

**Year  
6**

# SCIENCE

## Marvellous Microorganisms

**Term 2**  
5 Weeks  
(Weeks 1-5)

Name:

Teacher:



SAMPLE

# What to expect in Year 6

## Science: Marvellous Microorganisms

### Christian Worldview

This unit has been developed with the whole family in mind, which is a part of our mission statement to work with families to help students reach their God-given potential. The unit explores God's design to make things work and allows for the teaching of the whole child. It incorporates activities for different learning styles so every student can find success in learning. Children discover that God has put within each living thing the ability to adapt to its surroundings. Children will explore God's unique plans for His creation.

### Unit Overview

The unit is developed for Year 6. Students are given the opportunity to explore, investigate and demonstrate their understanding of how mould and plant growth may be impacted by different environmental conditions, in particular, light, temperature, air and soil conditions.

Yeast is used in food and mould is medical. Students will look at how the growth and survival of these tiny organisms are dependent upon the right conditions and how humans have harnessed them to help.

Inquiry Questions

What is a microorganism?

What do they need to survive?

What conditions allow mould, seeds and plants to grow?

### Online Videos

Every effort has been made to only include YouTube videos that we can link in safe mode. However, for technical reasons, this is not always possible. We ask that you monitor your child's activity closely when working online. **YouTube videos should be opened in a web browser, NOT the YouTube App, where possible.**

**Please note that assignments and exams will need to be completed and submitted by the due dates given. If a student is unwell and unable to submit, they will need to request an extension through their Teacher.**



### Time allocation:

5 weeks, 3 lessons, 4 hours per week.

Week	Lesson Focus	Work Submissions
<b>1</b> p. 5-11	<b>Lesson 1:</b> Soil Types and Plant Growth <b>Lesson 2:</b> Salinity <b>Lesson 3:</b> Presentation of Findings	
<b>2</b> p. 12-15	<b>Lesson 1:</b> What Seeds Need to Grow <b>Lesson 2:</b> Growing Seeds Research <b>Lesson 3:</b> Research Related to Findings	
<b>3</b> p. 16-20	<b>Lesson 1:</b> Animal Kingdoms and Fungi <b>Lesson 2:</b> Fungi Types <b>Lesson 3:</b> Effects of Yeast on Bread	
<b>4</b> p. 21-24	<b>Lesson 1:</b> Science of Bread Making <b>Lesson 2:</b> Mould Investigation <b>Lesson 3:</b> Mould Growth Conditions	<b>Mould Growth Investigation</b> Formative Assessment Due Week 4 - Friday May 12th
<b>5</b> p. 25-27	<b>Lesson 1:</b> Mould Growth Investigation <b>Lesson 2:</b> Mould Growth Investigation <b>Lesson 3:</b> Mould Growth Poster	<b>Mould Growth Poster</b> Summative Assessment Due Week 5 - Friday May 19th

