

Z G B STOP

British Science Week is held every March to celebrate science, technology, engineering and maths. This year's theme is 'Change and Adapt'.

Changes in Transport and Communications

Changes in technology have taken place in history to help our world improve. The use of computers and mobile phones to make contact with people quickly has become a popular way of communicating.



The famous inventor Alexander Graham
Bell made an important discovery with his
invention of the first telephone. Bell and
his assistant used electricity to send sound.
His invention in 1876 worked by sending
the human voice over electrical wires. The
telephone was a great success and resulted
in the Bell Telephone Company being set up
in 1877.

The way we travel has also changed and more transport opportunities have been

developed. Cars, aeroplanes and trains allow us to travel longer distances and explore more of the world than horses and carts in the past.

Changes and Adaption of Animals and Plants

Plants and animals rely on their habitats for food, water and shelter.

They need to adapt to the changes in their habitat or risk becoming **endangered** or even **extinct**.

Nature can create some of its own changes. However, some changes are caused by humans destroying habitats for land and materials. Conservationists have helped by entering endangered animals into breeding programmes in nature reserves.

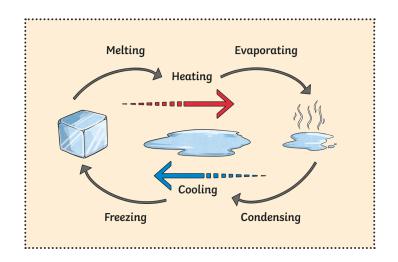


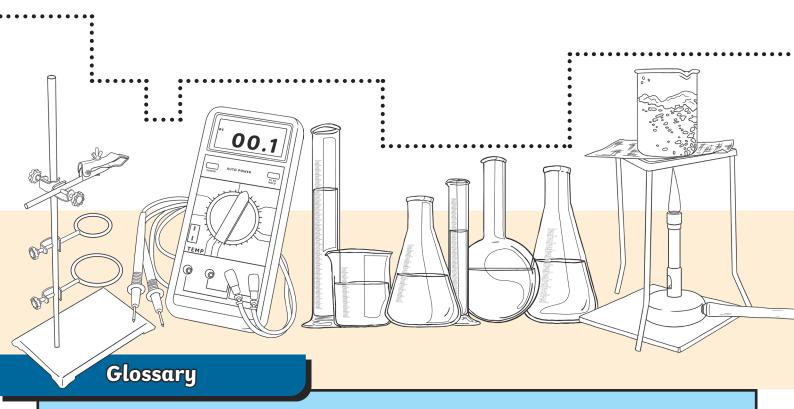




Properties and Changes of Materials

Materials usually exist in one of three states as solids, liquids or gases. These can change with temperature and pressure. Melting can change a solid to a liquid, such as ice to water. Freezing then makes the liquid into a solid again. Evaporation can cause a liquid to change to a gas, such as a puddle drying on a sunny day.





endangered: To be under threat of no longer existing.

extinct: When a plant or animal ceases to exist.

Disclaimer: We hope you find the information and resources on our website useful. Please be aware that aspects of an individual's life may be controversial to some. Due to this, we highly recommend that you carefully research the individual before teaching about them to learners. If your learners do independent research about an individual, we advise using only pre-selected, appropriate sources of information and websites appropriate to their age.





Questions

was well known. The famous inventor Alexander Graham Bell made an important discovery his invention of the first telephone. 4. What do plants and animals rely on their habitats for? Tick two. O food O families O mood O shelter 5. Fill in the missing words.	1.	Melting can change? Tick one.
The first one has been done for you. Plants and animals rely on their habitats for food, water and shelter. This year's theme is 'Change and Adapt'. Freezing then makes the liquid into a solid again. Nature can create some of its own changes. Bell and his assistant used electricity to send sound. Underline one word in the quotation below that suggests that Alexander Graham was well known. The famous inventor Alexander Graham Bell made an important discovery his invention of the first telephone. What do plants and animals rely on their habitats for? Tick two. food families mood shelter Fill in the missing words. British Science Week is held every March to science, technolo engineering and maths. This year's is 'Change and Adapt'.		a gas to a liquida liquid to a gas
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British Science Week is held every March to science, technolo engineering and maths. This year's is 'Change and Adapt'.	4.	foodfamiliesmood
6. What was set up in 1877?	5.	British Science Week is held every March to science, technology,
	6.	What was set up in 1877?





