Wednesday 4th November
Morning Challenge

There are 27 children in a class. Each child pays £7.49 for a school trip. How much do they pay altogether?

A football club has an average attendance of 859 people to each match. What is the total attendance for the 29 matches played in a season?

Wednesday 4th November

TBAT: read aloud, showing understanding through intonation.

Words we will find in Chapter 7 -

vibrations

A quick, repeated moving or shaking motion.



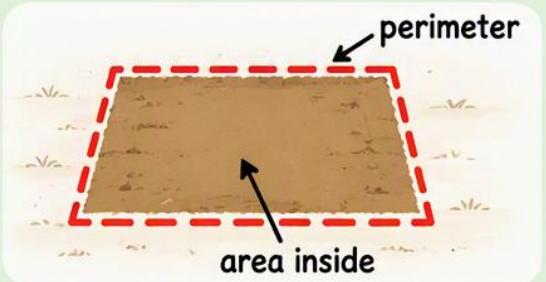
defective

Not working properly; faulty or broken.



perimeter

The edge or boundary around a shape or area.



crust

A hard, dry layer on the surface of something.



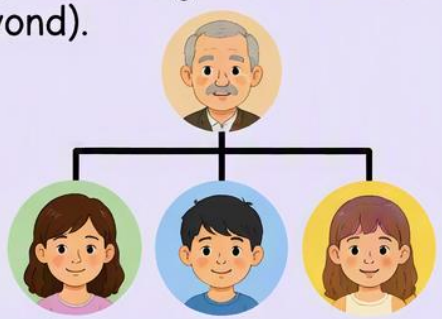
forlorn

Very sad and lonely.



descendants

People who are related to someone from a later generation (e.g. children, grandchildren, and beyond).



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Times tables

		1	0	7	4
x				1	9

		2	1	9	6
x				4	5

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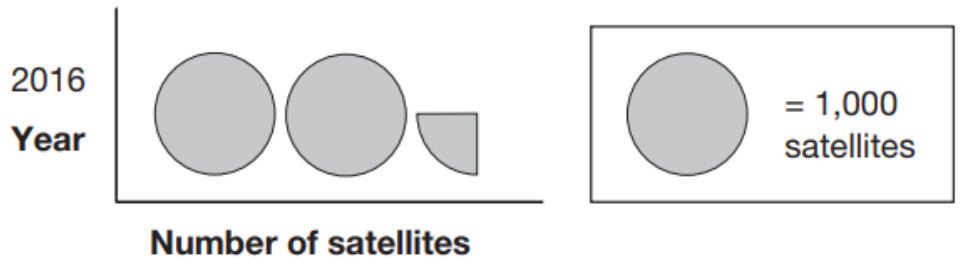
TBAT: read, write and order negative numbers.

3 in 3

1. 5,487 ÷ 3 =
2. 4,563 x 8 =
3. Identify the **improper fraction** that is equivalent to **5** 6/7

$$\frac{32}{7} \qquad \frac{40}{7} \qquad \frac{41}{7} \qquad \frac{29}{7}$$

This pictogram shows the number of satellites above the Earth in 2016.



How many satellites were above the Earth in 2016?

Daily 10 - Mental Maths Challenge - Topmarks

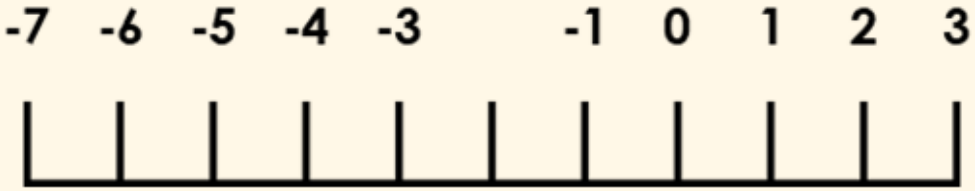
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TBAT: read, write and order negative numbers.

Put these numbers in ascending order.

5	-1	0	-3	1	3	-5	4	-2	-4	2

smallest largest



The missing number comes between _____ and _____.

It is less than_____ but greater than _____.

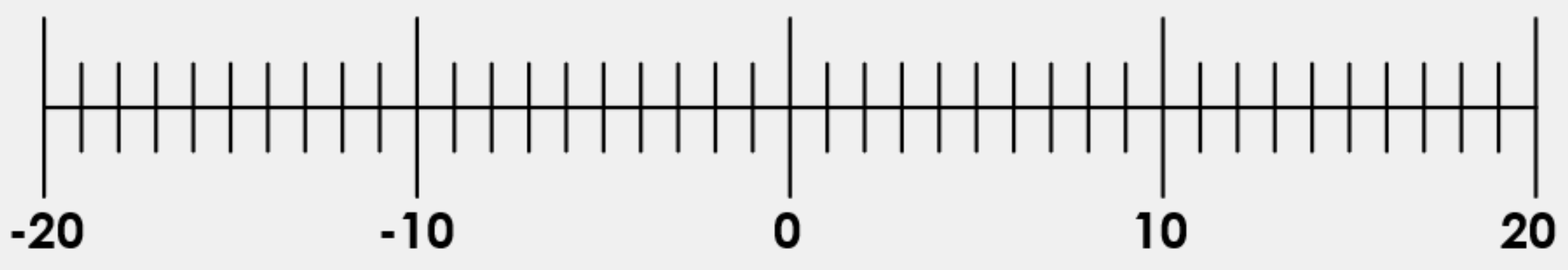
The missing number is ____.

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TBAT: read, write and order negative numbers.

15	-8

-13	8

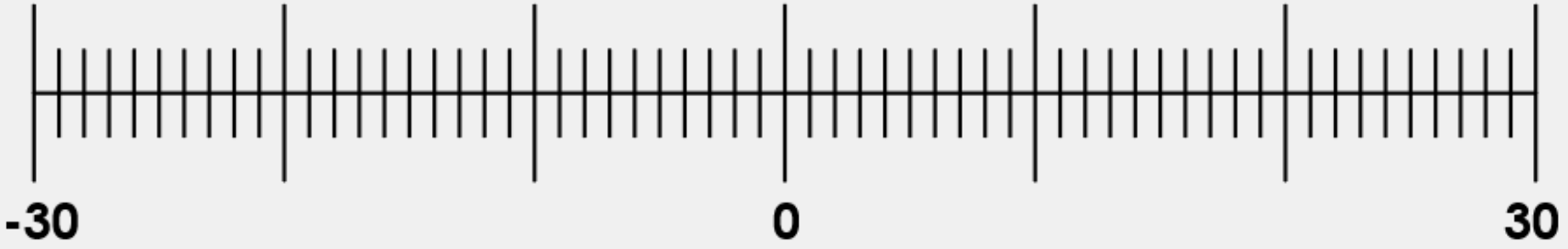


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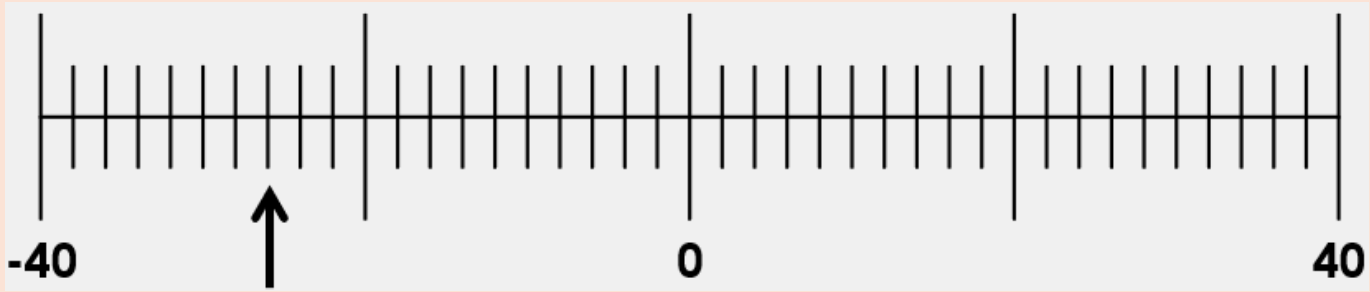
TBAT: read, write and order negative numbers.

Identify the coldest temperature in each set of data and mark it on the number line below.

Blue	- 14	0	-12	19	-9	29
Green	5	-19	-2	-21	15	-3



True or false? The arrow is pointing to -12 on the number line below.



