

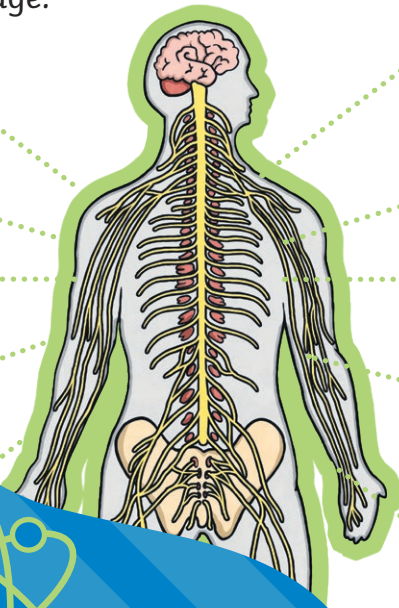
Growth

British Science Week

The British Science Association holds a ten-day event every year to celebrate science, technology **engineering** and maths. It is called British Science Week and the theme for 2022 is 'Growth'. Growth happens in many ways in the world around us. Every living thing is made up of cells and growth happens when the cells increase in size, number or age.

Humans

It's important that humans have healthy food, water and rest in order to grow. Many people think that the first five years of a child's life are the most important. A child will usually learn to eat solid food, walk and talk during this stage. Growth sometimes happens in ways which we cannot see and humans will also improve their understanding and skills as they age.

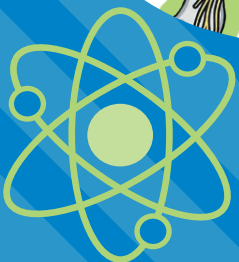
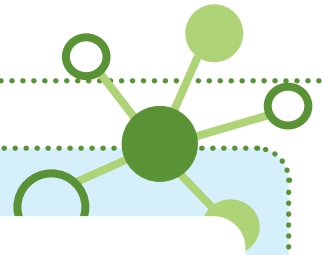


Did You Know...?

A newborn baby has 300 bones compared with an adult who has 206 bones. This is because a baby's bones join together as they become older.

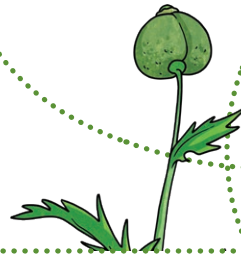
Animals

Animals need water, food, air and shelter in order to grow. Different animals have varied diets to help them develop well and their bodies are adapted to this. A tiger follows a meat-based diet and has sharp teeth whereas a zebra's back teeth are adapted to crush and grind plants.



Plants

Plants need to have air, sunlight, **nutrients** from the soil and water. The plants' surroundings can affect how it develops. The amount of light or warmth that it has can have an impact on how quickly it grows. A substance called fertiliser can also be added to soil to help plants grow taller and stronger.



Did You Know...?

The oldest tree recorded is thought to be in the United States of America and is over 5000 years old.

Growth as Repair

Some cells are able to repair damaged parts. The new growth may look different. A scar may form on a human after they have suffered a cut. Some animals are even able to grow missing parts. Lizards can grow a new tail if they lose it!

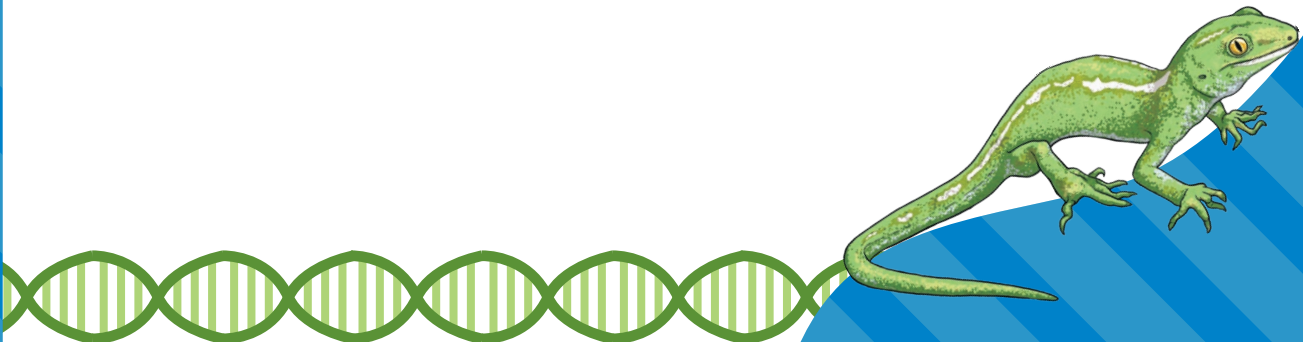
Glossary

engineering:

