Animals including humans

How do animals survive, grow and stay healthy?

Lesson 1: What helps animals and humans survive?





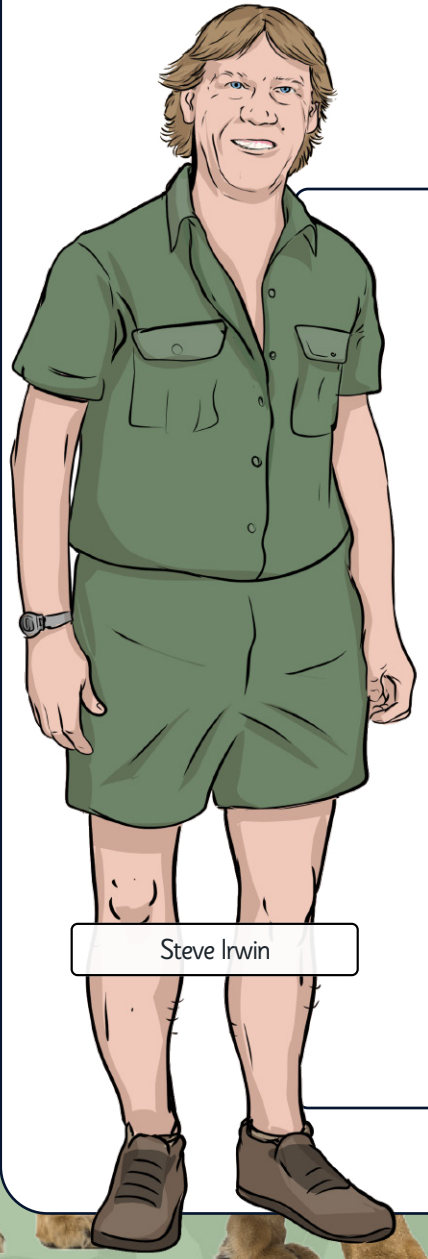






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Scientific enquiry types and skills



Scientific enquiry types

- Testing
- Researching
- Observing
- Pattern seeking
- **Identifying & classifying** ✓
- Problem solving

Working scientifically skills

- **Asking questions** ✓
- Making predictions
- Setting up tests
- Observing & measuring
- **Recording data** ✓
- Interpreting & communicating results
- Evaluating

How do animals survive, grow and stay healthy?


Marie Curie

Lesson 1: What helps animals and humans survive?

Lesson 2: How can we identify animals and their young?

Lesson 3: What is an animal life cycle?

Lesson 4: Why is exercise good for us?

Lesson 5: How can we stay healthy?


William Harvey

Key vocabulary for this lesson



animal – a living thing that is not a plant



alive – something that is living



survive – to stay alive



air – is all around us and living things need it to survive



water – a clear liquid needed for all known life



food – what an animal eats



shelter – a safe place to live that protects living things

Identifying and classifying



Hello! I am **Calvin** the **zoologist**, and my job is to study animals and learn how they live.

When I work, I carefully **identify** the things that animals need and then **classify** them by grouping them together. This helps me to understand what all animals, including humans, need to **survive**.

Today, you are going to work like zoologists by **identifying and classifying** the things that animals and humans need to survive, just like real scientists do!



Let's recap



Animals come in all **shapes**, **sizes** and **colours**. They can live **on land**, **in the water** or **both**!

In year 1, we learnt that we can group animals by looking at their ***features***. Look at the photos below. What **group of animals** do they all belong to?



robin



blackbird



seagull

Discuss this question with your **learning partner**. Be ready to **share your *feedback*** with the class before the **answers** are revealed.

Use the following sentence starters to help you.
"I think these animals are all …"
"This group of animals is called …"

Let's recap

answers

Identifying & classifying



Robins, blackbirds and seagulls are all **birds**.

What makes an animal a **bird**? Feathers!

All birds have ***feathers, two legs*** and **two wings**. Birds also lay hard shelled **eggs**.



robin



blackbird



seagull

Let's recap

Identifying & classifying

Let's look at some other animal groups. **Can you remember what group each of these animals belongs to?**

Discuss this question with your **learning partner**. Be ready to **share your feedback** with the class before the **answers** are revealed.



bear



crocodile



frog



salmon

Use the **word bank** and **sentence starters** to help you.

fish	amphibian	reptile	mammal

"The ____ is a type of…"
"The ____ belongs to the group of animals called…"



Let's recap

answers

Identifying & classifying



Bears are **mammals**.

Mammals have fur or hair on their body, and they also feed their babies on milk.



Crocodiles are **reptiles**.

Reptiles are a type of animal with **dry**, **scaly skin**. They lay eggs. They can live on land or in the water.



Frogs are **amphibians**.

Amphibians are animals with **moist skin** that are born in water. At first, they **breathe with gills**, like fish.



