tweet: @HelpPicture
or post to: Picture News Ltd, Colber Lane, Bishop
Thornton, Harrogate, North Yorkshire, HG3 3JR

Equivalent fractions (2)

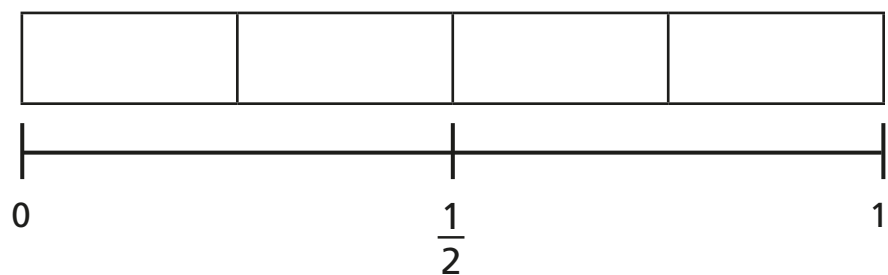


1 Shade the bar models to represent the fractions.

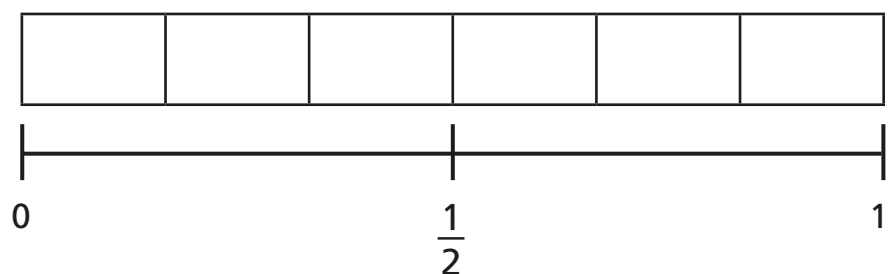
a) Shade $\frac{1}{2}$ of the bar model.



b) Shade $\frac{2}{4}$ of the bar model.



c) Shade $\frac{3}{6}$ of the bar model.

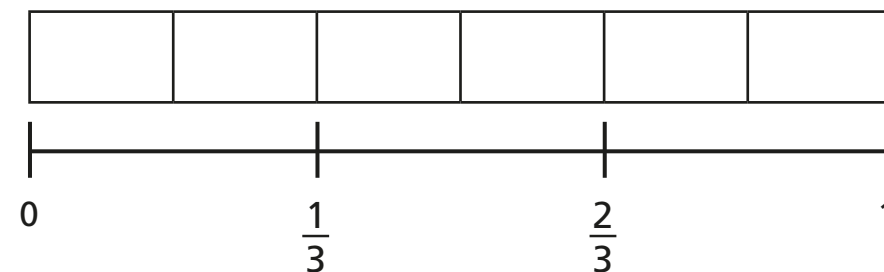


d) What do you notice?

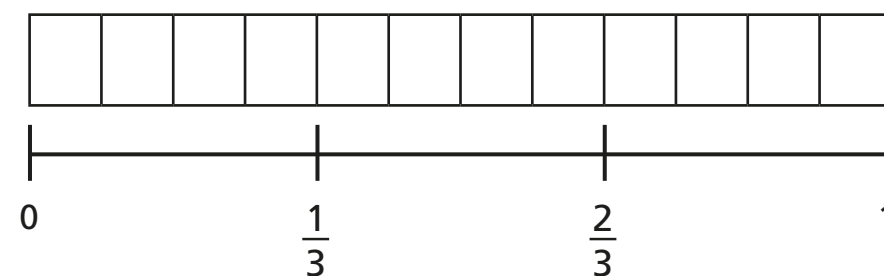
e) Write another fraction that is equivalent to $\frac{1}{2}$

2 Shade $\frac{2}{3}$ of each bar model.

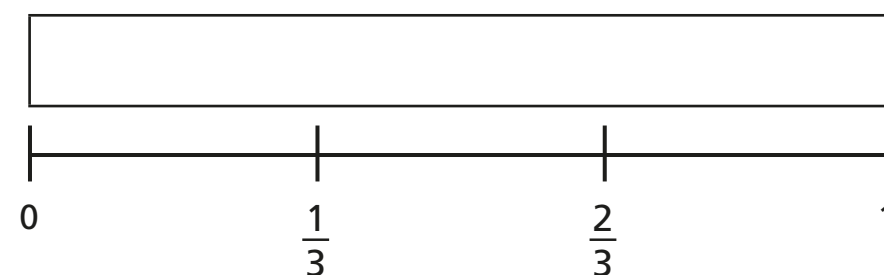
a)



b)



c)

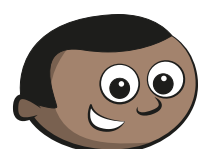
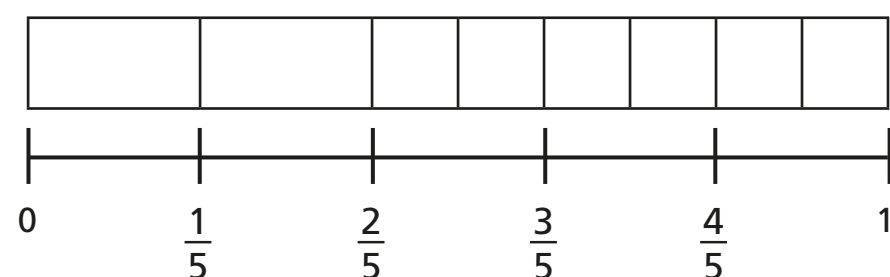
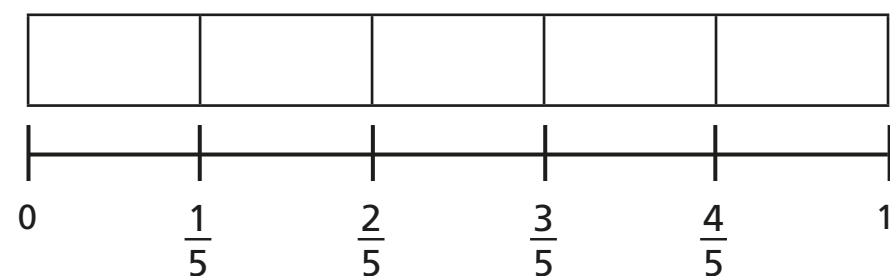


d) Use your answers to parts a), b) and c) to complete the equivalent fractions.

$$\frac{2}{3} = \frac{\square}{6} = \frac{8}{\square} = \frac{\square}{15}$$



- 3 Mo is finding equivalent fractions.