An area of science and technology which focuses on machines, engines, design and building.

nutrients:

Important substances that help growth.



Questions

1. Which animal can grow a new tail if they lose it? Tick one.

- tiger
 zebra
 lizard
 monkey

2. Number the events from 1-4 to show the order in which they are mentioned in the text.

- The theme for British Science Week 2022 is 'Growth'.
 A substance called fertiliser can also be added to soil.
 It's important that humans have healthy food, water and rest.
 Animals need water, food, air and shelter in order to grow.

3. How many bones does a newborn baby have? Tick one.

- 105
 206
 300
 400

4. Draw **four** lines and complete each sentence.

The British Science
Association...

is thought to be in the
United States of America.

Growth
sometimes happens...

holds a ten-day event
every year.

The oldest tree recorded...

after they have
suffered a cut.

A scar may form
on a human...

in ways which we
cannot see.

5. Fill in the missing word.

A zebra's back teeth are _____ to crush and grind plants.

6. In what ways that we cannot see do humans grow?

7. Why do you think warmth may affect how plants grow?

Answers

1. Which animal can grow a new tail if they lose it? Tick one.

- tiger
 zebra
 lizard
 monkey

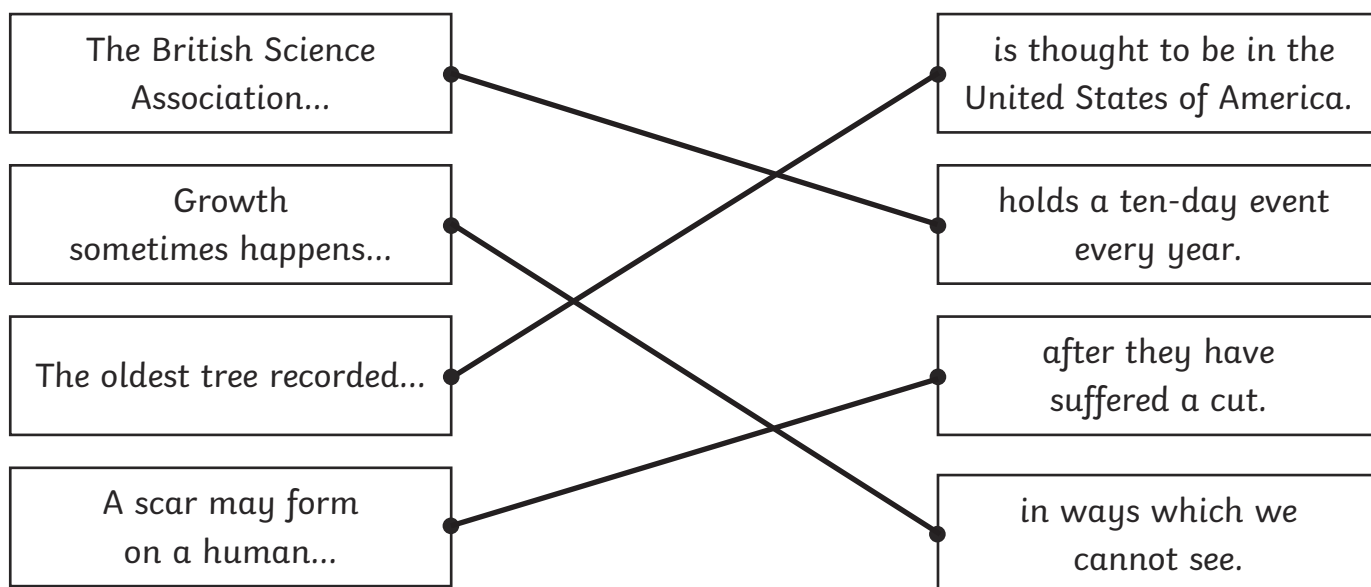
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3. How many bones does a newborn baby have? Tick one.

