



## Goal 2: Zero Hunger

End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

It is important that we all have access to food that will allow us to have healthy diets and nourish our bodies.

World leaders are taking action to ensure that we produce food and we use food in a sustainable way.

We are now going to learn about food security and sustainable farming, and explore growing your own food.

### What is food security and sustainable farming?

Food security is making sure that everyone has enough safe and healthy food to eat every day.

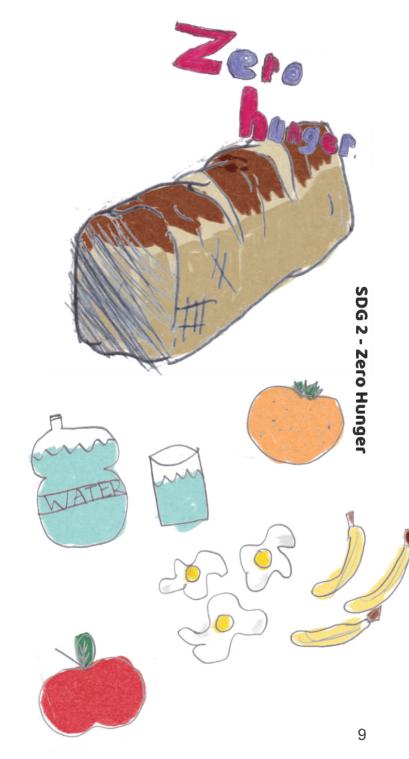
Food must be nutritious and provide people with the energy they need to complete their daily tasks. It is also important that food is affordable to communities.

Sustainable farming is a way of farming that aims to preserve soil health, prevent water pollution, and protect biodiversity. This type of farming aims to provide a place and a role for farms of all sizes from large to small.

Scientists and farmers across the world are exploring ways to sustainably farm land. Together they are researching the science of managing farms as ecosystems. This is called agroecology research. It aims to help farmers work with nature in order to have productive and profitable farms while also protecting the environment.

Sustainable farming will make sure our planet stays beautiful and healthy for us and future generations to enjoy!

- 1. Nutritious food contains many of the vitamins, minerals and substances needed for healthy growth.
- 2. Biodiversity is all the different kinds of life that live in a particular area. 3. An ecosystem is a community of living organisms together with the environments in which they live.

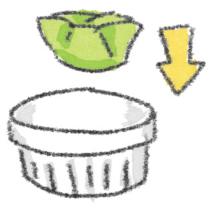


# **Experiment - Grow Your Own Food**

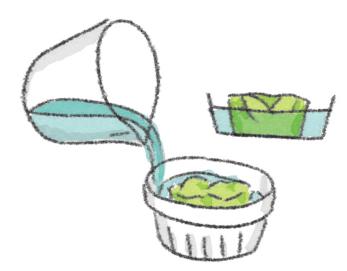


#### What you need:

- A left-over lettuce stalk
- A deep dish
- Water
- A sunny place



2. Place the lettuce stalk in the dish.



3. Add about 2 cm of water (just enough so that the stalk doesn't float).

Check on it every day and change the water if needed. Can you see any changes?

Once you have finished your experiment you can place the lettuce in a compost bin.

## What are your thoughts?

Have you learned something new about composting?

What would you do to achieve zero hunger?

# What Do We Learn From This Experiment?

### Grow your own Food

After 24 hours you should note that a brown colour appears on the surface of your cut lettuce. This is due to a process called oxidative discolouration. Once the lettuce is cut chemicals are released that can lead to a reaction involving oxygen that causes the brown colour to form.

After 5 days you should notice new green leaves growing from the top of your lettuce stump. What is happening? Cells within the lettuce stump have become activated and have begun to grow new stalks and leaves.

After 2 weeks you should notice that the stalks continue to grow but the leaves are no longer getting bigger. You now need extra nutrients in order for further leaf growth to continue.

You should have grown enough leaves to make a small salad or to add to your sandwich!!

Did you know that there is a method of farming in which plants are grown in a water-based nutrient solution instead of soil. This is known as hydroponics. Not all plants can be grown using this method but lettuce, tomatoes, cucumbers and peppers can be grown hydroponically.

1. Discolouration means a change of colour that can make something look damaged. 2. Activated means to start working.



# What Can We Do?



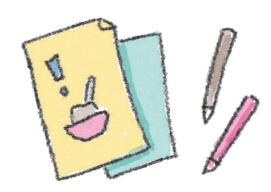
Encourage your family to reduce food waste at home.

SDG 2 is all about ending hunger, achieving food security and improving nutrition and promoting sustainable agriculture.

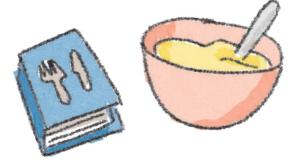
It can be hard to know the things we can do in our lives to make a difference, but by following some of the tips on this page we can start making the world better for everyone. You may not think that little changes will make a difference, but everyone making little changes adds up to big change.



Donate non-perishable foods to charities and food banks.



Create posters about the importance of reducing food waste.



Discover new recipes to use up left-overs.



Learn about local farmers markets near to you and try to support them if you can.