Salmon are ***fish***.

Fish live in water and have **gills**, **scales** and ***fins***.



Animal groups

Identifying & classifying



We know some animals that belong to these groups:

- **mammals**
- **fish**
- **amphibians**
- **birds**
- **reptiles**

Humans are animals too! But which group do they belong to?







Let's discuss

Humans are **mammals**.
All living things need the same things to stay **alive** or **survive** .
Survive means to **keep living**.








Look at these groups of animals.
They all need the **same things** to keep living or survive.
What things do animals need to survive?

Discuss this question with your **learning partner** and make a list on your whiteboard. Be ready to **share** your ***feedback*** with the class before the **answers** are revealed.

Use the following sentence starter to help you.
"I think these animals all need…"



Let's discuss

answers

All living things need **food**, **water**, and **air** to survive.

food



water



air



Food, water, and air are **basic needs** because animals cannot live without them.
A **basic need** is something you **must have** to stay alive.

Food

Food is a **basic need** because all animals need it to stay alive. Different animals eat different kinds of food depending on what they are.

For example, cows eat grass, lions eat meat and birds might eat seeds or worms. Humans also need different types of food to stay healthy, such as fruits, vegetables and meat. What an animal eats is called its **diet**, and it helps them grow, have energy, and stay strong.











Water

Water is a **basic need** because all animals and humans need it to stay alive. Different animals get their water in different ways.

A cat drinks from its bowl, a rabbit drinks from its bottle and a bee might drink from a puddle or a birdbath. Some animals, such as camels, can go a **long time** without water. Some get water from the food they eat. Humans also need to drink water **every day** to stay healthy.

Water helps all animals and people **grow**, have **energy** and **stay strong**.







Air

Air is a **basic need** because all animals need it to stay alive.

Animals get air in different ways. Humans and dogs **breathe air** through their nose and mouth. Fish get air from the **water** using their **gills**. Insects get air through tiny **holes** in their bodies. Whales and dolphins are mammals, so they breathe air through a **blowhole** on the top of their head. They have to come up to the surface to breathe.

Without air, **animals and people cannot survive**.







Shelter

Air, water and food are **basic needs** that all animals have. You might also have thought about **a safe place to live**. This is called a **shelter** . A shelter is something animals and humans need to stay alive. It is a safe place where they can **rest** and **protect themselves** from danger.

Different animals have different kinds of shelters. A dog might **sleep inside a house**, while a wild fox sleeps in a **den underground**. Birds build **nests in trees**, and some animals hide in **caves** or **under rocks**. Even though shelters look very different, they all help animals and people stay **safe** and **comfortable**.





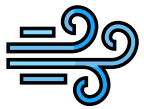




Let's watch



Animals and humans all have the same basic needs to stay alive.

- **food** 
- **water** 
- **air** 
- **shelter** 

Watch this video to help you remember the four basic needs of animals and humans.



https://www.bbc.co.uk/bitesize/articles/z343f82

Let's discuss

Think back to the list that you made earlier in the lesson.
What things do animals need to survive?
What else did you have on your list?



I wouldn't survive without football!

I couldn't live without TV!



Do you agree with Clay or Isla?
Are football and TV important for survival?

Discuss these questions with your **learning partner**. Be ready to **share your feedback** with the class before the **answers** are revealed.

Use the following sentence starters to help you.
"I don't agree because…"
"I agree because…"

Let's discuss

answers

Some people say that they couldn't survive without football or couldn't live without TV but that isn't really true.



I wouldn't survive without football!

I couldn't live without TV!



Football, TV, computer games, reading, singing and dancing are things we **enjoy**, not things that we **need** to stay alive. They make us **happy** and help us have fun, but **we can still survive and live without them**.

Remember
The four things we need for survival are food, water, air and shelter.

Basic need or nice to have?

Some things are **not basic needs** for survival, but they might help us **get what we need**.



A bed is not a basic need, but it helps us rest safely in our shelter or home.



A car is not a basic need, but it can help us travel to the shops to get food or get to work.

These things **make life easier** and help us get our basic needs.

