




Learning Scientific Skills Outside the Classroom

Scientific Skills

Predicting	Observing	Concluding Specific skill – use simple scientific language to answer simple questions
Country of Origin	Suggested Age Range	Suggested Theme
 UK	KS1 specialist unit Activity planned for children with severe learning difficulties.	Plants

Location outside the classroom	Benefits of using this location
Unmown grass	There are lots of grass seeds
Learning Objectives – Scientific Skills	Learning Objectives – Knowledge
To predict what might grow from a seed collected from the grass To make careful observations of growing seeds To say what they found out using simple scientific language	To know that plants grow from seeds To know how to care for seeds To know what conditions seeds need to grow and germinate

Key Vocabulary

Scientific skills vocabulary – predict, predicting, observe, observing, see, conclude, concluding, communicate, tell
Knowledge vocabulary – plant, seed, germinate, grow, root, shoot, leaf, wet, dry, light, warmth, condition, grass

Resources / Equipment

- Equipment to collect seeds – old woollen socks
- Equipment to observe seeds – magnifying glasses
- Equipment to germinate seeds – clear plastic bag, water

Teaching Activities

May is the best time to complete this lesson because it is when a lot of grasses and flowers are in seed. They will have previous experience of what conditions plants need in order to grow and stay healthy.

Explain – They are going to be exploring seeds. What is a seed?

Discuss – Where can they find seeds? Would we find them inside? Where outside might we find them? Why are they important?

Explain – They are going to go on a seed hunt and see if they can find any seeds on the grass. They are going to try and collect some seeds using socks.



Activity – Children place an old woollen sock over their shoe and walk or run through the grass. (A slightly damp sock is sometimes more successful at collecting seeds.) When they are finished, they carefully remove the sock and place it in a sealed clear plastic bag, if the sock is not damp it will need to be moistened slightly before sealing the bag.

If children are non-ambulatory, a stone can be placed in the sock and a string attached to it from their foot or wheelchair so the sock can be dragged through the grass.



Explain – They are going to look closely at the sock using a magnifying glass to see if they can find any seeds on their sock.

Activity – Children use a magnifying glass to make careful observations of any seeds they have collected on their sock. They will be able to see the seeds on the sock through the clear plastic bag.



Predict – Children predict what might grow from the seeds they have collected? I predict my seed will grow into

Explain – They are going to see what plants grow from their collected seeds and see if their prediction was correct. The seeds will need to be kept somewhere where they have everything they need in order to germinate and grow into a plant. What conditions will the seeds need?

Discuss – What conditions do they need to be able to grow?

Activity – With adult support, children tape the plastic bags to a well-lit window. *This activity could be extended by placing seeds in different conditions so that they can observe what happens if a seed is placed somewhere where the conditions are not correct.*

Discuss – What part of the plant do they think they will see first?

Explain – They are going to observe the seeds over the next few weeks and see whether anything begins to grow.

Activity – Children observe the seeds regularly over the next few weeks. They will use magnifying glasses to closely observe the seed and look for any changes.

Discuss – Regularly discuss the growth of the seed with the children and ask them to tell you using talk, signs or symbols what they have observed.

Record – Take photographs of the seeds during this time to record any observations. These will also act as a prompt to remind children what they have observed during the last few weeks. You could use time-lapse photography if available.

Discuss – What plant did grow? What part of the plant grew first? Why are seeds important? What conditions did the seed need in order to germinate and grow?

Conclude – Children use simple scientific language to tell you using talk, signs or symbols what they observed and what plant grew from their seed. Was their prediction correct?



Examples of children’s work and teacher comments from country of origin



*My children loved this activity, especially collecting the seeds. They couldn’t believe how small the seeds were and that they grew in a bag on a sock! We attached the sock bags to our classroom window inside and they all grew. They were hard to identify but it was clear that they were plants.
A next step would be to look at different seeds and compare their size, shape and colour. Children could also compare seeds to bulbs and explore any similarities or differences between the two.*