7.	Which section of this text do you think is most important? Explain your choice.





Answers

1.	. Melting can change? Tick one.	
	 a solid to a liquid a gas to a liquid a liquid to a gas a gas to a solid 	
2.	Number the sentences from 1–5 to show the order in which they occur in the text. The first one has been done for you.	
	 Plants and animals rely on their habitats for food, water and shelter. This year's theme is 'Change and Adapt'. Freezing then makes the liquid into a solid again. Nature can create some of its own changes. Bell and his assistant used electricity to send sound. 	
3.	Underline one word in the quotation below that suggests that Alexander Graham Bell was well known. The famous inventor Alexander Graham Bell made an important discovery with his invention of the first telephone. Award 1 mark for: • famous	
4.	What do plants and animals rely on their habitats for? Tick two . ✓ food families mood ✓ shelter	
5.	Fill in the missing words. British Science Week is held every March to celebrate science, technology, engineering and maths. This year's theme is 'Change and Adapt'.	





6. What was set up in 1877?

In 1877, the Bell Telephone Company was set up.

7. Which section of this text do you think is most important? Explain your choice.

Pupils' own responses, such as: I think the most important section is the part that explains how important habitat is to an animal or plant and how conservationists are using breeding programmes. I think this is important to stop animals and plants from becoming extinct as this would be very sad.



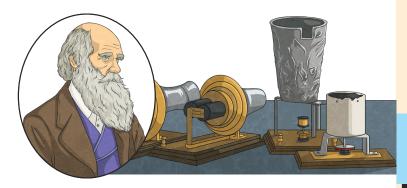




British Science Week is held every March to celebrate science, technology, engineering and maths. This year's theme is 'Change and Adapt'.

Changes in Transport and Communications

Changes in technology have taken place throughout history to help improve the world we live in. The use of computers and mobile phones to communicate more quickly has become a more popular choice than writing letters.



The famous inventor Alexander Graham
Bell made an important discovery with his
invention of the first telephone. With the
help of his assistant, Bell used electricity to
send sound. His invention in 1876 worked
by sending the human voice over electrical
wires. The telephone was a great success
resulting in the Bell Telephone Company
being set up in 1877.

The way we travel has also changed and more transport opportunities have been

developed. Cars, aeroplanes and trains allow us to travel longer distances, explore more of the world and travel much faster than horses and carts did in the past. The introduction of electric vehicles is also helping us adapt to a more **eco-friendly** way to travel.





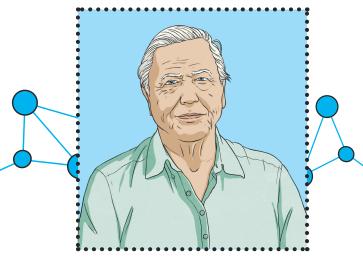
Changes and Adaption of Animals and Plants

Plants and animals rely on their habitats for food, water and shelter. If they cannot find these in their homes, they face the problem of survival. They need to adapt to the changes in their habitat or risk becoming endangered or even extinct.

Nature can create some of its own changes. However, other changes are created by some humans who destroy habitats for land or materials.



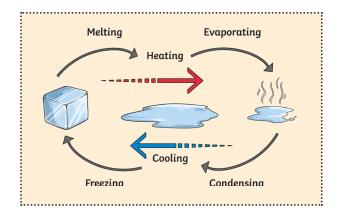




The work of many devoted conservationists has helped provide some positive changes. One change is to enter endangered animals into breeding programmes in reserves to be later released into the wild. Sir David Attenborough is a famous natural historian. He has campaigned to protect animal and plant habitats.

Properties and Changes of Materials

Materials all have certain properties. Melting can change a solid to a liquid, such as ice to water. Freezing reverses this change. Evaporation can cause a liquid to change to a gas, such as a puddle drying on a sunny day. Condensation happens when a gas changes to a liquid, such as hot breath on a window.



Did You Know...?

Evaporation can cool our bodies down on a hot day. When sweat has formed on the skin, it evaporates and reduces our temperature.

