

Week beginning: 27<sup>th</sup> April

**WALT:** To understand what a plant needs to grow.



# Watch the video below

<https://www.bbc.co.uk/bitesize/topics/zpxnyrd/articles/zxxsyrd>



Can you write down five facts you learnt from the video?



# What a Plant Needs



air

light

water

nutrients

warmth



# Why Does it Need Them?

- If a seed is not **warm** enough, it will not germinate
- Germination is when the seed starts to sprout in to a plant
- If a plant does not have enough **light**, it will grow to be tall and flimsy as it searches for light. It will probably die.
- If a plant is not **watered** enough, its stem will be fragile and have very dry leaves. It will eventually die.

# Water

## Plants need water for many reasons...

- When you first plant a seed, water is needed to help turn the seed into the start of a plant.
- Plants need water to suck up nutrients from the soil. Nutrients are the good things in soil which will help a plant grow and be healthy.
- The leaves of a plant need water to help it turn sunlight in to food.

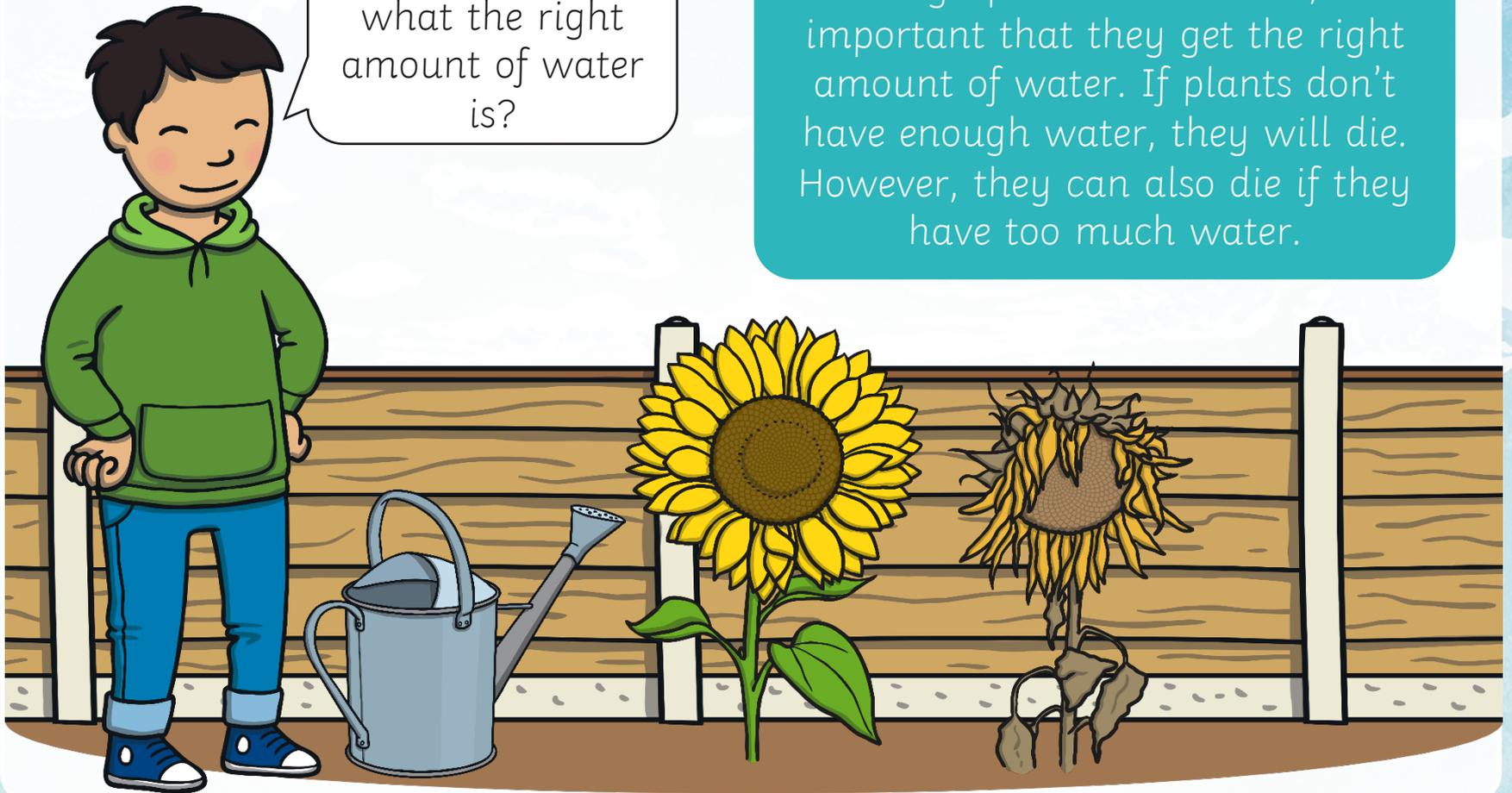
Children should try to drink around five glasses of water a day. Plants need water to grow and be healthy too!