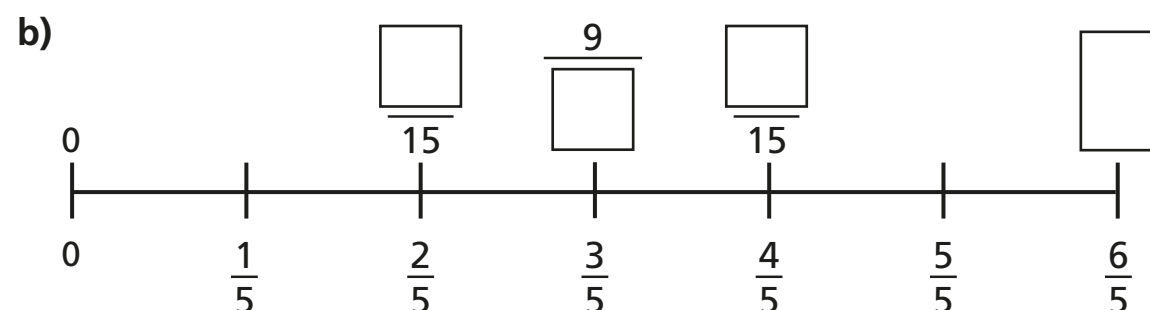
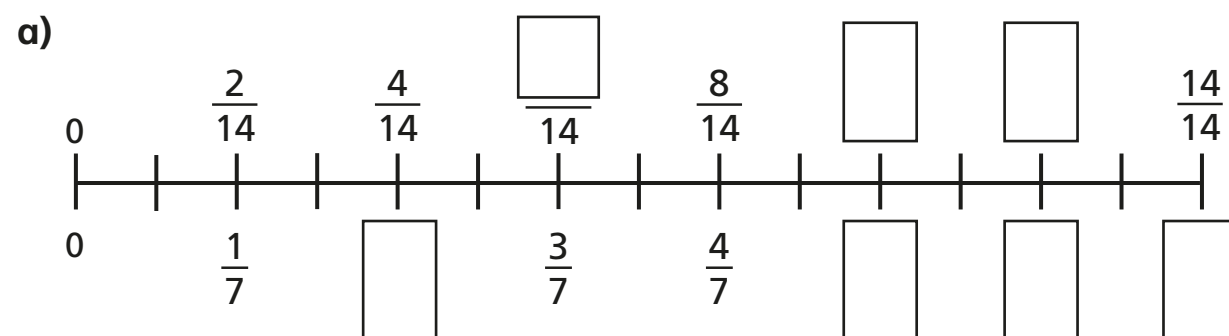
$\frac{6}{8}$ is equivalent to $\frac{4}{5}$

Do you agree with Mo? _____

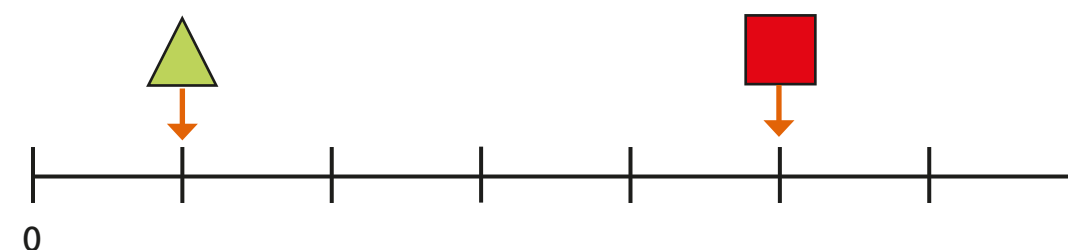
Explain your answer.



- 4 Find the missing numbers.



- 5 Here is a number line.



- a) What fraction is each shape pointing to?

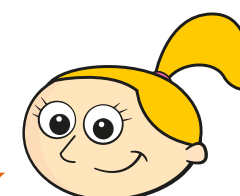
 =  =

- b) A circle is halfway between the triangle and the square.

Draw the circle on the number line.

- c)




The circle is pointing to $\frac{9}{21}$



Do you agree with Eva? _____

Show how you worked this out.

- d) Write three equivalent fractions for each shape.

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

Compare answers with a partner.

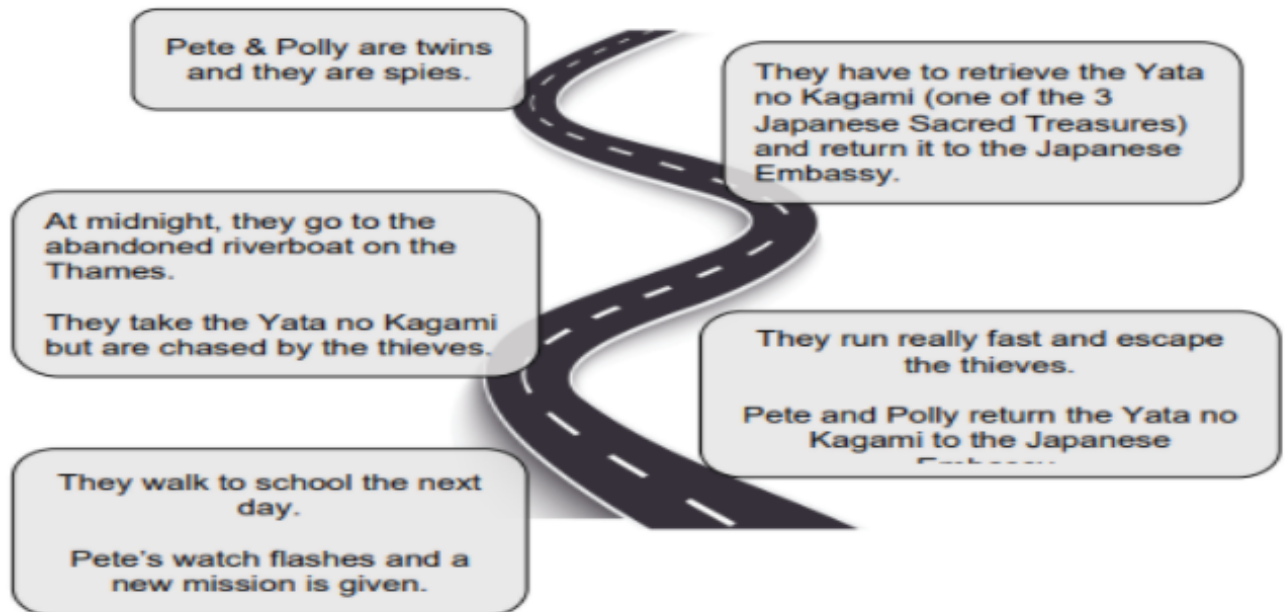


Have a listen to our story to recap on the main events.

<https://soundcloud.com/talkforwriting/mission/s-qMLb31YjpM7>

	Bare bones of the story	Mission Possible
Opening	<ul style="list-style-type: none"> Main characters (MCs) introduced & special secret about them revealed 	<ul style="list-style-type: none"> Pete and Polly are twins they are spies
Build Up	<ul style="list-style-type: none"> MCs given mission/ quest which they accept 	<ul style="list-style-type: none"> have to retrieve the Yata no Kagami (one of 3 Japanese Sacred Treasures) and return it to Japanese Embassy
Problem	<ul style="list-style-type: none"> MCs set out to complete mission/ quest but encounter problem on way 	<ul style="list-style-type: none"> at midnight go to abandoned riverboat on Thames take the Yata no Kagami but chased by thieves
Resolution	<ul style="list-style-type: none"> MCs overcome problem & complete their mission/quest 	<ul style="list-style-type: none"> run really fast - escape thieves Pete & Polly return Yata no Kagami to Japanese Embassy
Ending	<ul style="list-style-type: none"> MCs return to their everyday lives New mission arrives 	<ul style="list-style-type: none"> walk to school next day Pete's watch flashes - new mission arrives