**Learning Intentions:** To identify soil types and their characteristics.

**Success Criteria:** I can communicate the different types of soil and their characteristics.

**Inquiry Questions:** What impacts on a plant's growth and how can I be a good steward?



**Christian Focus**

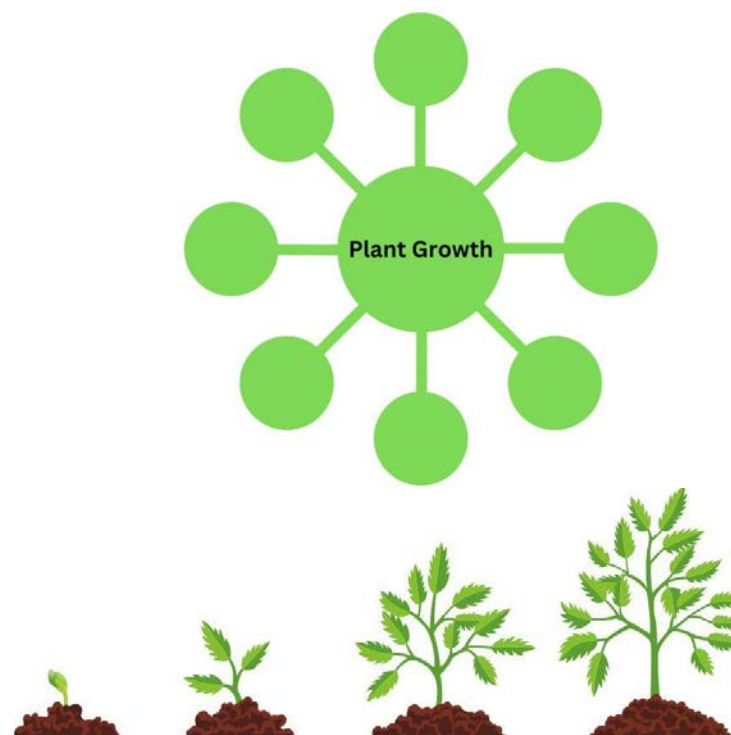
We can all respond to God's call to caretake the Earth and look after it. In **1 Timothy 1:12**, it read, 'As a caretaker, you're fulfilling this role by selflessly helping another person. Thank God for working through you – for appointing you to His service. Whether you're responsible for caring for strangers, your children, or your elderly parents, know that you are not alone in this difficult task.'

What do I know?	What do I want to know?	What I have learnt

**Understanding**

**Genesis 1:28** says God has made us stewards of His creation. Do you know what the word stewardship means? Can you define stewardship?

Using a mindmap, write the words 'PLANT GROWTH' in the middle and record any type of conditions required for plant growth onto your mind map. (Example: list, light, heat, water, soil, fertilisers and others.) Do this in your Science Journal. Let's investigate the conditions for plant growth.



Throughout this unit, you can refer to your KWL chart below and summarise all the information you have learnt. Rule up a page in your Science Journal with these 3 columns so that you have room to add your thoughts over the next 5 weeks.

# Week 1 Lesson 1 Continued...

## Demonstrating

Use your Science Journal to create a table, and in the table record information about the impacts of temperature, light and air on plant growth.

Impacts of Plant Growth		
Temperature	Light	Air



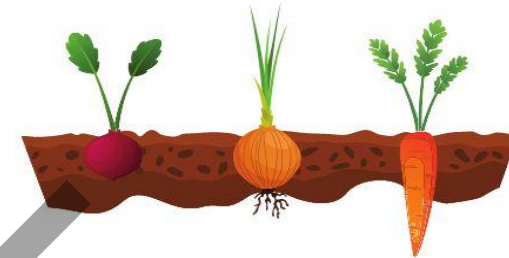
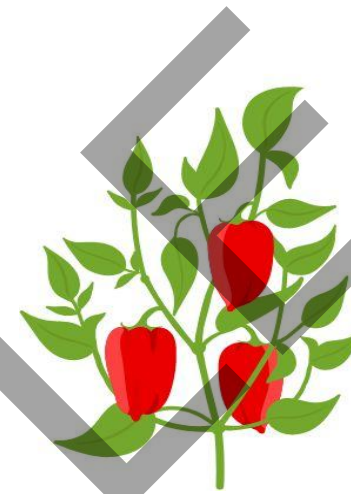
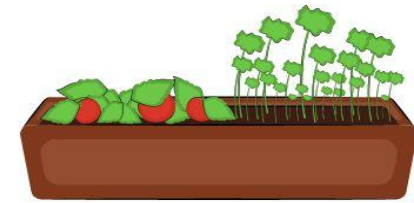
[Click here](#) and open the link to watch the video, **Introduction to Plants and their Environment**. This information will help you with completing your table.



[Click here](#) and open the link to watch the video, **Plants Talk: Creating the Perfect Environment for Growth**. The information in here will also assist you with completing your Impacts in the Plant Growth table.

## Research questions:

1. What temperature is ideal for growing vegetables and why do you think that?
2. What level of light is ideal for growing vegetables and why do you think that?
3. What is ideal air for growing vegetables?



## What are the soil types?

1. **Read page 2 of Science Now** - Physical Conditions that impact a plant's growth.
2. Use the Soil Types Table to **create a PowerPoint Presentation of 6 slides**. Each slide should include images displaying examples of each soil type. Each slide should also comment on the soil fertility level.
3. **Complete questions on page 3** to understand the content.