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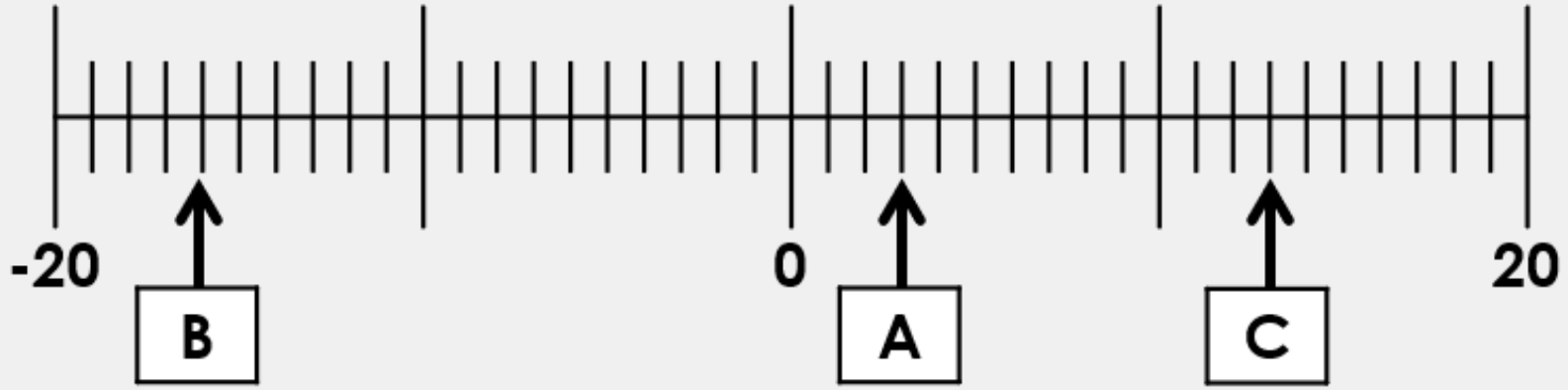
TBAT: read, write and order negative numbers.

Rosie has recorded each answer to the questions below on the number line.

A. 18 more than negative 15

B. 21 less than 5

C. 4 subtract 17



Is she correct? Explain your answer.

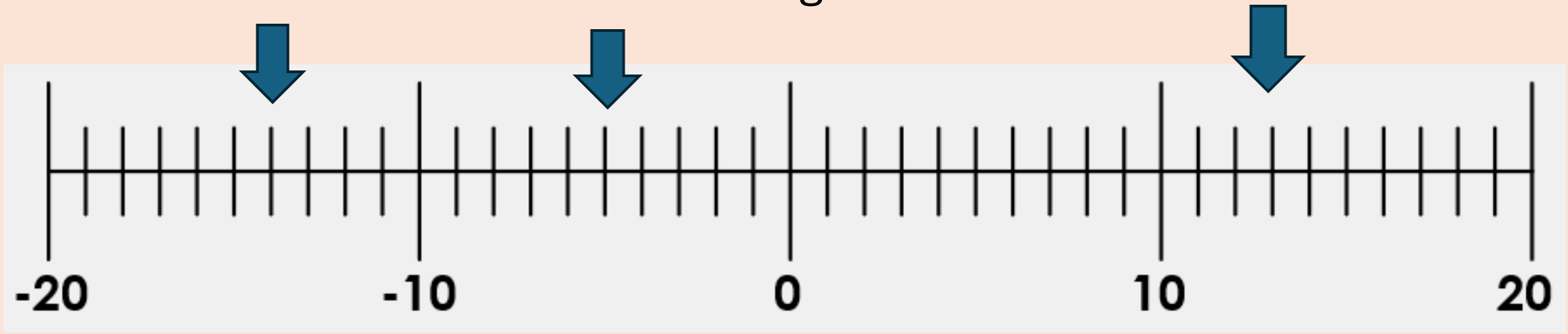
If the temperature in Hull is 15°C and the temperature in Moscow is -18°C, what is the difference between the two temperatures?

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TBAT: read, write and order negative numbers.

Knowledge Check

What numbers are being shown on this number line? Order them in ascending order.

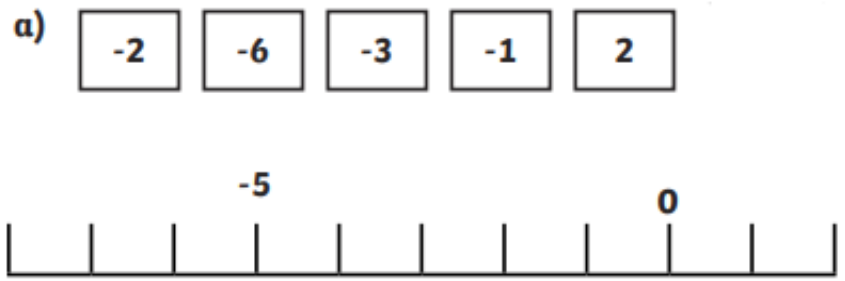


What number is fifteen less that 7? How would you write that number? What is fifteen less that your answer?

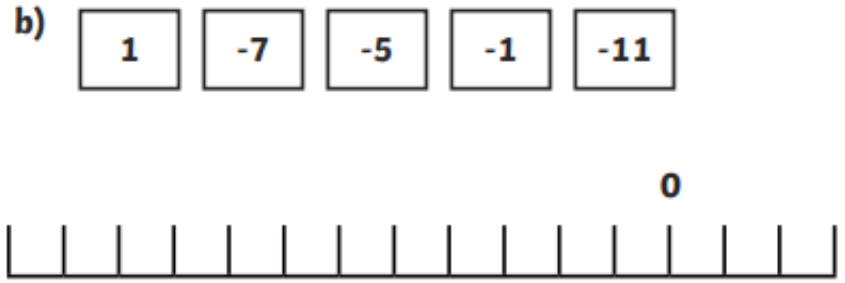
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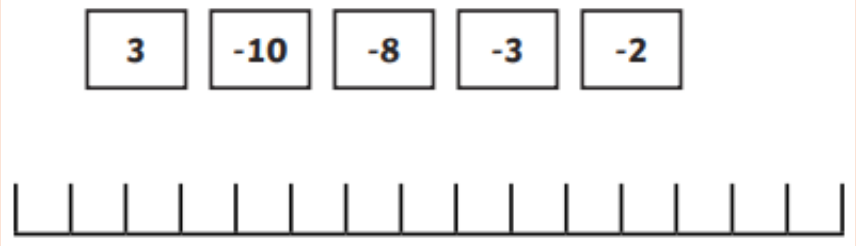
TBAT: read, write and order negative numbers.

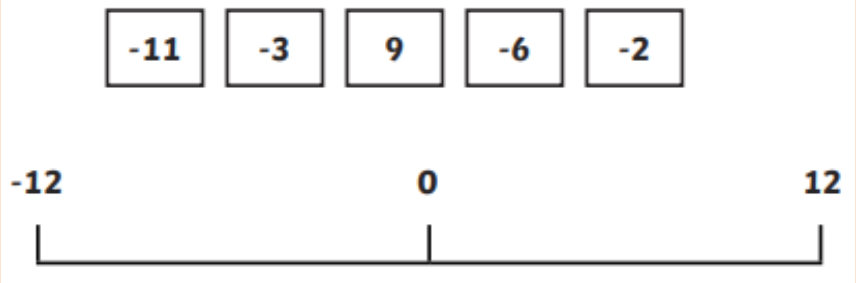
a)



b)







RP

The temperatures in five cities are:

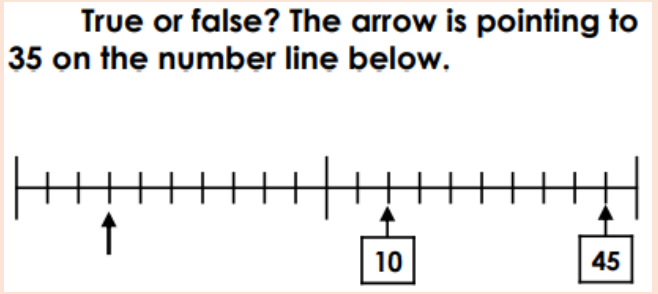
−8°C, 2°C, −11°C, 0°C, −4°C

Order the temperatures from coldest to warmest.