The Story Road

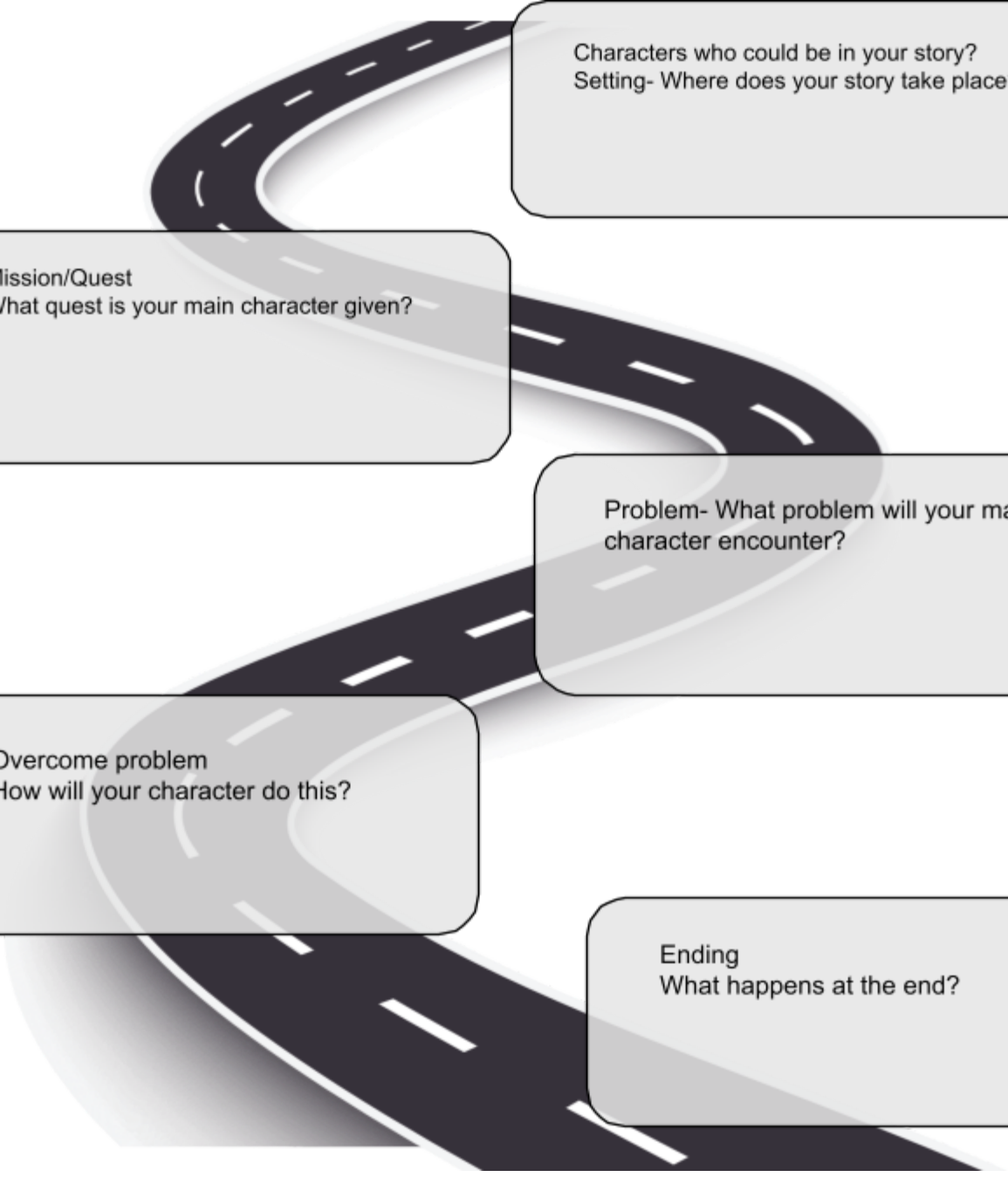


Do you have any ideas for your story?

Have you watched any films or read any other books that you could use as a starting point or to get ideas from?

Use the road map template sheet to capture your story ideas. Make sure you follow the correct structure from the boxed up plan!

Use this road to plan your story



Characters who could be in your story?
Setting- Where does your story take place?

Mission/Quest
What quest is your main character given?

Problem- What problem will your main character encounter?

Overcome problem
How will your character do this?

Ending
What happens at the end?

Tuesday

Monday 1st March 2021

LO: I am learning to recognise how vibrations from sound travel through a medium to an ear.

Can I remember?

1. Why do we need food?
2. Name the tube that carries food from the mouth to the stomach.
3. What is a conductor?
4. What is an insulator?



Monday 1st March 2021

LO: I am learning to recognise how vibrations from sound travel through a medium to an ear.

Can I remember?

1. Why do we need food?
So that the body has enough energy to survive
2. Name the tube that carries food from the mouth to the stomach.
Oesophagus
3. What is a conductor?
A material that allows charge to move easily through it
4. What is an insulator?
A material that does not allow charge to move easily through it



Let's explore sound!

If you are working from home use the website to have a go at exploring the online instruments!

<https://www.virtualmusicalinstruments.com/>

If you are in class we are going to move around the classroom and exploring the different instruments.

When using the instruments think about:

What sound you can hear?

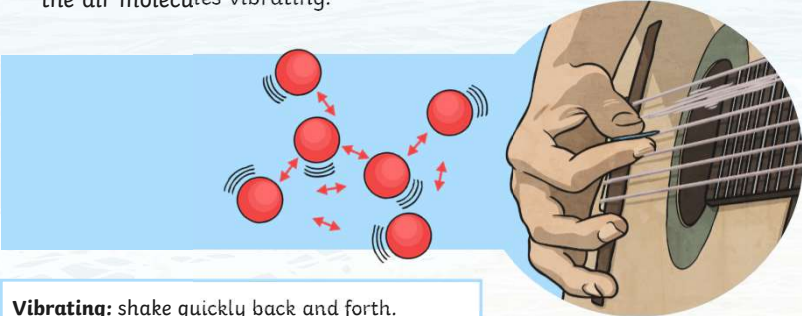
What is vibrating to make the sound?

Can you change the sound? How?

Can you change the pitch? How?

How Sound is Made

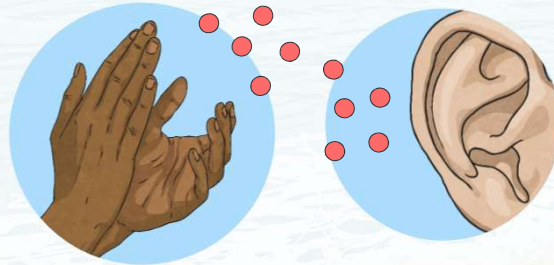
- Like light, sound travels through the air in waves.
- Sound is made by air molecules **vibrating**.
- When you clap your hands, the air around your hands shakes. This is the air molecules vibrating.



Vibrating: shake quickly back and forth.

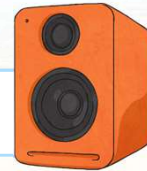
How Sound is Made

The vibration of the air molecules around the hands shake the molecules next to them and so on, until the air molecules in the ear are vibrating.



Have you ever felt a speaker when the sound is on?

It vibrates.



How Sound is Made



Molecules Vibrating

When air molecules inside the ear vibrate, they shake tiny hairs on the insides of the ears.

The hairs are connected to nerves under the skin.

These nerves send messages to your brain to tell you that you heard a noise.



Communicating with the brain

How Sound is Made

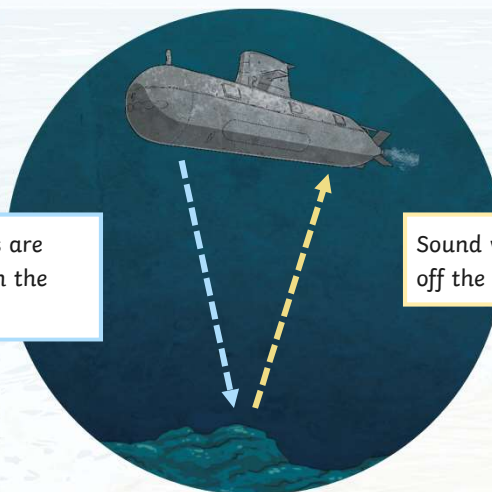
- Sound needs molecules to move. It is impossible for sound to travel in space.
- Sound doesn't have to move through air. It can travel through water or metal.
- In fact, sound travels faster through water and solids than it does through air.