It can be hard to sort items. Asking these questions might help you decide:

- **Do I need this to stay alive?**
- **Is this a need or something that helps us with our needs?**
- **Does this give me food, water, air or shelter ?**

Activity

Identifying & classifying | Recording data | Asking questions

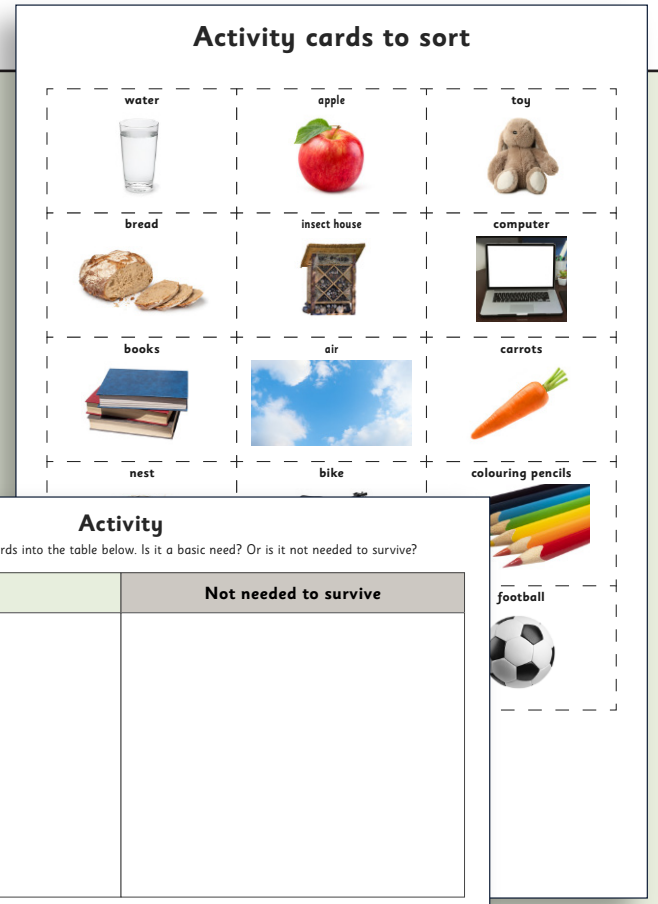


Look at the pictures. Think about these questions:

- **Which of these things do animals need to stay alive?**
- **Which things would be nice to have but are not needed to survive?**

Sort them into the table on your **activity worksheet**.

There is an **example to help you** on the following slide.



Activity - example



This is a colouring book. It is nice to have but it is **not** air, food, water or shelter. It is **not a basic need**.

We would put it here to show it is **NOT** a basic need.

Activity

Cut out and sort the picture cards into the table below. Is it a basic need? Or is it not needed to survive?

Basic need	Not needed to stay alive and survive.
	

Draw and **label** or **write** two more items in each side of the table.

What are the four **basic needs**?

1. _____ **2.** _____ **3.** _____ **4.** _____

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Let's discuss

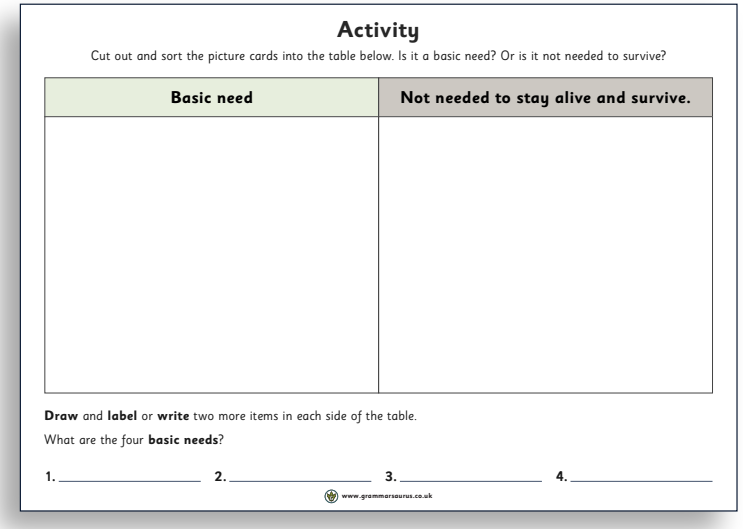
Interpreting & communicating results

How did you sort the items?

Were there any things that were difficult to sort?

Did you add any items to both of the boxes?

Discuss these questions with your **learning partner**.
Be ready to **share your *feedback*** with the class.



Activity

Cut out and sort the picture cards into the table below. Is it a basic need? Or is it not needed to survive?

Basic need	Not needed to stay alive and survive.

Draw and **label** or **write** two more items in each side of the table.

What are the four **basic needs**?

1. _____ 2. _____ 3. _____ 4. _____

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Use the following sentence starters to help you.
"I think ____ is a basic need because..."
"_____ is not a basic need because..."



Challenge



Discuss the following question with your **learning partner**.

Decide which words are needed to complete the sentences.

Can you complete the missing words in these statements?

A basic need is something you _____.

Animals and humans need _____ to stay alive.

_____is nice to have but not a basic need.

Be ready to **share your feedback** with the class before the answers are revealed.



Challenge

answers



Marie Curie

A basic need is something you **need to stay alive and survive**.

Animals and humans need **food**, **water**, **air** and **shelter** to stay alive.

Music is nice to have, but not a basic need.



William Harvey