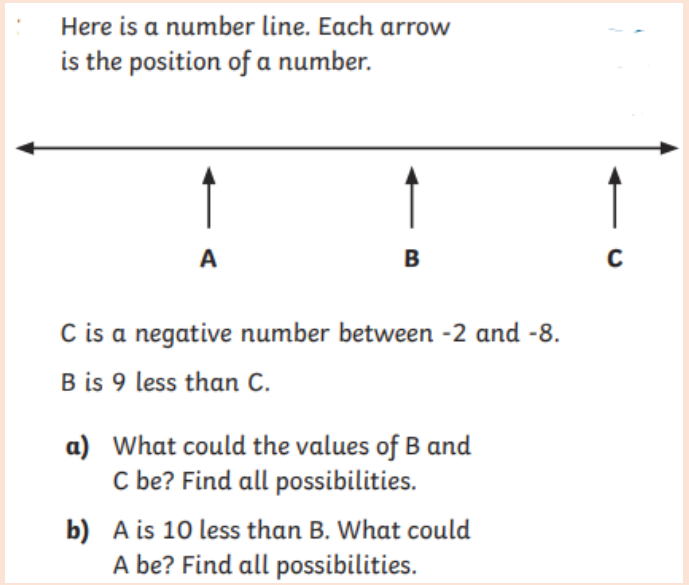
Then:

- Which temperature is closest to 0°C?
- How many degrees warmer is 2°C than −8°C?

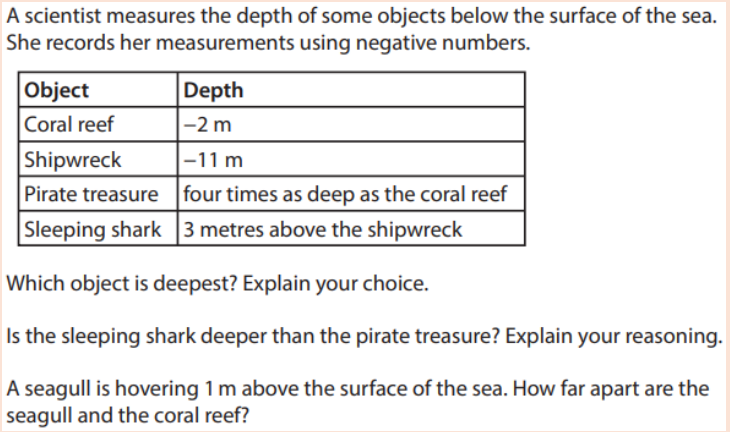
Ch -



Mastery -



GD



04.11.26

TBAT: read, write and order negative numbers.

Mastery with Greater Depth -

A scientist measures the depth of some objects below the surface of the sea.
She records her measurements using negative numbers.

Object	Depth
Coral reef	−2 m
Shipwreck	−11 m
Pirate treasure	four times as deep as the coral reef
Sleeping shark	3 metres above the shipwreck

Which object is deepest? Explain your choice.

Is the sleeping shark deeper than the pirate treasure? Explain your reasoning.

A seagull is hovering 1 m above the surface of the sea. How far apart are the seagull and the coral reef?

Wednesday 4th November

TBAT: identify organisational features of a persuasive leaflet.

3 in 3

1. Which sentence uses the **apostrophe** correctly?

I've been given a bike for my birthday. **1**

Iv'e been given a bike for my birthday. **2**

Ive' been given a bike for my birthday. **3**

Ive been giv'en a bike for my birthday. **4**

2. Circle the two words in the sentence that are **synonyms** of each other.

Faisal charged past the creek heading deeper into the forest when a wild boar dashed across the path .

3. Change the following statement to a **question**.

Do not use any additional words.
Remember to punctuate your answer correctly.

Romesh will arrive late tomorrow.

CHALLENGE: Write an antonym for deeper.

What features can you find in this example?

Which features help organise the text?

Camp Red Forest: Where Miracles Happen

Could you imagine spending your every waking hour squashed into a building in a dirty, smoke-filled city? Your meals are nothing more than meagre gruel and nothing to do all day but sit and stare at the walls. This is what most young offenders face today.

Now, imagine that there is an alternative. What if there was a place so serene it calms even the most criminal of minds? A place so peaceful that sleeping under the stars is an everyday occurrence. Such a place exists: Camp Red Forest Juvenile Correction Facility. Join us. Miracles happen here.

The Camp

Situated on the northern edge of the world-famous Red Forest, Camp Red Forest is a home from home. It was once renowned for the abundance of apple orchards, which had miraculous medicinal properties. Our large airy tents are ideal for reconnecting with the outdoors. Immersing yourself in nature provides innumerable mental and physical advantages; research has shown that it reduces feelings of anger and stress. The positive impacts are infinite. Without a doubt, every camper that stays with us feels tremendous benefits. So could your child.

What Should I Pack?

You don't need to provide anything for the campers; we have it covered!

While staying with us, young people will receive:

- a regulation red jumpsuit, complete with matching woollen hat;
- a bespoke, personalised water bottle;
- their very own chisel which is used in character-building exercises, such as rock-cutting and our revolutionary Mini-Mining programme.

Camp Councillors

On arrival, your child will receive a friendly welcome from our inspirational, highly-trained camp councillors. They are quite simply, the best in the business. Through their guidance, they equip young people with the tools to enable them to make the best choices when they are back at home. Due to our cutting-edge approach, young people feel listened to and are ready to make positive choices once back at home: 99.99 per cent of campers go on to further education or employment.

Wednesday 4th November

TBAT: identify organisational features of a persuasive leaflet.

Camp Red Forest: Where Miracles Happen

Could you imagine spending your every waking hour squashed into a building in a dirty, smoke-filled city? A place where your limited time outdoors is taken in a tiny, 6x6 metre concrete space; your meals are nothing more than meagre gruel and nothing to do all day but sit and stare at the walls. This is what most young offenders face today.

Now, imagine that there is an alternative. What if there was a place so serene it calms even the most criminal of minds? A place where nature is in abundance, where each morning is greeted by birdsong. A place so peaceful that sleeping under the stars is an everyday occurrence. Such a place exists: Camp Red Forest Juvenile Correction Facility. Join us. Miracles happen here.

A catchy title, which tells us the topic of the leaflet.

An introduction that hooks the reader and sets out your point of view.

What is the author's point of view? What are they trying to convince the audience to do?

Wednesday 4th November

TBAT: identify organisational features of a persuasive leaflet.

The Camp

Situated on the northern edge of the world-famous Red Forest….
Our large airy tents are ideal for reconnecting with the outdoors…

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Camp Councillors

On arrival, your child will receive a friendly welcome…

Testimonials

As a consequence of their stay here…
Parents think so too…

Each paragraph is based around one argument or theme with reasons and evidence to support it.

Opinions presented as fact.

There are a variety of organisational devices used (bullet points, headings and sub-headings).

Wednesday 4th November

TBAT: identify organisational features of a persuasive leaflet.

Undeniably, our young people leave us reinvigorated and inspired – ready to rejoin society as hardworking citizens of the world. Why not join us? Camp Red Forest: Where Miracles Happen.

The conclusion summarises the main argument.

The final sentence(s) should be impactful and reiterate your opinion.

Can you find any examples of opinions presented as facts?

Wednesday 4th November

TBAT: identify organisational features of a persuasive leaflet.

What punctuation can you identify?