# How Much Water?

How do we know what the right amount of water is?

Although plants need water, it is important that they get the right amount of water. If plants don't have enough water, they will die. However, they can also die if they have too much water.



# How Much Water?

To know how much is the right amount of water, we need to know what type of plant it is. For example, lavender and sage need very little water. Whereas, irises and hydrangeas need lots of water.

When you buy a packet of seeds, the packet will often give you information about how much water a plant needs. If you aren't sure, you could find out using a book or the Internet.



lavender



sage



iris

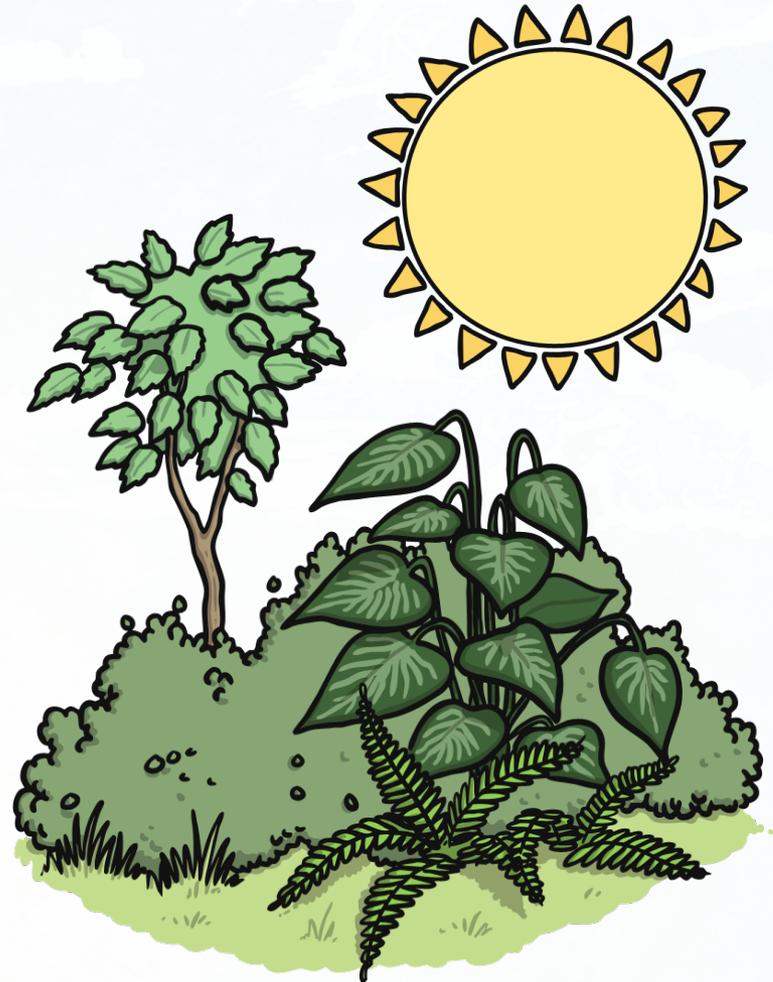


hydrangea

# Light

We need sunlight to keep healthy. Our bodies make vitamin D from sunlight. Vitamin D helps our bodies

Leaves turn sunlight in to food for the whole plant. Without light, a plant won't be healthy.



# Light

If you put a plant in a very dark place, such as a cupboard, you will notice some interesting things...



As the plant grows, it will grow in the direction of the cupboard door, trying to find some sunlight.

At first, the plant might grow taller, but it will be thinner than usual. This is because the plant is putting all its energy in to finding light.

# Light

If you put a plant in a very dark place, such as a cupboard, you will notice some interesting things...



The leaves of the plant will start to turn yellow. Leaves are green because of a chemical in them, which helps turn sunlight in to food. Without light, this can't be made, so the leaves lose their green colour.