- 105
 206
 300
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4. Draw **four** lines and complete each sentence.



5. Fill in the missing word.

A zebra's back teeth are **adapted** to crush and grind plants.

6. In what ways that we cannot see do humans grow?

Humans improve their understanding and skills as they grow but we cannot see this.

7. Why do you think warmth may affect how plants grow?

Pupils' own responses, such as: I think warmth may affect how plants grow because certain plants will not develop well if it is too cold or too hot and it could damage the plant if the temperature is not right.

Growth

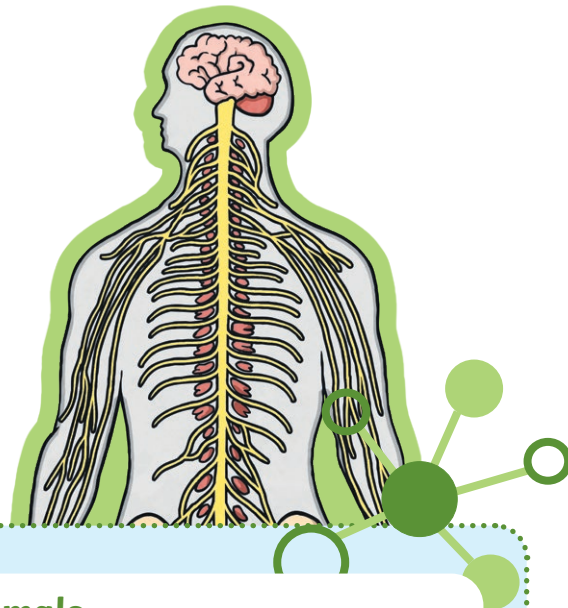
British Science Week

Every year, the British Science Association holds a ten-day celebration of science, technology, **engineering** and maths called British Science Week. Its aim is to create interest and excitement for science. The theme for 2022 is 'Growth'. Growth happens in many ways in the world around us. Every living thing is made up of cells and growth occurs when the cells increase in size, number or age.

Humans

It's important that humans have healthy food, water and rest in order to grow. Many people think that the first five years of a child's life are the most important. During this stage, a child will usually reach key milestones, such as their first steps or their first words. Sometimes, growth happens in ways which we cannot see and humans will also improve their understanding and skills as they age.

Interestingly, a newborn baby has 300 bones compared with an adult who has 206 bones. This is because a baby's bones join together as they become older.



Animals

In order to grow, animals require water, food, air and shelter. Shelter is important for animals to protect them from any **predators** or weather. Different animals have varied diets to help them grow successfully and their bodies are adapted to this. A tiger follows a meat-based diet and has sharp teeth whereas a zebra's back teeth are adapted to crush and grind plants.



Plants

Plants need to have air, sunlight, **nutrients** from the soil and water. The plants' surroundings can affect how it develops. For example, the amount of light or temperature that it has can have an impact on how quickly it grows. In addition, a substance called fertiliser can be added to soil to help plants grow taller and stronger.



Pollen is carried by insects, wind, air, water or animals in order for new seeds to grow. A seed will sprout and the shoot increases in size and grows into a plant. Each part of the plant has a job and the leaves use sunlight to help make its own food.

Did You Know...?

The oldest tree recorded is thought to be in the United States of America and is over 5000 years old.

Growth as Repair

Amazingly, some cells are able to repair damaged parts. Sometimes, the new growth may look different, such as how a scar may form on a human after they have suffered a cut. Some animals are even able to grow missing parts. Incredibly, lizards can grow a new tail if they lose it!

Glossary

engineering:

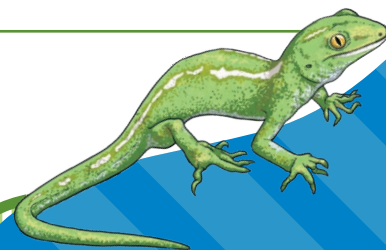
An area of science and technology which focuses on machines, engines, design and building.

nutrients:

Important substances that help growth.

predators:

Animals that hunt other animals.