How Sound is Made

Sound waves are sent out from the submarine.

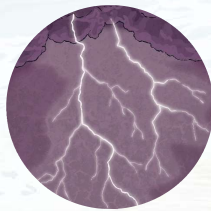
Sound waves bounce off the objects.



How Sound is Made

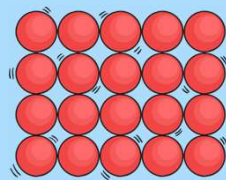
- Sound travels much slower than light, whether in air or in water.
- You often hear things after you see them, for example you see the lightning before you hear the thunder.

Light travels at 186,000 miles per second.
Sound travels at 770 miles per hour.

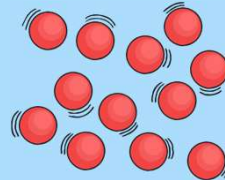


How Sound is Made

Why do you think sound travels faster through solids and liquids than gases?







Solid



Liquid

Hint: think about how close the molecules are to each other.

How we hear things

1			The sound wave reaches the ear . The wave travels deep inside the ear, where it is turned into an electrical signal that the brain understands as sound .	
2			The vibrating object causes the particles in the air around it to vibrate too, because it is touching them.	
3			The vibrating air particles bump into other air particles further away, causing them to vibrate too. This is called a sound wave . It gradually moves away from the source .	
4			An object starts to vibrate , or move very quickly back and forth. This is called a sound source . An example of a sound source is a plucked guitar string.	

twinkl.com

How we hear things

Outstanding Science Year 4 - Sound - OS4D001

National Curriculum Statutory Requirements

4D1 - identify how sounds are made, associating some of them with something vibrating; 4D2 - recognise that vibrations from sounds travel through a medium to the ear

Learning Objective



I can explain how sounds are made and how we hear things.

Me:   

Teacher:   

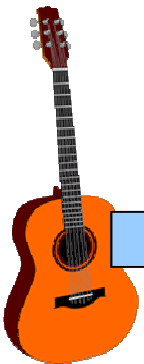
Scientific play

Pick up a string instrument, such as a guitar or violin. Pluck one of the strings. What do you see? What do you hear? Touch the string while it is still moving. What do you feel? What do you hear?

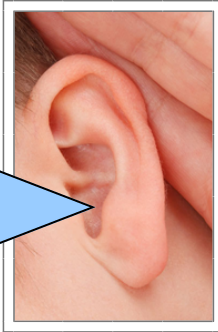


How sound is made

Sound is caused by **vibration**. Vibration means **wobbling** very quickly back and forth. When you pluck a guitar string, or hit a drumskin, you can see the material vibrate. This causes the **air** touching the string to vibrate, which causes air further away to vibrate, which causes the air near your **ear** to vibrate, which your brain experiences as **sound**. The moving vibration is called a **sound wave**.

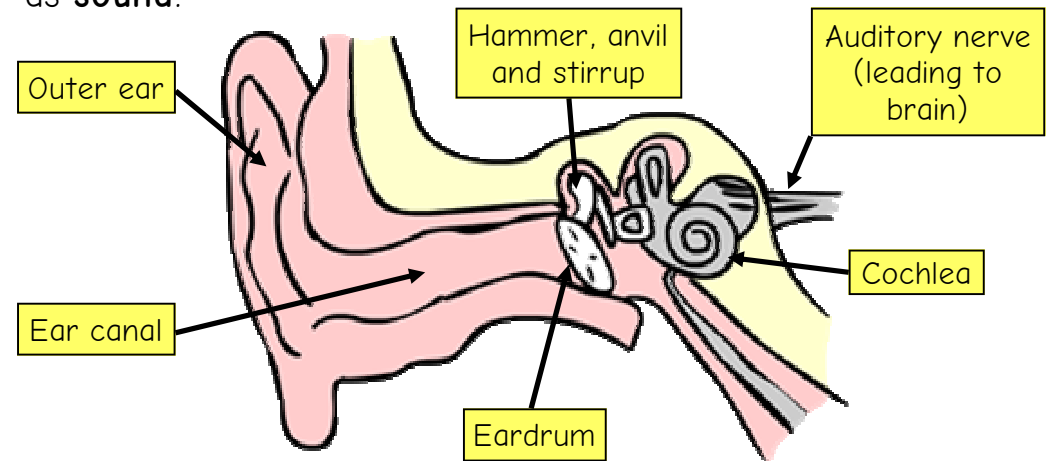


The vibrating **guitar** causes the **air** to vibrate. This vibrating air is called a **sound wave**. When the air near your **ears** vibrates, your brain experiences a **sound**.



How our ears work

When a sound wave reaches our ear, our **outer ear** (the part that we can see on the side of our heads) funnels the sound into our heads down the **ear canal**. At the end of the ear canal is the **eardrum**, which is waterproof and airtight. Past the ear canal is the **middle ear**. Inside the middle ear are the **hammer, anvil and stirrup** (the three smallest bones in the body) which vibrate and pass the sound waves to the **inner ear**, which contains the **cochlea**, which turns the vibrations into **electrical signals**. These signals travel down the **auditory nerve** to the **brain**, which experiences the signal as **sound**.



Activity

Carefully cut out the diagrams and descriptions to create an **explanation text** showing how we hear things. For an extra challenge, try drawing some of your own diagrams and writing some of your own descriptions.

How we hear things

1

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2

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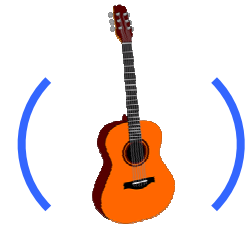
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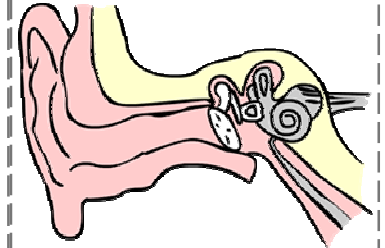
4

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The sound wave reaches the **ear**. The wave travels deep inside the ear, where it is turned into an **electrical signal** that the brain understands as **sound**.



The vibrating object causes the **particles** in the **air** around it to vibrate too, because it is touching them.



The vibrating air particles bump into other air particles further away, causing them to vibrate too. This is called a **sound wave**. It gradually moves away from the **source**.



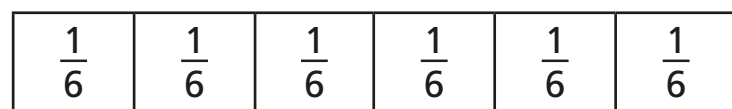
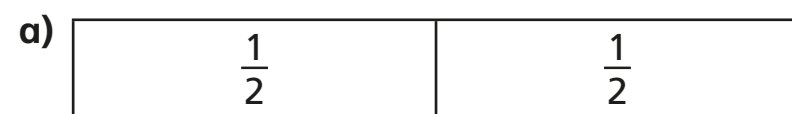
An object starts to **vibrate**, or move very quickly back and forth. This is called a **sound source**. An example of a sound source is a plucked guitar string.