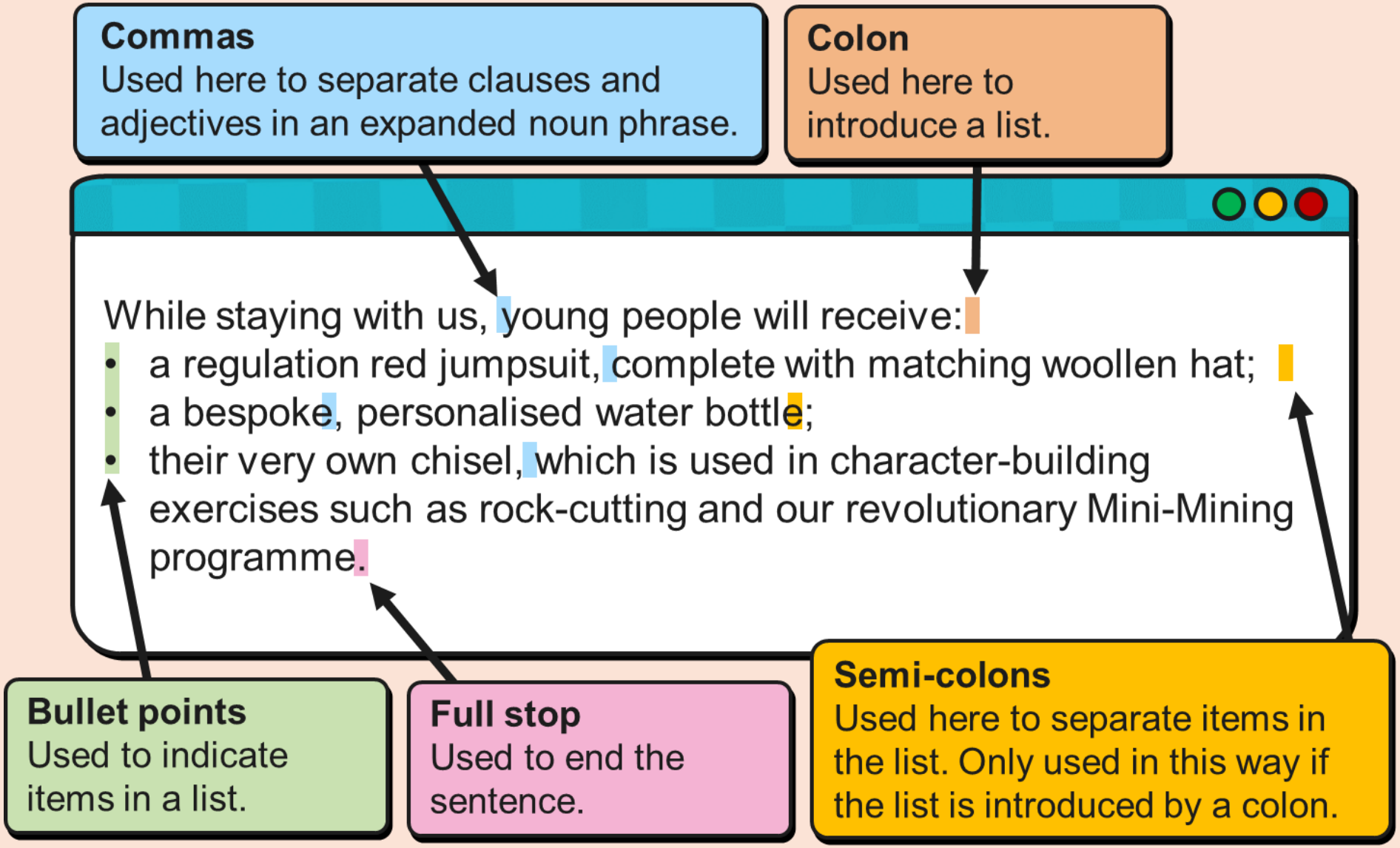
Why has it been used?

While staying with us, young people will receive:

- a regulation red jumpsuit, complete with matching woollen hat;
- a bespoke, personalised water bottle;
- their very own chisel, which is used in character-building exercises such as rock-cutting and our revolutionary Mini-Mining programme.

Wednesday 4th November

TBAT: identify organisational features of a persuasive leaflet.



Wednesday 4th November
TBAT: identify organisational features of a persuasive leaflet.

Write a paragraph for your persuasive leaflet using organisation features.

You must include:

- Subheading
- Colon to introduce a list
- Bullet points

Challenge - Make your paragraph even more persuasive by adding one of these features:

- Rhetorical question to grab attention
- Emotive language to appeal to feelings
- A short, punchy slogan that reinforces your message
- A call to action that tells the reader exactly what to do next

Wednesday 4th November

KQ – Can I explain how Sikhs have contributed to British history?

Quick Quiz

1 What do many Hindus believe Brahman is? (Tick **1** correct answer)

- ☐ a festival
- ☐ the one supreme spirit
- ☐ a famous temple

2 What symbol represents Brahman in Hindu Dharma? (Tick **1** correct answer)

- ☐ a bell
- ☐ a flower
- ☐ aum

3 What is Hindu worship called? (Tick **1** correct answer)

- ☐ puja
- ☐ yoga
- ☐ karma

Challenge

What do Hindus believe happens after this life? (Tick **1** correct answer)

- ☐ you go to sleep forever
- ☐ you become a star
- ☐ you are reborn

Wednesday 4th November

KQ – Can I explain how Sikhs have contributed to British history?

What religion do Sikhs belong to?

What religion do Hindus belong to?

If you could write one rule for all religions to follow, what would it be and why?

Keywords

community	a group of people who share common interests and values
service	the act of helping or doing work for others, often to support a community or cause
British Empire	a group of countries that were controlled or ruled by Britain
gurdwara	a Sikh place of worship, where people gather to pray, learn, and share meals together



Izzy



Alex

Have Sikh people always been in the UK, Mandeep?

The Sikh religion started in India. Guru Nanak lived there and became a teacher that many Hindu and Muslim people followed.

So originally, Sikhs lived in India, which was part of the **British Empire** until 1947.



Mandeep

How have Sikhs contributed to British history?

Explanation



When Britain needed help, many Sikh soldiers joined the British Indian Army to **serve** and protect others — just like my grandad.



Mandeep

Abu Castor / Alamy Stock Photo

My grandad fought in World War I with the British Indian Army. He travelled from Punjab to France. Many Sikh soldiers fought bravely, and over 80,000 died in the two World Wars.

The Sikh **community** believes in **serving** others, and my grandad always said that by helping in the army, he was doing his duty to protect people and live by our faith.



Mandeep

Izzy and Alex continue to talk to one another.



Izzy

I didn't realise that Sikhs came and helped us fight in the world wars for the UK.

Me neither! They travelled a really long way to help our country. I wonder if there are other ways Sikh people have helped us?



Alex

Ria explains how many Sikh men and women have made a big impact in healthcare.

While Sikh soldiers were fighting on the front lines, others helped in hospitals as nurses. Their bravery and **service** contributed hugely to British history.

My grandparents told me stories about how Sikhs' **service** was a big part of the British war effort. After the wars, many Sikhs continued to **serve** by working in hospitals, schools, and supporting local **communities** across Britain.



Ria

My family helped to rebuild Britain by working in factories, transport, and hospitals. These jobs were very important for keeping the country running while the country was still recovering from the damage caused by the war.

Sikh workers helped repair buildings, run public **services**, and support local **communities**. Their hard work helped shape modern Britain.



Mandeep

Izzy and Alex are discussing what to do next.



Izzy

How could we find out about how large the Sikh **community** is in the UK?

What about looking at the census? It is a survey of everyone in England and Wales. It asked people ‘What is their religion?’. That will give us some data.



