

Seeds to Plants

How to use the activity

In Seeds to Plants, Smudge plants some sunflower seeds in a garden, and children need to choose the weather on each day to help the seeds grow into large plants with flowers.

Seeds to Plants is a simulation activity, which allows children to see the results of their choices: the seeds may grow into large beautiful flowers, but care is not taken, the sunflowers can die from being exposed to the cold, or from too much sun!

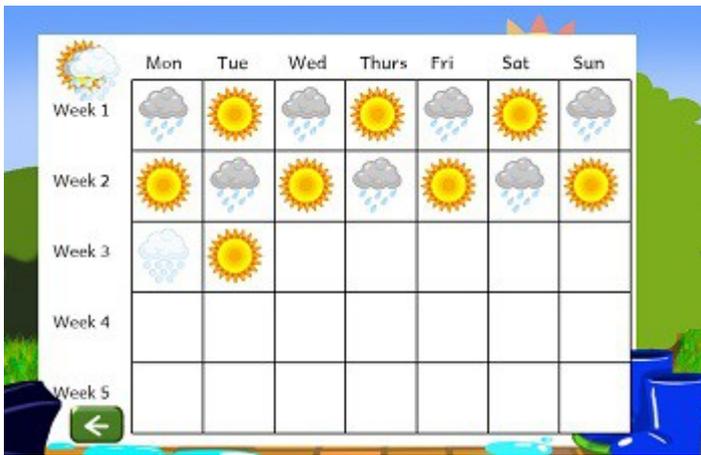
The activity starts with sunflower seeds planted in the brown patch of earth.



You must select one of the types of weather from the right of the screen for each day. To do this, move the mouse to one of the weather symbols, and drag it to the sky before releasing the mouse. The day is then completed, and you will see how the seeds have grown.



Children will be able to view a chart showing the choices made on each day by clicking on the icon showing a cloud.



Reporting

There is a reporting page, which allows the number of correct and incorrect answers to be seen. There is an option to allow the reporting to be reset. (The reporting information is stored in the browser memory of the computer).



Learning Outcomes

Know that plants need water, a source of light, and to be kept away from the cold in order to grow well.

Use of a simulation type activity, for early years children.

Ideas for work away from the computer

Plant some seeds:

For this you will need – small pots, soil, seeds and some water

- Fill each pot with soil;
- Open the packet of seeds (which gives children a chance to look at the seeds);
- Make a hole in the soil with a finger and put one or two seeds into each hole then fill some soil back on top of the seed

- Give the seed some water (but don't flood it!)
- Each children could write their name on a stick or on the pot.
- Place the plants somewhere warm

The seeds will take a few days before anything can be seen, and children should water the plants regularly.

Grow cress:

For this you will need – absorbent paper, a container cress seeds and some water

- Take some absorbent paper, and place in the bottom of a container.
 - Wet the paper and sprinkle cress seeds onto the paper.
 - Place the container in a warm and light place (a window sill is ideal) and dampen the paper every day.
- Children can record their observations as the cress grows, and when it has completely grown, it can be cut with scissors and eaten!

A second container of cress could be started at the same time, and placed in a dark cupboard, and children can compare the growth of both sets of cress. A further container could be prepared at the same time, but after the initial wetting of the paper, be given no more water. These could be added to the children's observations.

Support resources

Complimentary resources (interactive, online)

- our naming parts of a plant

Videos

How does a seed become a plant? <https://www.youtube.com/watch?v=tkFPyue5X3Q>

Links to Curricula

England - Science National Curriculum

Plants	Year 2	How seeds grow into mature plants
Plants	Year 2	How plants need water, light and temperature to grow

Scotland – Science

Biodiversity & Interdependence	1 st , SCN 1-03a	What plants need to grow
--------------------------------	--------------------------------	--------------------------

Northern Ireland

The World Around Us - Interdependence	KS2	Plant and plant growth
---------------------------------------	-----	------------------------

NGSS

K-LSS-1		Use observations to describe patterns of what plants need to survive
---------	--	--

LS1.C		Plants need water and light to grow
ESS3.A		Natural Resources: Living things need water, air and resources from the land
2-LS2-1		Conduct an investigation to determine if plants need sun and water to grow
LS2.A		Plants depend on water and light

Australia

Strand: Science Understanding, sub-strand: Bio-Senses

Foundation	ACSSU002	Living things have basic needs, inc. food and water
------------	----------	---

New Zealand

Living World Life Processes

Levels 1 & 2		Recognise that all living things have requirements so they can stay alive
--------------	--	---

Singapore

Diversity	P3 & P4	Describe the characteristics of living things (need water, food)
Energy Forms and Uses	P5 & P6	Living things need energy to carry out life processes
Interaction within the environment	P5 & P6	Identify the factors that affect the survival of an organism