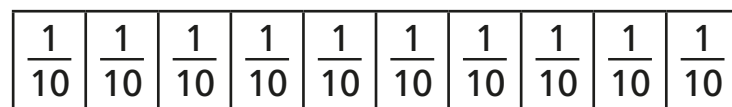
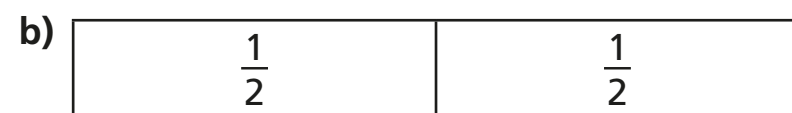
Equivalent fractions (1)



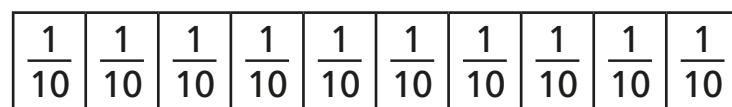
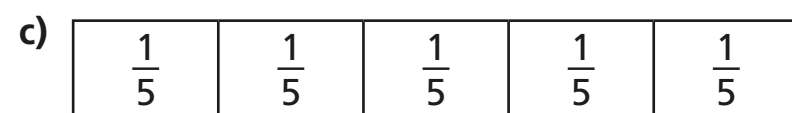
1 Shade the bar models to represent the equivalent fractions.



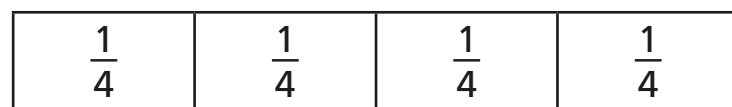
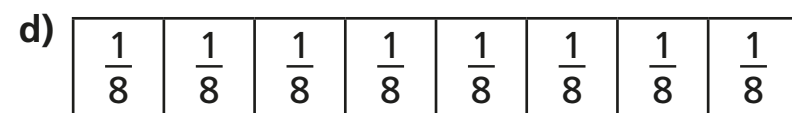
$$\frac{1}{2} = \frac{3}{6}$$



$$\frac{1}{2} = \frac{5}{10}$$

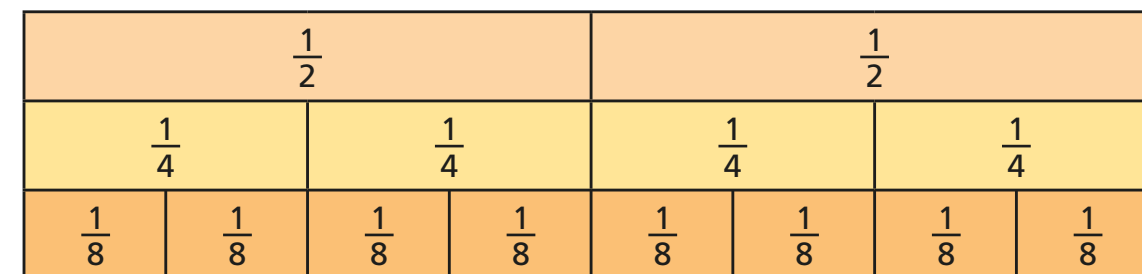


$$\frac{4}{5} = \frac{8}{10}$$



$$\frac{6}{8} = \frac{3}{4}$$

2 Use the fraction wall to complete the equivalent fractions.



a) $\frac{1}{2} = \frac{\square}{4}$

c) $\frac{2}{4} = \frac{4}{\square}$

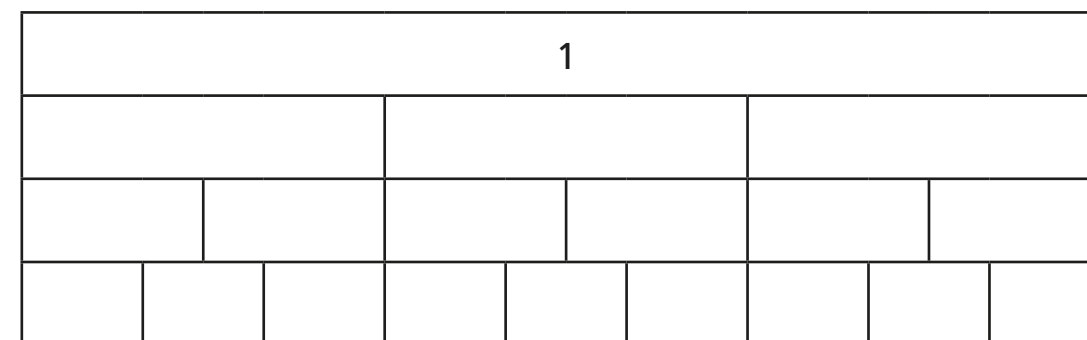
e) $\frac{\square}{8} = \frac{3}{4}$

b) $\frac{1}{2} = \frac{\square}{8}$

d) $\frac{2}{8} = \frac{\square}{4}$

f) $\frac{2}{2} = \frac{\square}{4} = \frac{\square}{8}$

3 a) Label the fractions on the fraction wall.



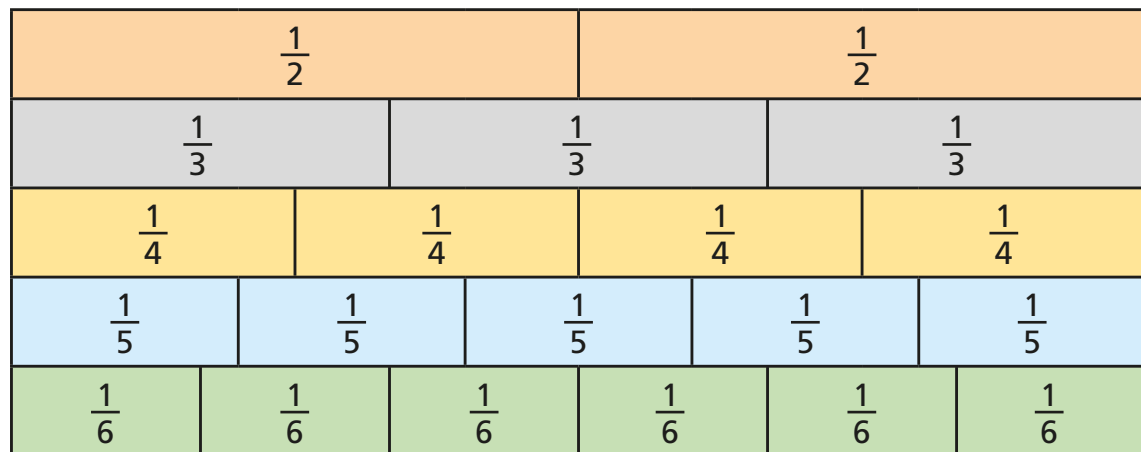
b) Use the fraction wall to complete the equivalent fractions.

$$\frac{1}{3} = \frac{\square}{6} = \frac{3}{\square}$$

$$\frac{\square}{3} = \frac{4}{\square} = \frac{6}{9}$$

$$\frac{3}{\square} = \frac{6}{\square} = \frac{9}{\square} = 1$$

4 Here is a fraction wall.



Is each statement true or false? Tick your answers.

- | | True | False |
|---|--------------------------|--------------------------|
| a) $\frac{1}{2}$ is equivalent to $\frac{3}{6}$ | <input type="checkbox"/> | <input type="checkbox"/> |
| b) $\frac{2}{3}$ is equivalent to $\frac{3}{4}$ | <input type="checkbox"/> | <input type="checkbox"/> |
| c) $\frac{2}{4}$ is equivalent to $\frac{3}{6}$ | <input type="checkbox"/> | <input type="checkbox"/> |
| d) $\frac{2}{3}$ is equivalent to $\frac{4}{5}$ | <input type="checkbox"/> | <input type="checkbox"/> |
| e) $\frac{2}{3}$ is equivalent to $\frac{4}{6}$ | <input type="checkbox"/> | <input type="checkbox"/> |
| f) $\frac{3}{5}$ is equivalent to $\frac{4}{6}$ | <input type="checkbox"/> | <input type="checkbox"/> |

Write your own equivalent fractions statements.

Ask a partner to say if they are true or false.



5 Are the statements always, sometimes or never true?

Circle your answer.