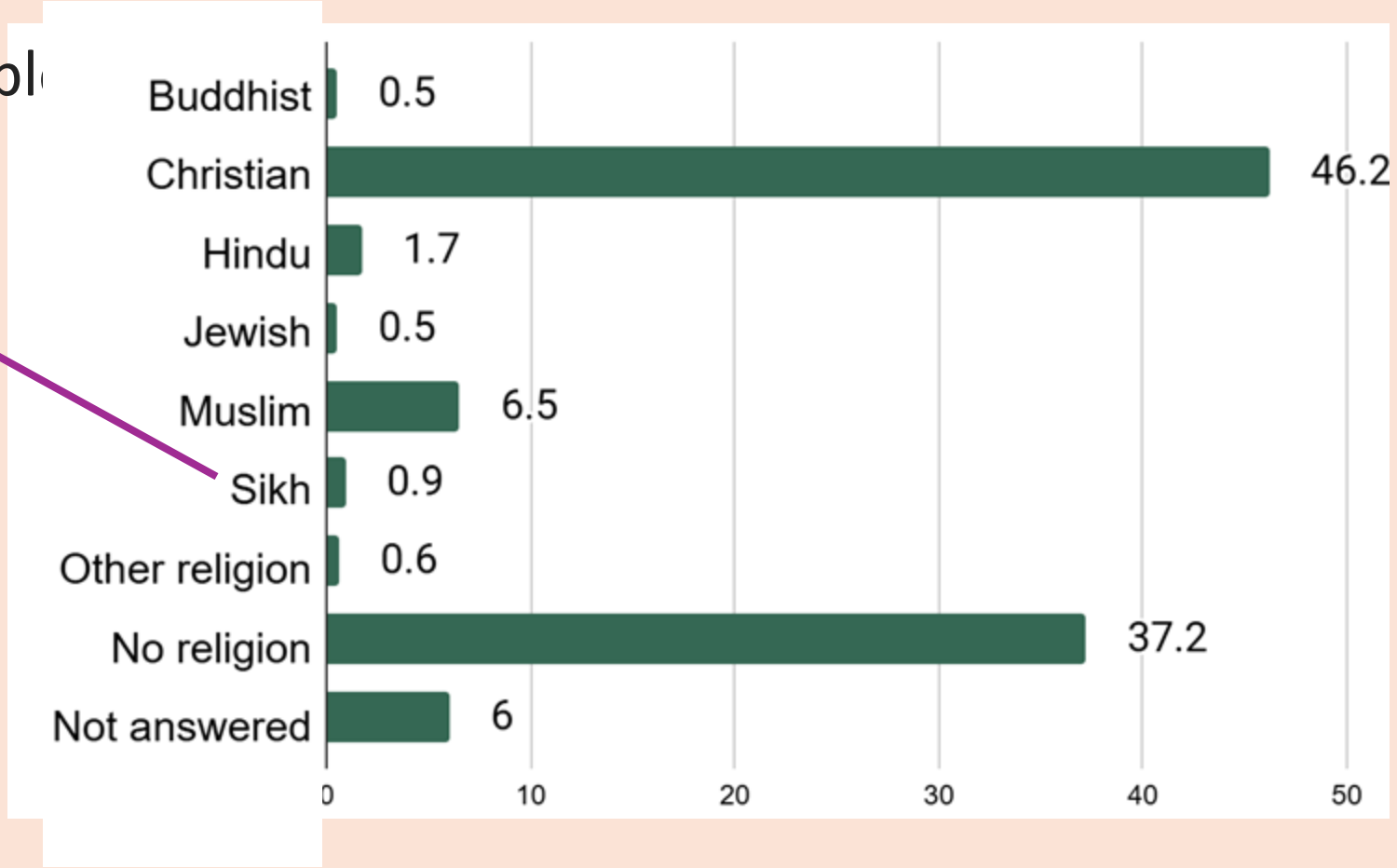
Alex

Here is the census data for 2021:

What percentage of peopl identified as Sikhs?

0.9% of people in England and Wales are Sikhs.

This is a relatively small percentage, but it still represents a significant number of people - 525,865 in total.



Data source: Office for National Statistics – Census 2021

Here is a map of part of England and Wales. It uses 2021 census data to show where Sikhs live.



The darker the colour on the map, the larger the Sikh **community** that can be found there.

What do you notice from looking at this map?

Where do most Sikhs live?

Source: Census 2021 from the Office for National Statistics

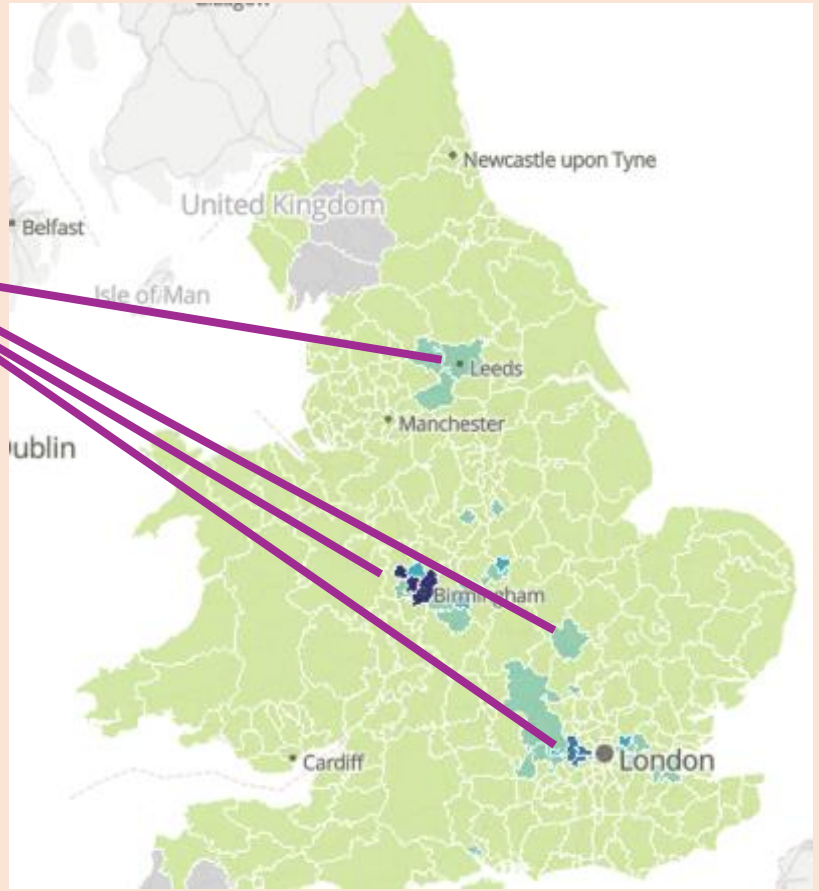
Why do some places have large Sikh communities?

Explanation



Izzy

I can see that most Sikh **communities** are in cities such as Birmingham, Wolverhampton, London, and close to Leeds.





Alex

This is really interesting. The data tells us where Sikhs live, but not why they live there. I wonder how we could find that out?

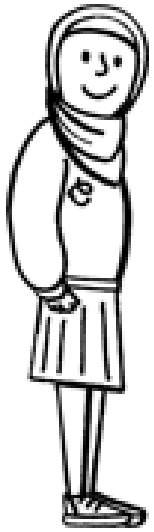
- The Sikh **community** has historic links with the UK, connected to the **British Empire**.
- Sikh soldiers were heavily involved in fighting for the **British Empire**. Their **service** cost many lives during the World Wars.
- Sikhs comprise 0.9% of the population of England and Wales according to the 2021 census.
- There are historic Sikh **communities** in London and the West Midlands.
- Many Sikh families choose to live in areas where they can practise their faith and be part of a **community**.

Wednesday 4th November

KQ – Can I explain how Sikhs have contributed to British history?

Your task:

Aisha is thinking about Sikhs and British history.



Aisha

Sikhs' contribution to British history was to fight for the **British Empire** in the Second World War.

Is Aisha correct? Is that the only contribution?

What evidence from the case studies can you use to make your argument?

Challenge

I'm not sure why Sikhs often choose to live in the **communities** they do?

How would you explain an answer to this question?

Wednesday 4th November

KQ – Can I explain how Sikhs have contributed to British history?

Exit Quiz

1 Sikh soldiers played an important role during the two World _____ . (Fill in the blank)

2 According to the 2021 _____ , 0.9% of people in England and Wales are Sikh. (Fill in the blank)

3 Where are historic Sikh communities found in the UK? (Tick **1** correct answer)

- ☐ Cornwall and Kent
- ☐ London and the West Midlands
- ☐ York and Cumbria

Challenge

Why have many Sikhs settled in the UK? (Tick **1** correct answer)

- ☐ for the beaches
- ☐ to find treasure
- ☐ to help rebuild after the war

Why is it wrong to say that all Sikhs living in the UK only recently moved here? (Tick **1** correct answer)

- ☐ some are from America
- ☐ they live in tents
- ☐ they've been here for generations

04.11.26

TBAT: spell words ending –able.

comfortable
reasonable
perishable
breakable
fashionable



Challenge – Write a sentence in the active voice including the spellings.

Wednesday 4th November
KQ – Can I build and test a range of simple circuits?

Quick Quiz

1 Which of these rely on electricity to work? (Tick **2** correct answers)



- ☐ home lighting
- ☐ yo-yo
- ☐ music keyboard
- ☐ in-line skates

2 Tumble dryers, microwaves and lamps are examples of electrical ...

_____

3 An electric _____ is a group of components joined together by wires and include a cell or battery. (Fill in the blank)

Challenge

4 What are the basic elements of a circuit called? (Tick **1** correct answer)

- ☐ mini-machines
- ☐ components
- ☐ parts
- ☐ contributors

Wednesday 4th November

KQ – Can I build and test a range of simple circuits?

What is this?



What is this?



What is the scientific drawing for a cell?

Keywords

circuit	An electrical **circuit** is a closed loop or path that electricity can flow through to make a component work.
component	A **component** is a device in a circuit that has a specific function.
cell	A **cell** is a single unit that is needed for electricity to flow around a circuit.
battery	When two or more cells are used together, it is called a **battery.**
terminal	Cells have a negative and positive **terminal**.

Electricity and **circuits** are everywhere and are a part of most of our daily lives.

Do you know where you use electricity and electrical circuits each day?

Electricity flows safely all around us, allowing us to heat and light our homes and to use appliances where we need them.



home lighting



a plug connected to mains electricity



a fridge

Izzy wants to build an electrical **circuit**.



You will need **components** to build a circuit.

Alex

I can't remember what components are.



Izzy

The basic elements of an electrical circuit are called components.

Can you identify any of these components?