Although the plant will continue to grow at first, it won't be healthy and will eventually die.

# Light

Can you work out which plant was grown in the light and which plant was grown in the dark?



This plant was  
grown in the light.

?



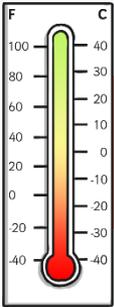
This plant was  
grown in the dark.

?

# Temperature

Explain to your partner what you think the word **temperature** means.

**temperature** – how hot or cold something is



When you've been poorly, the people you live with might have used a thermometer to check your temperature.

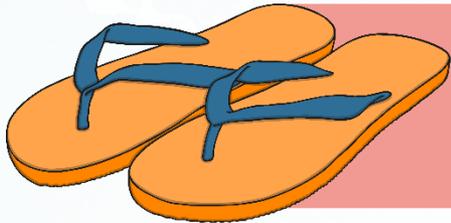
If the temperature outside is high (hot), you wouldn't go out wearing a coat, hat and gloves. You'd get very hot and sweaty and might begin to feel unwell.



# Temperature

Think about what the word **temperature** means.

**temperature** – how hot or cold something is



If the temperature outside is low (very cold), you wouldn't go outside in flip flops and a T-shirt. This may also make you feel unwell.



The right temperature is important to help us stay healthy.

# The Right Temperature

Plants need the right temperature to stay healthy too!  
The right temperature is different for different types of plants.



A **cactus** is from the desert, so it is used to a hot temperature.



**Daisies** can grow and be healthy in much cooler temperatures.

Seeds need the right temperature to start turning in to a plant. Plants also need the right temperature to be able to turn sunlight into food.

# What Parts of a Plant Do

The **leaves** use a process called **photosynthesis** to produce food for the plant. They use **light, water and carbon dioxide** to do this.

The **stem** transports water and nutrients to all parts of the plant.

The **roots** take up water and nutrients from the soil. They also keep the plant in the ground.



# How to look after your plant...

You are now going to present what you have learnt about looking after plants. Create a guide on how to look after a plant.

You might want to create a video, poster or information leaflet. Don't forget to include some top tips!

Post your finished idea on your Dojo portfolio. You may even earn some petals!

# Key things to consider:

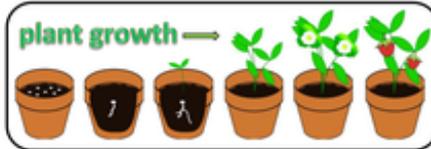
- What key things do plants need?
- Why do they need them?
- How can we make sure that they get them?
- Do all plants need the same?
- Could you include key facts you learnt last week?

# Example:

Plants create seeds to grow new plants. This is called **reproduction**.

# PLANTS

Seeds can stay **dormant** (asleep) for years before they are ready to grow.



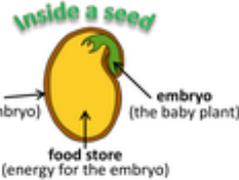
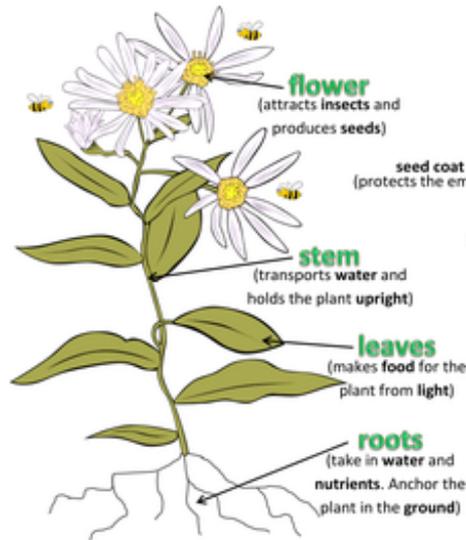
**Germination**  
This is when a **plant** starts to **grow** from a **seed**, but only when things are **just right!**



**It needs...**

- the right amount of **water**
- **air** (oxygen)
- the correct **temperature** (warm or cold)
- most seeds **don't** need **light**

For a plant to be **healthy** and to **grow** it needs the right amount of...



**This plant has died**

**why?**

- too much or not enough **water**
- too **hot** or too **cold**
- not enough **light**
- **pests** or **disease**
- **bad weather**