Draw a diagram to support your answer.

a) The greater the numerator, the greater the fraction.

always sometimes never

b) Fractions equivalent to one half have even numerators.

always sometimes never

c) If a fraction is equivalent to one half, the denominator will be double the numerator.

always sometimes never



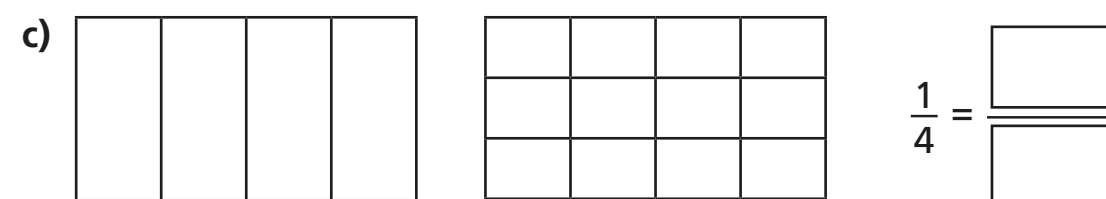
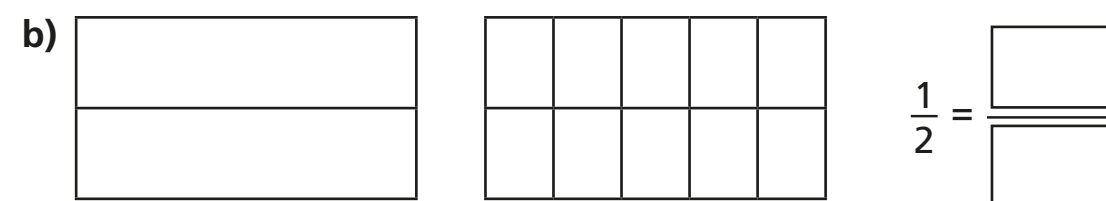
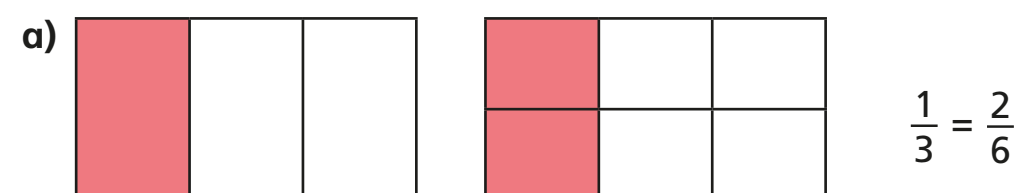
Wednesday

Equivalent fractions (2)



- 1 Shade the diagrams to help you complete the equivalent fractions.

The first one has been done for you.



- 2 Draw a diagram to show that $\frac{3}{4} = \frac{6}{8}$

- 3 Match the equivalent fractions.

$$\frac{1}{4}$$

$$\frac{4}{10}$$

$$\frac{10}{15}$$

$$\frac{1}{7}$$

$$\frac{3}{21}$$

$$\frac{2}{3}$$

$$\frac{2}{5}$$

$$\frac{3}{12}$$

- 4 Complete the equivalent fractions.

a) $\frac{1}{5} = \frac{\boxed{}}{10}$

d) $\frac{3}{10} = \frac{9}{\boxed{}}$

g) $\frac{8}{12} = \frac{2}{\boxed{}}$

b) $\frac{4}{5} = \frac{\boxed{}}{10}$

e) $\frac{6}{8} = \frac{3}{\boxed{}}$

h) $\frac{2}{\boxed{}} = \frac{10}{25}$

c) $\frac{3}{10} = \frac{6}{\boxed{}}$

f) $\frac{8}{12} = \frac{\boxed{}}{3}$

i) $\frac{1}{\boxed{}} = \frac{4}{28}$



- 5 a) Write the fractions in the correct place on the sorting diagram.

$\frac{8}{24}$	$\frac{3}{12}$	$\frac{5}{15}$	$\frac{6}{24}$	$\frac{4}{12}$	$\frac{9}{36}$	$\frac{3}{9}$	$\frac{4}{16}$
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	equivalent to $\frac{1}{3}$	equivalent to $\frac{1}{4}$
odd denominator		
even denominator		

- b) Are any of the boxes empty?

Why do you think this is?

Talk about your answer with a partner.



- 6 Find three ways to make the fractions equivalent.

a) $\frac{2}{\square} = \frac{4}{\square}$ $\frac{2}{\square} = \frac{4}{\square}$ $\frac{2}{\square} = \frac{4}{\square}$

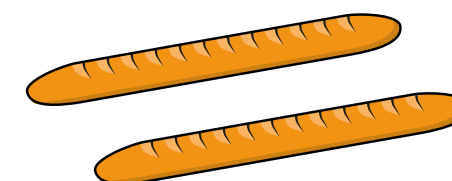
b) $\frac{1}{\square} = \frac{4}{\square}$ $\frac{1}{\square} = \frac{4}{\square}$ $\frac{1}{\square} = \frac{4}{\square}$

c) $\frac{\square}{3} = \frac{\square}{9}$ $\frac{\square}{3} = \frac{\square}{9}$ $\frac{\square}{3} = \frac{\square}{9}$

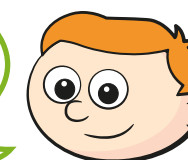
- 7 Eva and Ron have a baguette each.

The baguettes are the same size.

Eva cuts her baguette into 8 equal pieces.



3 of my equal pieces are equal to 6 of Eva's.



How many equal pieces has Ron cut his baguette into?

Ron has cut his baguette into equal pieces.



Thursday 4th March

LO: I am learning about forgiveness from bible stories.

★ I can recall a Christian story about forgiveness and say what it tells people about how to treat each other

★ I can describe what a Christian might learn about forgiveness from a Biblical text.

★ I can explain how Christians might try to put into practice Jesus' teachings about forgiveness.

Egbert Owl asks children to tell him who Jesus is/was. Children to brainstorm their knowledge and perceptions of Jesus so far. Do they think he had enemies? Explore why Jesus had enemies and was arrested. Pupils could imagine themselves as someone who let Jesus down - either Judas or Peter. They could develop a piece of drama where they explain their actions or feelings.

The last Supper www.bbc.co.uk/education/clips/z8vcd2p
and The last Supper (animation) www.bbc.co.uk/education/clips/zrfgkqt
What was Jesus' response to the people who let him down?
Did he forgive them?

NOTES

Judas betrayed Jesus by kissing him on the forehead to identify to the soldiers who he was for 30 pieces of silver.

Pontius Pilate wanted him dead as the Jewish leaders felt threatened by his knowledge and skills that he was showing (his miracles from God, healing the sick, turning bread and fish for 5 into 5000.)

Jesus had shouted at traders to leave the temple as they were making the temple to be a den of thieves. The Jewish leader did not like this as Jesus said God would not approve and God shall destroy you. As Jesus had already shown his powers as the son of God, the leader feared what would happen next and wanted rid of Jesus.

Can I remember?

Who was Jesus?

Type here:



Today you are going to be listening to and then rewrite a story about forgiveness.

Listen carefully to the story 'The Last Supper'. Who is forgiven for what and by who?

<https://www.bbc.co.uk/bitesize/clips/z8vcd2p>

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

Now rewrite the story of the last supper. On the next slide there is a list of key vocabulary for you to use where you can type your story too. Alternatively, you can use pencil and paper and upload to google classroom.

