

PLANTS – STRUCTURE AND GROWTH

LESSON PLAN

A fast-paced, hands-on and engaging session for primary and homeschooling students.

This 90-minute session is broken into **two halves (45 minutes each)** and covers a vast field of information pertaining to plants, their structure and growth.

It is appropriate for Kindy to Upper Primary, or homeschoolers of varied age groups.

Included:

- List of all learning objectives covered in the session
- List of materials you require to deliver it
- Some ideas for take-away questions and research points for the children
- Australian (WACE) Curriculum points touched upon

If you enjoy it, please remember to rate it on TPT 😊
Thank you!

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PLANTS

Learning Objectives:

To gain an understanding of:

- ✓ What cells are (the building blocks of life)
- ✓ Cell structure and organelle functions
- ✓ Main differences between plant vs animal cells
- ✓ The structure of plants (an introduction)
- ✓ How to label biological diagrams correctly
- ✓ How plants absorb and distribute nutrients
- ✓ The process and key chemistry of photosynthesis
- ✓ The importance of the sun and water in plant life

WA Curriculum codes touched upon:

- ACSSU179
- ACSSU002
- ACSSU072
- ACSSU017
- ACSSU072
- ACSSU149
- ACSSU048

Activities:

- Breathe deeply and discuss Oxygen and its origin
- Discuss cells and what they are comprised of
- Watch a short **video** of plant parts and how they grow
- Pull a weed and see the roots
- Watch a short video on photosynthesis
- Dance like a plant growing in the sunlight
- Recap photosynthesis using laminates
- Make a picture of photosynthesis (as sun print)
- Celery experiment to see xylem in action

Materials:

1. Lesson Plan
2. Poster of a cell
3. Plant parts diagram
4. Weeds in the ground to be pulled up
5. Plant life cycle diagram
6. Plant life cycle video
7. Video on plants growth
8. Slow ethereal music to dance to
9. Video of photosynthesis
10. Comic of photosynthesis
11. Cut outs of the elements of photosynthesis
12. Fabric, acrylic paints, leaves, etc...
13. Celery, water, food colouring
14. Book showing more detail in case of questions
15. Art supplies and texter pens
16. Crossword about plant and animal cells
17. Picture of a plant to label

Take-aways and home research:

- Label a picture of a plant in the correct way
- Plant cells vs animal cells crossword

LESSON PLAN: Plants (Primary ages)

90 mins total, with a break in middle

Part one – 45 mins					
LESSON SECTION	ACTIVITY	LEAD QUESTION	LEARNING POINTS	RESOURCES	MINS
Why are plants important	• Breathe deeply	What went into your lungs and where did it come from?	Plants produce much of the Oxygen we need to stay alive on this planet. So, it is important that we know how to help them grow	Our own lungs	10
Plant structure and growth	• Look at a poster of cells and their contents	Life – it is a miracle – what makes up things that are alive?	Cells – the basic building blocks of all living things. We spoke about atoms making up chemicals, but cells make up living things - animals and plants.	Poster of cells	
	• Watch a short video on: <ul style="list-style-type: none"> Plant parts How they grow Time lapse of growth 	What makes up a plant?	The Parts of a plant	<ul style="list-style-type: none"> Plant parts diagram https://www.youtube.com/watch?v=p3St51F4kE8 Plant life cycle diagram https://youtu.be/nMsRvbx24Bo https://www.youtube.com/watch?v=ECibetK2EYI 	20
	• Pull a weed and see the roots	How do plant parts look?	Each plant has the same key parts to keep it alive and growing	(Outside in the garden)	10
	• Dance like a plant growing	How does a plant move?	We can move upwards slowly like a plant growing over time	Orinoco flow (Enya)	5
End of part one – take a break					
Part two – 45 mins					
Photosynthesis	• Watch a short video on photosynthesis	How do plants get what they need to grow? Do they eat like us?	Plants make their own energy by taking in sunlight, carbon dioxide and water and turning them into sugar and oxygen	https://www.youtube.com/watch?v=D1Ymc311XS8	5
	• Recap photosynthesis using comic	What do we need for photosynthesis to happen?	Sunlight + Water + Carbon dioxide = Oxygen + Energy	Printout of a comic story	5
	• Make a picture of photosynthesis (as sun print)	Is the sun's energy really very powerful?	See what it does to art – its energy is tremendous. Reinforce photosynthesis with the prints on the fabric as it dries	<ul style="list-style-type: none"> Cut outs of photosynthesis Fabric Paint Sunlight 	30
	• See Xylem in action with a stick of celery	How do plants drink?	They pull water up through tubes of Xylem into the cells of the plant. Xylem tubes are like straws. See the water move up	Celery, water, food colouring	5