Questions

1. What do plants get from the soil? Tick one.

- air
- sunlight
- warmth
- nutrients

2. Number the events from 1-4 to show the order in which they are mentioned in the text.

- A seed will sprout and the shoot increases in size and grows into a plant.
- The first five years of a child's life are the most important.
- Different animals have varied diets.
- Some cells are able to repair damaged parts.

3. Look at the section **British Science Week**.

Which word means the same as 'happens'? Tick one.

- aim
- theme
- occurs
- increase

4. Draw **four** lines and complete each sentence.

Interestingly, a newborn baby has 300 bones...

to repair damaged parts.

The plants' surroundings...

their understanding and skills as they age.

Amazingly, some cells are able...

compared with an adult who has 206 bones.

Humans will also improve...

can affect how it develops.

5. Look at the section **Animals**.

Find and copy a word which means the same as 'need'.

6. Give one example of a key milestone that a child will usually reach which is listed in the text.

7. Why do you think a tiger has sharp teeth?

8. Look at the section **Growth as Repair**.

Why do you think the author has used the words 'amazingly' and 'incredibly'?

Answers

1. What do plants get from the soil? Tick one.

- air
 sunlight
 warmth
 nutrients

2. Number the events from 1-4 to show the order in which they are mentioned in the text.

- 3** A seed will sprout and the shoot increases in size and grows into a plant.
 1 The first five years of a child's life are the most important.
 2 Different animals have varied diets.
 4 Some cells are able to repair damaged parts.

3. Look at the section **British Science Week**.

Which word means the same as 'happens'? Tick one.

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4. Draw **four** lines and complete each sentence.

| | |
|--|---|
| Interestingly, a newborn baby has 300 bones... | to repair damaged parts. |
| The plants' surroundings... | their understanding and skills as they age. |
| Amazingly, some cells are able... | compared with an adult who has 206 bones. |
| Humans will also improve... | can affect how it develops. |

5. Look at the section **Animals**.

Find and copy a word which means the same as 'need'.

require

6. Give one example of a key milestone that a child will usually reach which is listed in the text.

Accept any one of the following: first steps, first words.

7. Why do you think a tiger has sharp teeth?

Pupils' own responses, such as: I think a tiger has sharp teeth as they help them when hunting and they can tear meat apart easily, which is helpful as they eat a lot of meat.

8. Look at the section **Growth as Repair**.

Why do you think the author has used the words 'amazingly' and 'incredibly'?

Pupils' own responses, such as: I think the author has used the words amazingly and incredibly because they are impressed with how animals and humans can form new cells to repair damage.

Growth

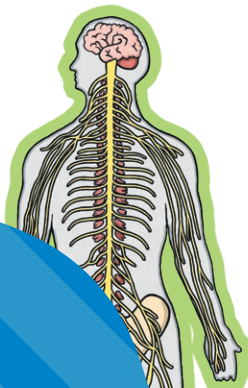
British Science Week

Every year, the British Science Association holds a ten-day celebration of science, technology, engineering and maths called British Science Week. Its aim is to create interest and excitement for science. The theme for 2022 is 'Growth'. Growth happens in many ways in the world around us. Every living thing is made up of cells and growth occurs when the cells increase in size, number or age.

Humans

It's important that humans have healthy food, water and rest in order to grow. It is believed that the first five years of a child's life are the most important in terms of their development. During this phase, a child will usually reach key milestones, such as their first steps or their first words. Humans increase in height and develop their muscles as they age. Sometimes, growth happens in ways which we cannot see and humans can also improve their knowledge and skills.

Interestingly, a newborn baby has 300 bones compared with an adult who has 206 bones. This is because a baby's bones fuse together as they become older.



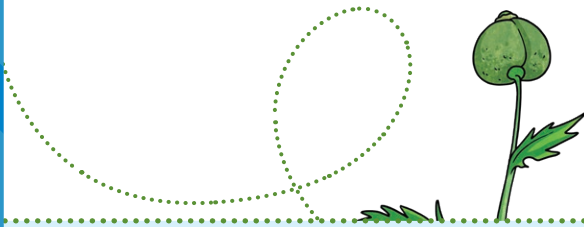
Animals

In order to grow, animals require water, food, air and shelter. Shelter is important for animals to protect them from any **predators** or different weather conditions.