Glossary

eco-friendly: Something that is not harmful to the environment. endangered: To be under threat of no longer existing. extinction: When a plant or animal ceases to exist.







Questions

 □ a solid changes to a liquid □ a gas changes to a gas □ a gas changes to a solid 2. Number the summaries from 1-4 to show the order that they occur in the text. □ The invention of the telephone in 1876. □ The problems that plants and animals experience in the wild. □ Materials have different properties and can be changed. □ British Science Week is a celebration in March. 3. Underline one word in the quotation below that suggests that Sir David Attenborough is well known. Sir David Attenborough is a famous natural historian. He has campaigned to protect animal and plant habitats. 4. How have conservationists helped to make positive changes? Tick one. ○ by entering endangered animals into breeding programmes ○ by starting forest fires ○ by building on habitats ○ by moving animals permanently 5. Fill in the missing words. □ can cool our bodies down on a hot day. When sweat has formed on the skin, it evaporates and reduces our	1.	Condensation happens when? Tick one.
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	5.	can cool our bodies down on a hot day. When sweat has formed on
	6.	





7.	Which fact surprised you the most? Explain your answer.
3.	Sir David Attenborough is a famous natural historian. He has campaigned to protect
	animal and plant habitats.
	What impression do we get about Sir David Attenborough from these sentences?





Answers

1.	1. Condensation happens when? Tick one.	
	O a solid changes to a liquid	
	O a liquid changes to a gas	
	O a gas changes to a solid	
2.	Number the summaries from 1–4 to show the order that they occur in the text.	
	The invention of the telephone in 1876.	
	The problems that plants and animals experience in the wild.	
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3.	Underline one word in the quotation below that suggests that Sir David Attenborough is well known.	
	Sir David Attenborough is a famous natural historian. He has campaigned to protect animal and plant habitats.	
	Award 1 mark for: • famous	
4.	How have conservationists helped to make positive changes? Tick one.	
	O by starting forest fires	
	O by building on habitats	
	O by moving animals permanently	
5.	Fill in the missing words.	
	Evaporation can cool our bodies down on a hot day. When sweat has formed on the	
	skin, it evaporates and reduces our temperature .	
6.	Look at the paragraph that begins with Plants and animals rely	
	Find and copy one word which means 'continuing to live or exist'.	
	survival	





- 7. Which fact surprised you the most? Explain your answer.
 - Pupils' own responses, such as: I was surprised that the telephone had been invented such a long time ago and that it used electricity to be powered.
- 8. Sir David Attenborough is a famous natural historian. He has campaigned to protect animal and plant habitats.

What impression do we get about Sir David Attenborough from these sentences?

Pupils' own responses, such as: We get the impression that Sir David Attenborough cares about the plant and animal habitats because he campaigns to protect them and he wants to make a positive difference to their situation.





British Science Week is held every March to celebrate science, technology, engineering and maths. The week aims to encourage young people to participate in STEM activities by sharing the leading work of experts in these areas. This year's theme is 'Change and Adapt'.

Changes in Transport and Communications

Changes in technology have taken place throughout history to help improve the world we live in. Our society has moved from writing letters to communicate over long distances to using computers and mobile phones to stay connected wherever you are in the world.



The work of the famous inventor
Alexander Graham Bell was essential in
the development of communication by
telephone. With the help of his assistant,
he was able to use electricity to send
sound. The invention of his telephone in
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Changes and Adaption of Animals and Plants

Plants and animals rely on their habitats for the essentials of food, water and shelter. If they cannot find these in their homes, they face the problem of survival. They need to adapt to the changes in their habitat or risk becoming an endangered species. This could lead to extinction.





Page 1 of 2



Nature can often create some of its own changes. However, other changes are created by some humans who destroy habitats for land or materials.

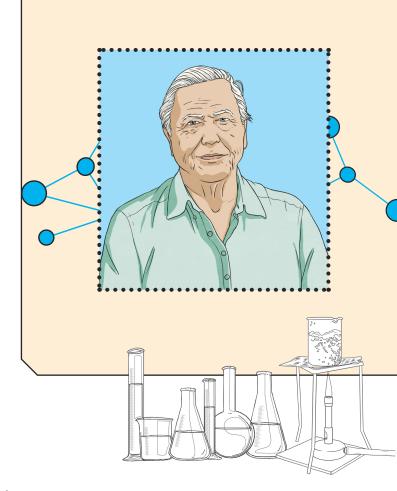
The work of many devoted conservationists has helped provide some positive changes. One of these changes is to enter endangered animals into breeding programmes in nature reserves to be later released into the wild.