Some of the **components** in a simple **circuit** are:



cell



buzzer



bulb
(in a holder)



motor



wire



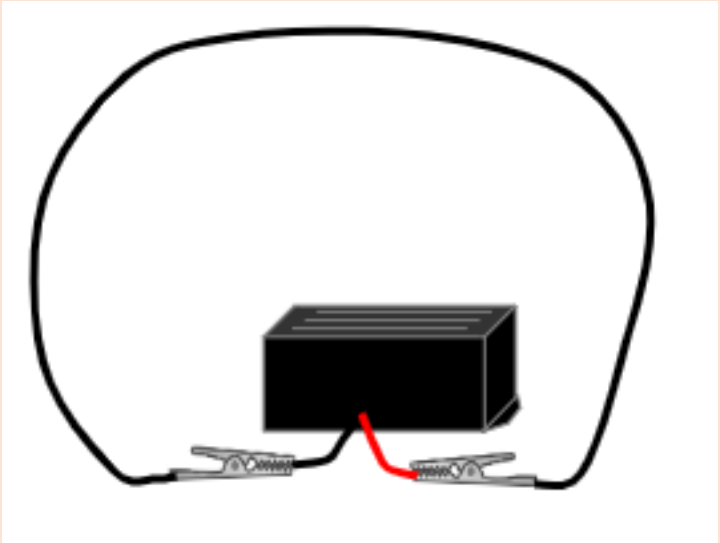
switch



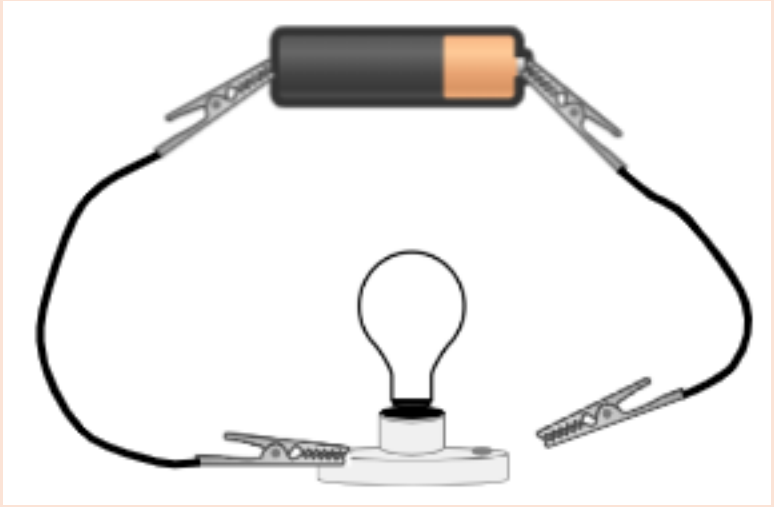
Not all of my **circuits** worked.

Izzy

Can you explain what was wrong with each of these circuits?



circuit 1



circuit 2

When a **circuit** is complete, electricity can flow around the circuit and make **components** work.



Alex

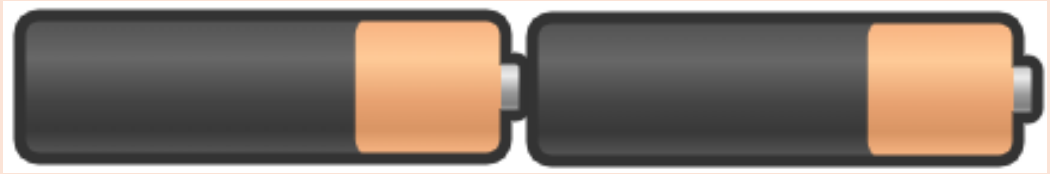
Remember, an electrical circuit must have a cell or battery.

cell



When we have one of these units, we call it a cell.

battery of two cells



When there are more than one working together, we call it a battery.

Electricity passes around a circuit when a cell or battery gives a push to start the flow of electricity.

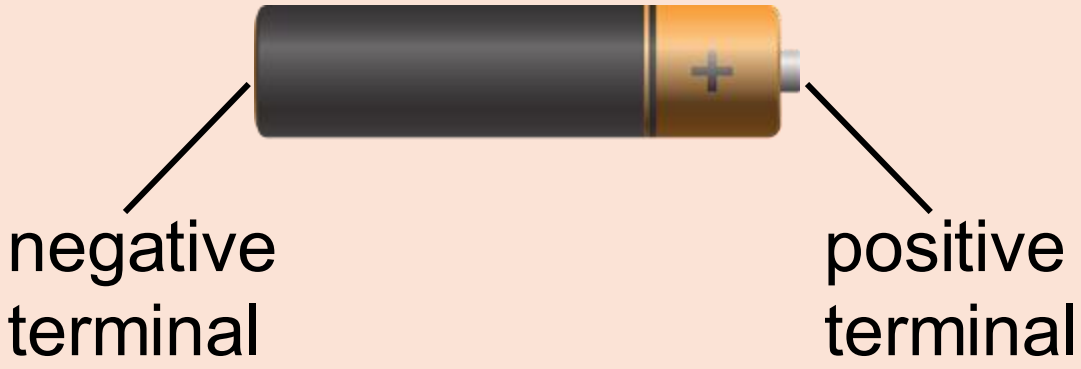


Izzy's sister

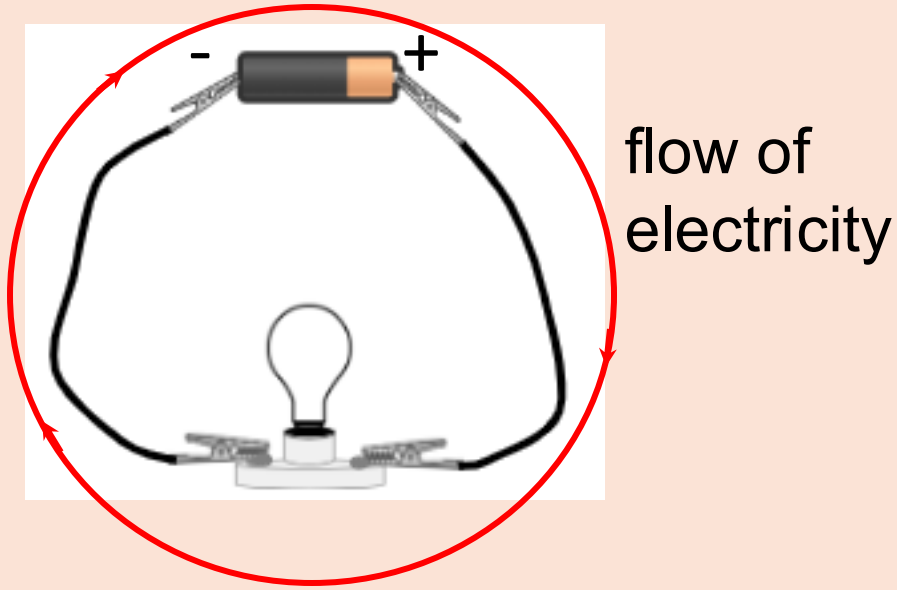
The cell or battery gives the push to start the movement or flow of electricity.

Cells and **batteries** have two ends called **terminals**.

One of these is a positive (+) terminal and one a negative (-) terminal.

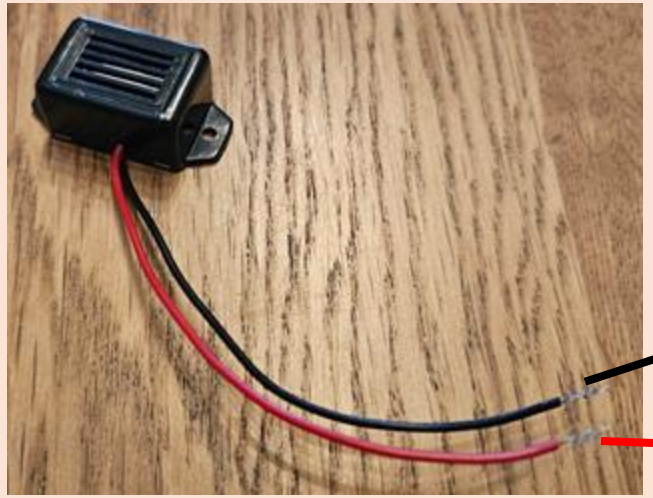


Electricity flows from the positive terminal to the negative terminal of the cell or battery.



The flow of electricity is pushed by the cell or battery, through the wires, to the other **components** in the circuit.

Just like cells, all **components** have two **terminals**, where the component is connected to the rest of a **circuit**.



buzzer

For a buzzer:

negative (-) terminal is black

positive (+) terminal is red

Buzzers only work if their positive terminal is connected to the positive terminal of the cell or battery.