Key vocabulary for you to use:

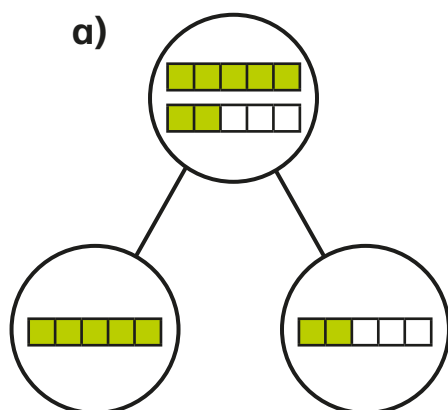
Jesus	Judas	bread	wine	Passover meal
betray	enemies	feast	Jerusalem	
captured	friends	secret	trap	
pay				

Start here:

Thursday

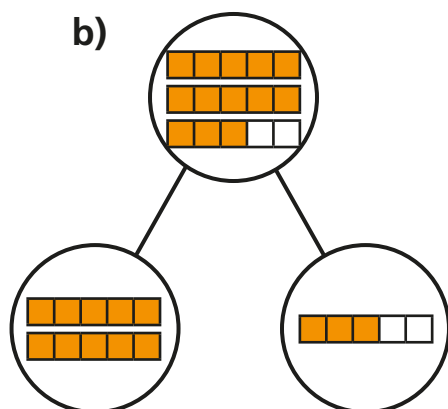
Fractions greater than 1

1 Complete the sentences.



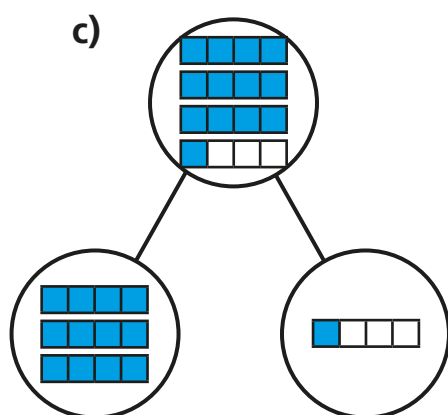
There are 7 fifths altogether.

7 fifths = whole + fifths



There are fifths altogether.

fifths = wholes +
 fifths

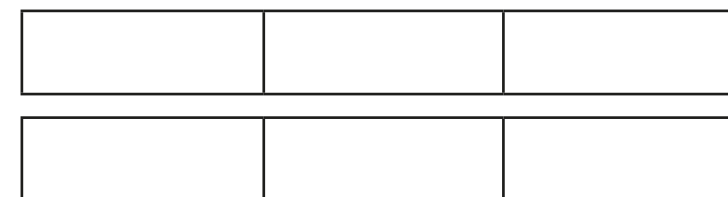


There are quarters altogether.

quarters = wholes +
 quarter

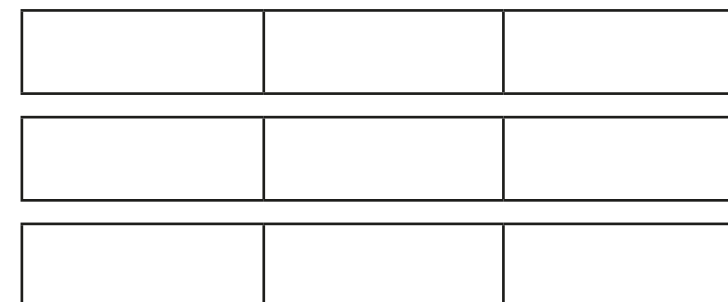
2 Shade the bar models to represent the fractions.

a) $\frac{5}{3}$



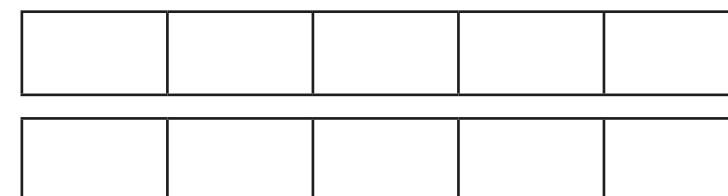
$\frac{5}{3} =$ whole + thirds =

b) $\frac{8}{3}$



$\frac{8}{3} =$ wholes + thirds =

c) $\frac{8}{5}$



$\frac{8}{5} =$ whole + fifths =



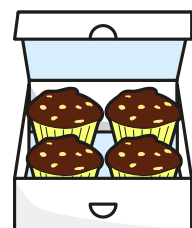
3 Complete the statements.

- a) $\frac{12}{2} = \square$ wholes e) $\frac{15}{3} = \square$ wholes
- b) $\frac{12}{4} = \square$ wholes f) $\frac{15}{5} = \square$ wholes
- c) $\frac{12}{6} = \square$ wholes g) $\frac{15}{4} = \square$ wholes + \square quarters
- d) $\frac{12}{3} = \square$ wholes h) $\frac{15}{2} = \square$ wholes + \square half

4 Whitney bakes 26 muffins.

Muffins are packed in boxes of 4

a) How many boxes can Whitney fill?



Whitney can fill \square boxes.

b) How many more muffins does Whitney need to fill another box?

Whitney needs \square muffins to fill another box.

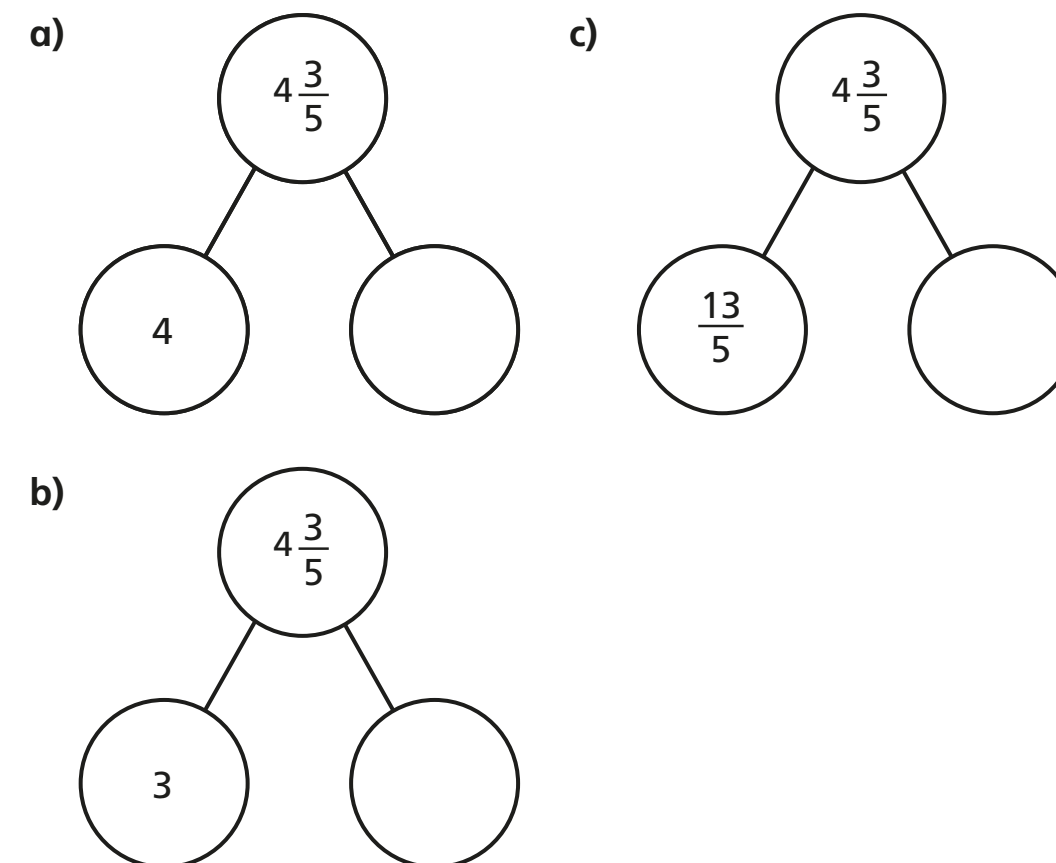
Explain how you know.