Sir David Attenborough is a famous natural historian and television presenter. He has campaigned to protect animal and plant habitats. He has made many people aware of the damaging effects that humans can have on the natural world.

Properties and Changes of Materials

Materials all have certain properties and usually exist in one of three states: solid, liquid and gas, which change when cooled, heated or put under pressure.

Melting can change a solid to a liquid, such as ice to water. Freezing reverses this change. A puddle drying on a sunny day is an example of how evaporation

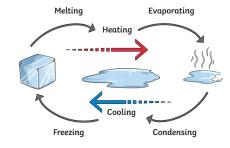


can cause a liquid to change to a gas.

Evaporation can cool our bodies down on a hot day. When sweat forms on the skin, it evaporates and reduces our temperature. Condensation happens when a gas changes to a liquid, such as hot breath on a window.

Glossary

eco-friendly: Something that is not harmful to the environment. **endangered:** To be under threat of not existing anymore. **extinction:** When a plant or animal does not exist anymore.



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Questions

1.	How can a state of matter be changed? Tick thr	ee.
	heated	
	O cooled	
	O broken into pieces	
	O put under pressure	
2.	Draw four lines and match each word to its def	inition.
	melting	changing a solid to a liquid
	condensation	changing a liquid to a solid
	evaporation	changing a gas to a liquid
	freezing	changing a liquid to a gas
3.	Fill in the missing words.	
	The work of the famous Alexan	der Graham Bell was essential in the
	development of by telephone.	
4.	Look at the paragraph that begins Melting can	•
	Find and copy one word which means 'to make	something less .
5.	List three things mentioned in the text that plan	nts and animals rely on their habitat for.
	•	
	•	
	•	
6.	Summarise what you have learnt about evapore	ition in 20 words or fewer.





7.	Why do you think Sir David Attenborough is so famous?
8.	Why do you think the author gives us examples for each of the changes made by solid, liquids and gases? Explain your answer.

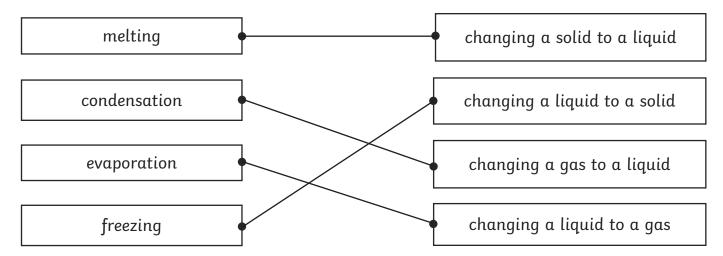




Answers

- 1. How can a state of matter be changed? Tick three.
 - heated

 - O broken into pieces
- 2. Draw **four** lines and match each word to its definition.



3. Fill in the missing words.

The work of the famous **inventor** Alexander Graham Bell was essential in the development of **communication** by telephone.

4. Look at the paragraph that begins **Melting can change a solid...** Find and copy one word which means 'to make something less'.

reduces

- 5. List **three** things mentioned in the text that plants and animals rely on their habitat for.
 - food
 - water
 - shelter
- 6. Summarise what you have learnt about evaporation in 20 words or fewer.

Pupils' own responses, such as: Evaporation is when a liquid changes to a gas and it helps us by cooling us down when we sweat.





7. Why do you think Sir David Attenborough is so famous?

Pupils' own responses, such as: I think Sir David Attenborough is so famous because

he has tried to raise human awareness of the importance of looking after our natural

- world and the problems that can occur if we do not.
- 8. Why do you think the author gives us examples for each of the changes made by solid, liquids and gases? Explain your answer.
 - Pupils' own responses, such as: The author gives us examples for each of the changes made by solids, liquids and gases so that we can understand how they change in a practical way that we will probably have experienced.