The basic elements of an electrical circuit are called components.

A complete electrical circuit is made is when all components are connected together correctly, and there are no breaks in the circuit.

A flow of electricity moves from the positive terminal to the negative terminal of the cell or battery.

The flow of electricity is pushed by the cell or battery, through the wires and other components in the circuit.

Wednesday 4th November

KQ – Can I build and test a range of simple circuits?

Task 1

-Draw a simple scientific circuit using the symbols here:

-Make the circuit using the equipment.

-Do this for two circuits.

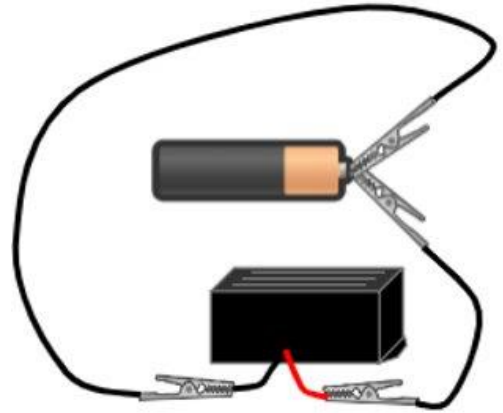
Component	Symbol	Purpose
Cell (Battery)		Provides electrical energy
Power supply		Alternative to using cells
Wire		Allows current to travel
Bulb/light		Converts electrical energy into heat and light
Motor	M	Converts electrical energy into movement energy
Buzzer		Converts electrical energy into sound energy
Switch		Allows circuit to be opened or closed

Task 2

-Draw this circuit:

-One battery, one bulb, one buzzer and wires.

Challenge – Why is this circuit not working?



Wednesday 4th November
KQ – Can I build and test a range of simple circuits?

Exit Quiz

1 The basic elements of an electrical circuit are called ...

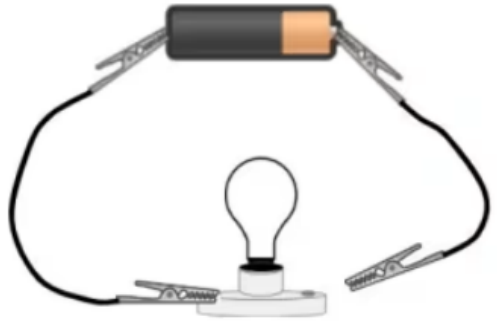
_____

2 A complete electrical _____ is made is when all components are connected together correctly and there are no breaks. (Fill in the blank)

3 What are the names for the two ends of a cell or battery? (Tick **1** correct answer)

- ☐ north pole and south pole
- ☐ positive terminal and negative terminal
- ☐ north terminal and south terminal
- ☐ positive end and negative end

4 What is wrong with this circuit? (Tick **1** correct answer)



- ☐ There is no cell.
- ☐ The bulb is connected the wrong way round.
- ☐ There is a break in the circuit.

Challenge

In which direction does electricity flow around a circuit? (Tick **1** correct answer)

- ☐ from the negative terminal to the positive terminal
- ☐ from the components and round the wies
- ☐ from the wires to the components
- ☐ from the positive terminal to the negative terminal

Wednesday 4th November

KQ: What is alcohol?

What is the legal age for someone to buy or drink alcohol in the UK?



Why might people drink alcohol?



Alcohol

Alcohol is a drug that can have negative effects on your body.

Maybe you already know some of them. What are they?

feeling sick

tired

loss of balance

acting strangely

can’t speak properly

vomiting



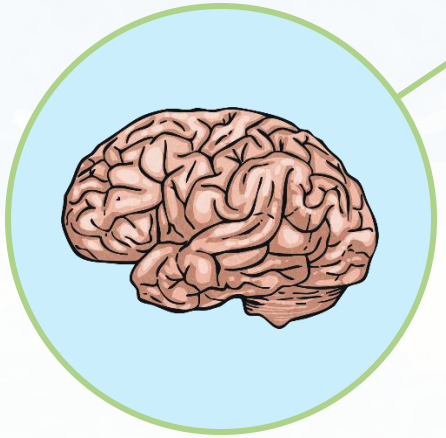
These are the effects that you can see or hear.

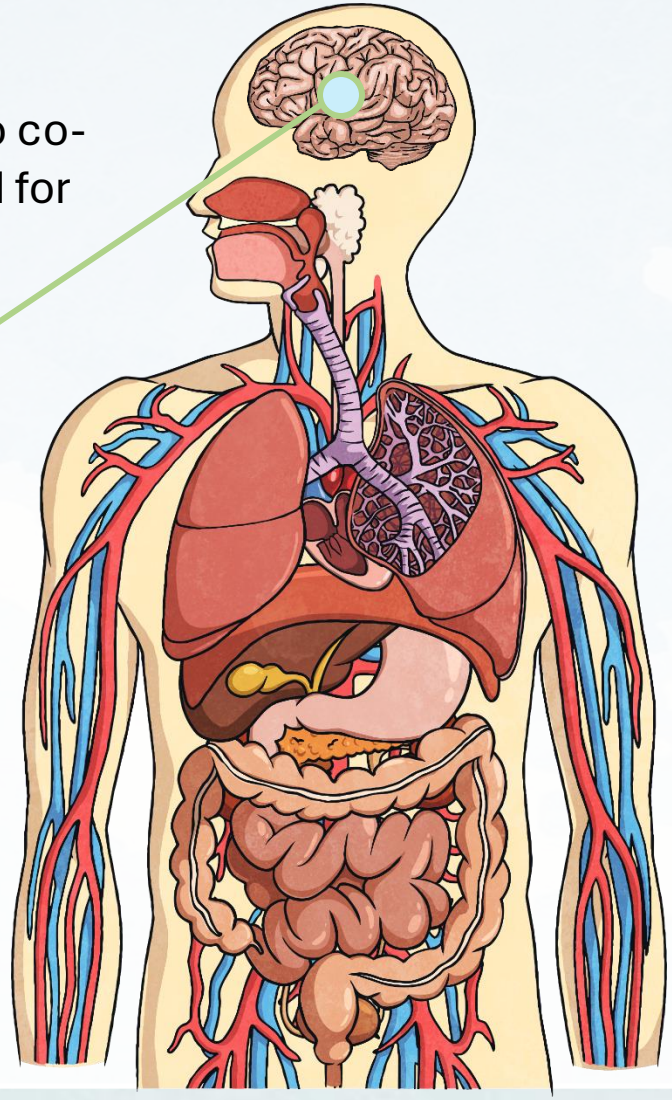
There are others that happen inside the body that are not so obvious.

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Brain

Drinking alcohol can stop your brain from working properly. It makes it more difficult to co-ordinate your arms and legs. It makes it hard for you to concentrate.

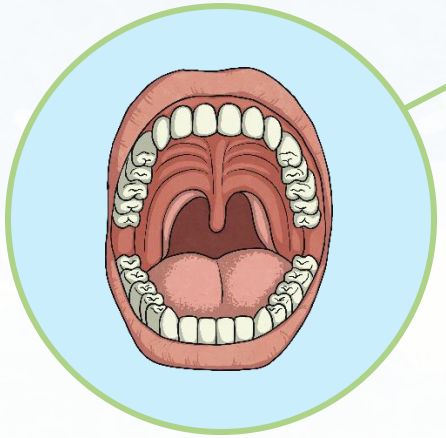


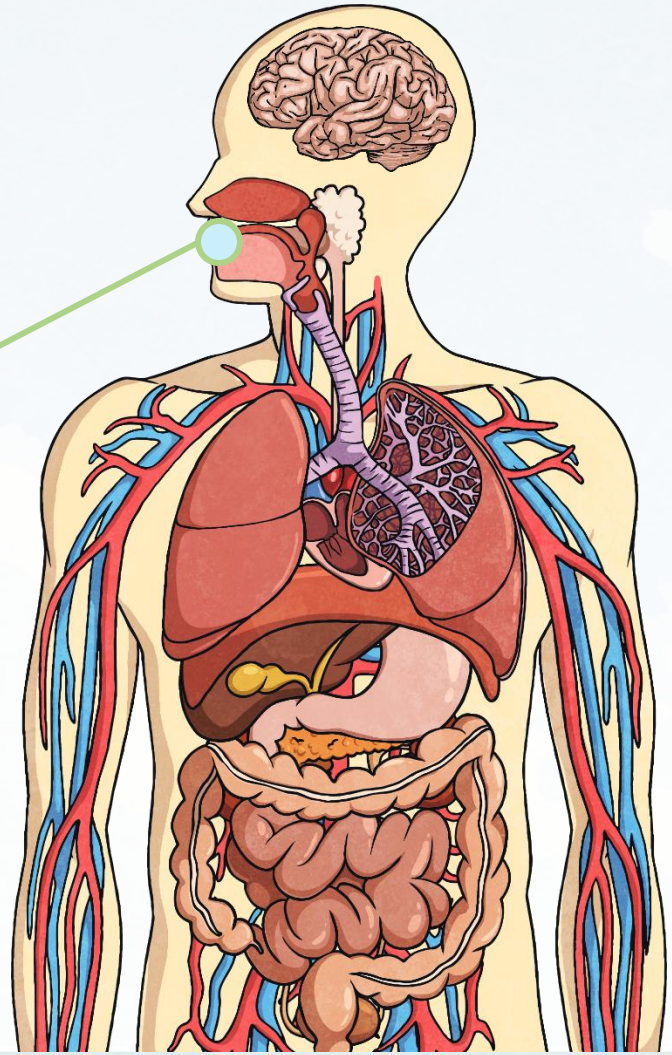


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Mouth and Oesophagus

Drinking alcohol can cause bleeding of the oesophagus (food pipe). It reduces your desire to eat and dulls your taste.