How does writing $\frac{26}{4}$ help you to answer this?

5 Write $<$, $>$ or $=$ to complete the statements.

- a) 2 wholes and 3 quarters \bigcirc 5 quarters
- b) 2 wholes and 3 quarters \bigcirc 15 quarters
- c) 2 wholes and 3 sixths \bigcirc 15 sixths
- d) 2 wholes and 3 eighths \bigcirc 15 eighths
- e) $\frac{15}{3} \bigcirc \frac{15}{5}$
- f) $\frac{15}{3} \bigcirc \frac{20}{4}$

6 Complete the part-whole models.



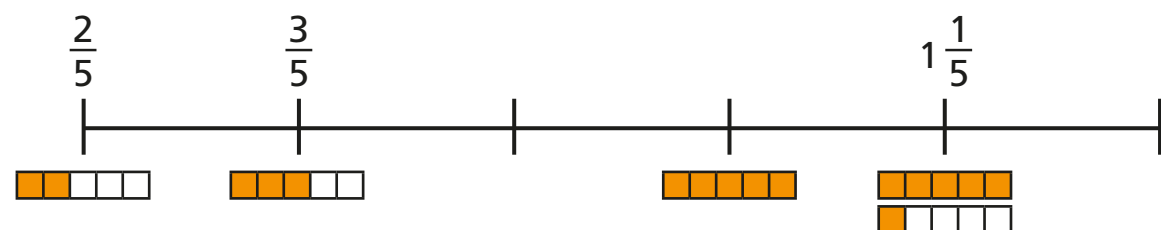
Friday

Count in fractions

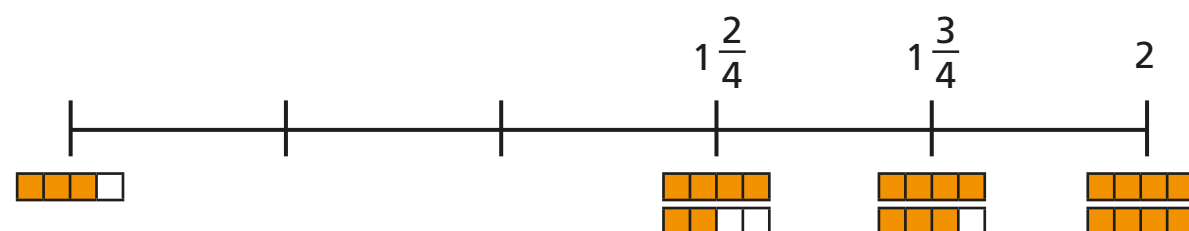


1 Complete the number lines.

a)

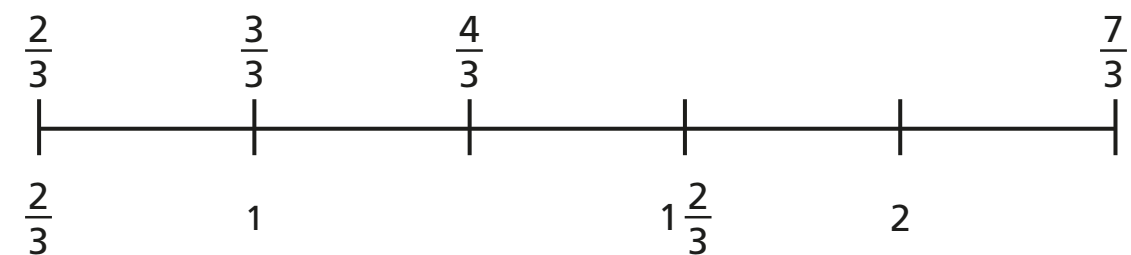


b)

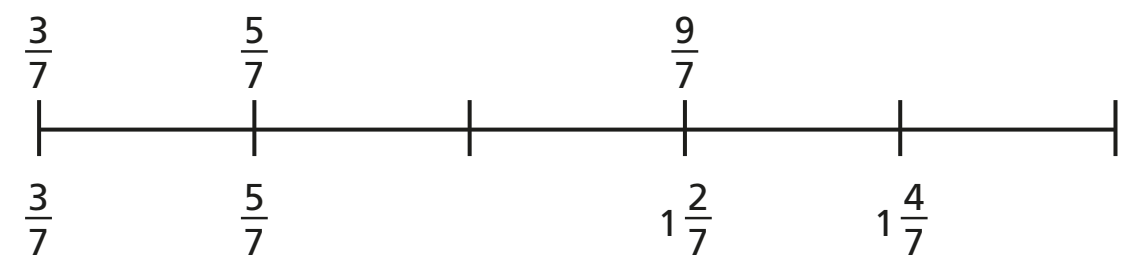


2 Complete the number lines.

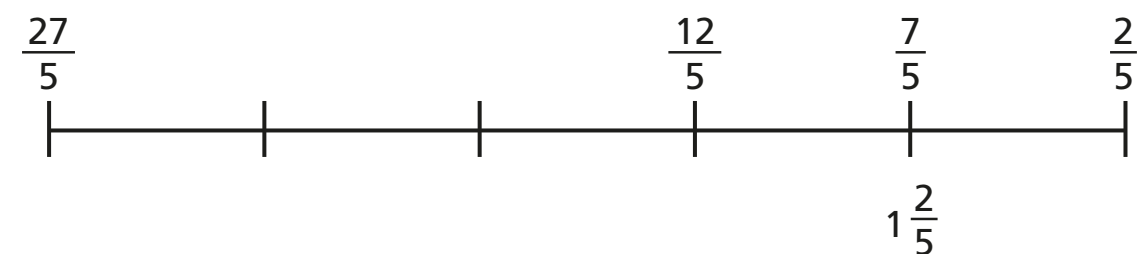
a)



b)



c)



3 Write the next three fractions in each sequence.

a) $\frac{1}{8}, \frac{2}{8}, \frac{3}{8}, \square, \square, \square$

b) $\frac{1}{4}, \frac{2}{4}, \frac{3}{4}, \square, \square, \square$

c) $\frac{1}{4}, \frac{3}{4}, 1\frac{1}{4}, \square, \square, \square$

d) $4, 3\frac{1}{3}, 2\frac{2}{3}, \square, \square, \square$

4 What is the missing fraction?

Give two possible answers.

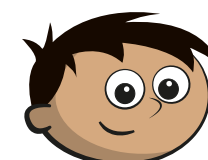
a) $\frac{8}{3}, \frac{12}{3}, \frac{16}{3}, \frac{20}{3}, \square, \frac{28}{3}, \frac{32}{3}$

b) $\frac{8}{5}, \frac{12}{5}, \frac{16}{5}, \frac{20}{5}, \square, \frac{28}{5}, \frac{32}{5}$

c) $\frac{8}{7}, \frac{12}{7}, \frac{16}{7}, \frac{20}{7}, \square, \frac{28}{7}, \frac{32}{7}$

5 Amir, Dexter and Dora are counting in fractions.

$$\frac{8}{10}, \frac{9}{10}, \frac{10}{10}, \frac{11}{10}$$



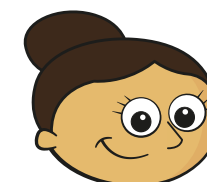
Amir

The next fraction
is $\frac{12}{10}$

The next fraction
is $1\frac{2}{10}$



Dexter



Dora

The next fraction
is $1\frac{1}{5}$

a) Who is correct? _____

Explain your answer.

b) Compare answers with a partner.