The life cycle of a butterfly is an interesting animal to research in terms of its growth. The butterfly begins its life as a small egg. The egg hatches and a caterpillar emerges. After that, the caterpillar begins to increase in size as it eats. Then, the caterpillar turns itself into a pupa when it has fully grown. This is where its incredible transformation occurs and it becomes a butterfly. This stage can take from two weeks to several months.

Plants

Plants need to have air, sunlight, **nutrients** from the soil and water in order to grow. The plants' environment or surroundings can affect how it develops. For example, the amount of light or temperature that it is exposed to can have an impact on how quickly it grows. In addition, a substance called fertiliser can be added to soil to help plants grow bigger and faster.

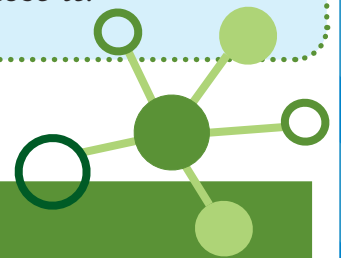


Pollination happens when pollen is transported by insects, wind, air, water or animals in order for new seeds to grow. A seed will sprout and the shoot increases in size and grows into a plant. Each part of the plant has a job and the leaves are extremely important. Plants use them to convert sunlight into their own food.

Trees are among the longest-living things and the oldest tree recorded is believed to be in the United States of America and has been aged at over 5000 years old.

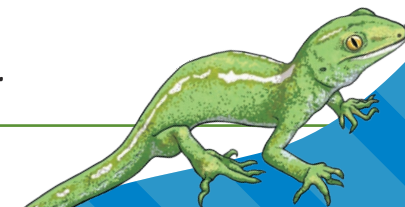
Growth as Repair

Amazingly, some cells are able to repair damaged parts. Sometimes, the new growth may not look like the original cells, such as how a scar may form on a human after they have suffered a cut. Some animals are even able to grow missing parts. Incredibly, lizards can grow a new tail if they lose it!



Glossary

| | |
|-------------------|--|
| nutrients: | Important substances that help growth. |
| predators: | Animals that hunt other animals. |



Questions

1. Which subject is **not** celebrated during British Science Week? Tick one.

- technology
- engineering
- maths
- languages

2. Draw **four** lines and match each sub-heading to the corresponding sentence from that section.

Humans

Incredibly, lizards can grow a new tail if they lose it!

Animals

During this phase, a child will usually reach key milestones, such as their first steps or their first words.

Plants

After that, the caterpillar begins to increase in size as it eats.

Growth as Repair

Trees are among the longest-living things.

3. How long can it take for a caterpillar to turn into a butterfly?

4. Fill in the missing word.

Its aim is to create interest and _____ for science.

5. Look at the section **Humans**.

Find and copy a word which means the same as 'combine' or 'join'.

6. ... a child will usually reach key milestones...

What impression does the author give by the use of the word 'key'?