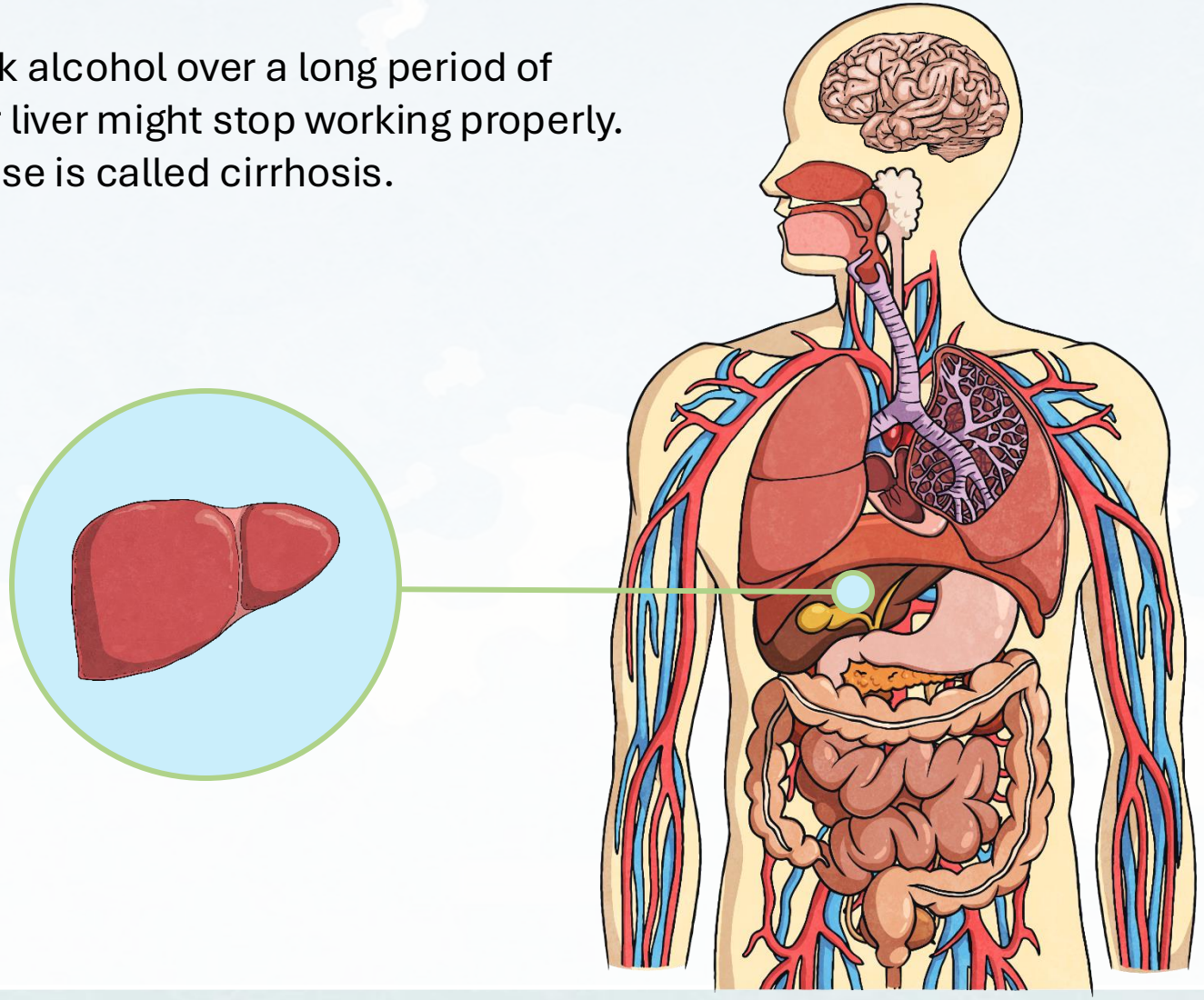




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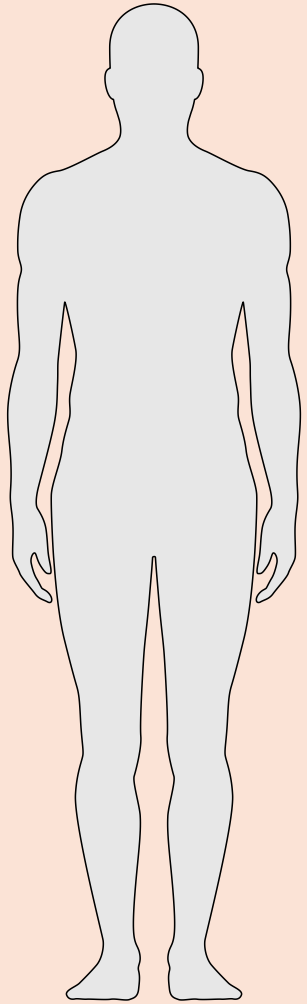
Liver

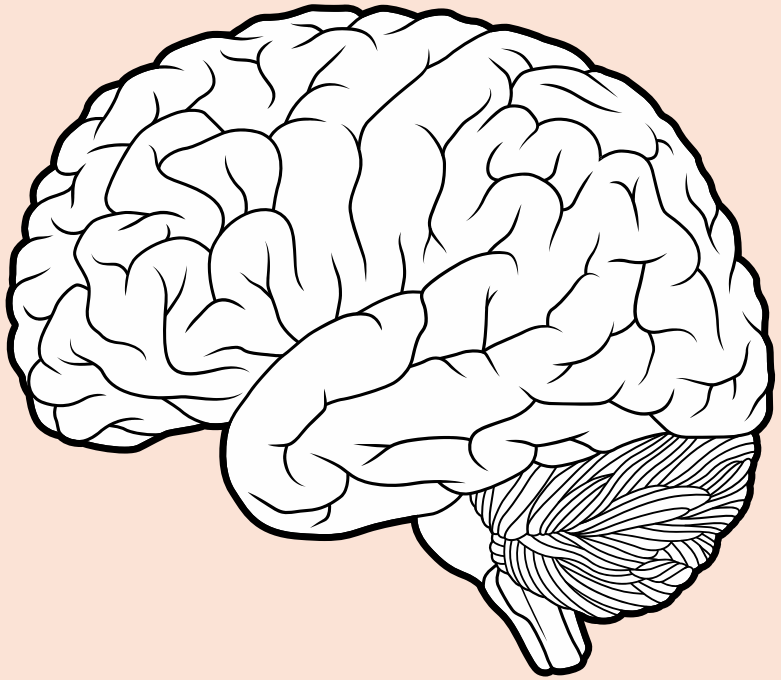
If you drink alcohol over a long period of time, your liver might stop working properly. This disease is called cirrhosis.



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How does alcohol affect the body and brain?





Wednesday 4th November

KQ: What is alcohol?

True or false?

1. Alcohol can affect your decision-making and might make you do things you wouldn't usually do.
2. It is recommended that women drink no more than 4–5 units per day and men no more than 8–9 units a day.
3. In England and Wales, the alcohol limit for drivers is higher than in Europe.
4. Drinking alcohol in excess over a long time can cause liver disease.
5. If you are drunk, you can sober up by drinking black coffee or having a shower.
6. Drinking alcohol in excess can cause headaches, vomiting and dizziness.
7. If people drink the same amount of alcohol as each other, it will have the same effect.