7. Why do you think an exact age is not recorded for the oldest living tree?

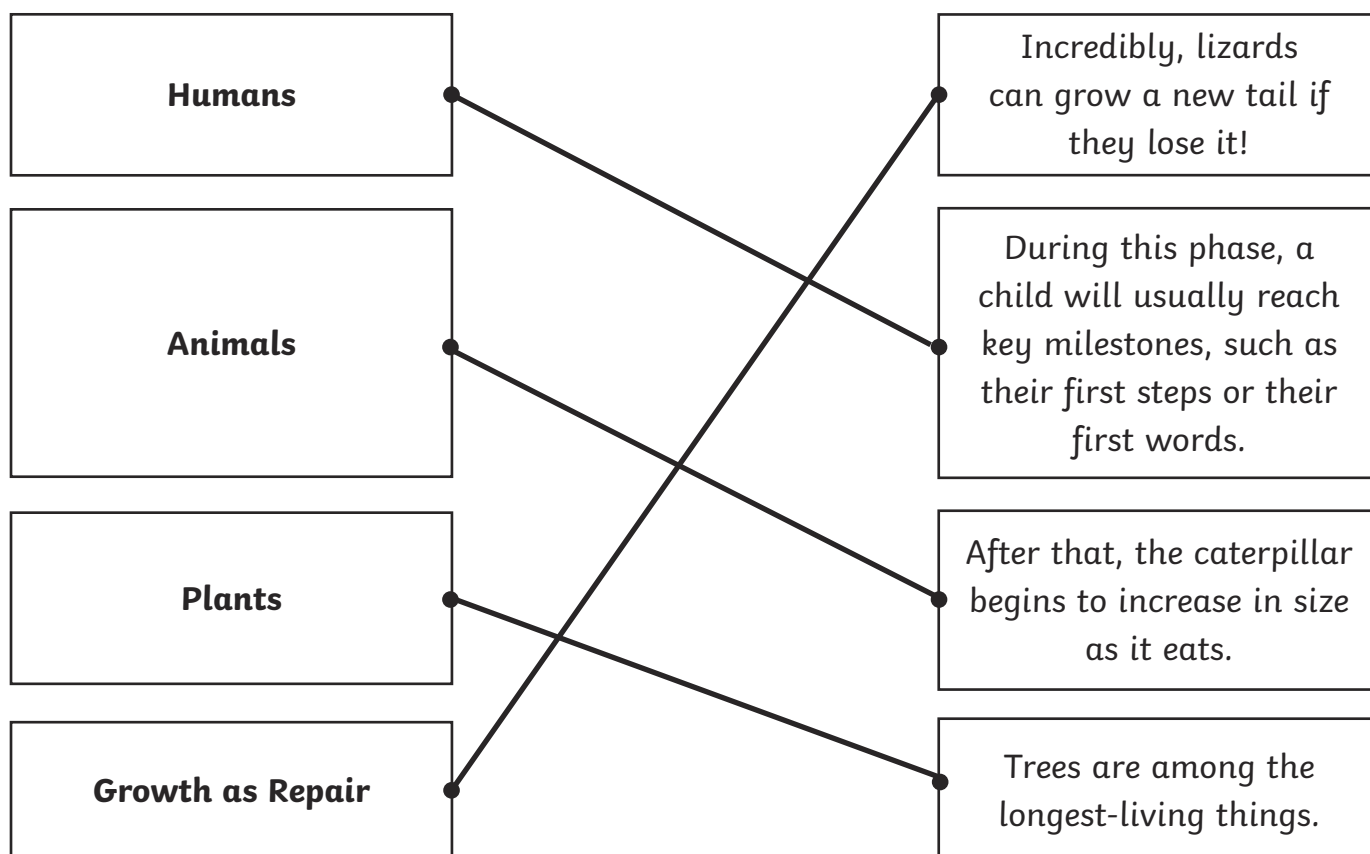
8. Predict what would happen to the growth of a plant that is always kept in a dark place.

Answers

1. Which subject is **not** celebrated during British Science Week? Tick one.

- technology
- engineering
- maths
- languages**

2. Draw **four** lines and match each sub-heading to the corresponding sentence from that section.



3. How long can it take for a caterpillar to turn into a butterfly?

It can take from two weeks to several months for a caterpillar to turn into a butterfly.

4. Fill in the missing word.

Its aim is to create interest and **excitement** for science.

5. Look at the section **Humans**.

Find and copy a word which means the same as 'combine' or 'join'.

fuse

6. ... a child will usually reach key milestones...

What impression does the author give by the use of the word 'key'?

Pupils' own responses, such as: I think the author gives the impression that they are major and important moments in a child's development by the use of the word key.

7. Why do you think an exact age is not recorded for the oldest living tree?

Pupils' own responses, such as: I think an exact age is not recorded for the oldest-living tree because it is difficult for someone to know exactly how old they are and instead they give a rough estimate.

8. Predict what would happen to the growth of a plant that is always kept in a dark place.

Pupils' own responses, such as: I think that a plant that was kept in a dark place would not grow properly as the leaves would not develop and be able to take in sunlight for the plant to make its own food.