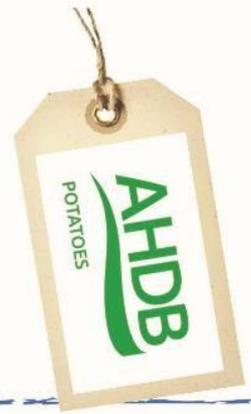


GROW YOUR OWN POTATOES



Growing Potatoes

Lesson 3: What potatoes need to grow

Children will:

- Learn what potatoes need in order to grow well.

This activity is separate to the GYOP project and will require the following additional resources:

- 4 seed potatoes
- 4 large 10 litre pots (you could use buckets)
- Crocks – bits of broken plant pots or pebbles
- Soil or compost to fill the pots

Children can undertake their investigation in groups or you could complete it as a class. See the **Grow potatoes investigation factsheet 4** for equipment and investigation ideas.

Groups: Each group can plant 4 potatoes in four separate containers, keeping one as a control and changing one variable for each of the other 3 plants.

Class: Split the class into four groups with each group being responsible for growing one potato with a different variable. For young children you could just plant a control and one or two other variables.

This investigation can be set up separately or in conjunction with the previous session (Lesson 2).

Introduction

Talk to the children about what they think is needed to make a potato grow well (light, water).

Ask the children how they know this, and how they could confirm what they think.

Establish that they could remove or change one of the conditions they think the potato needs and see if it makes any difference.

Discuss the condition changes you could try, e.g. temperature, water, light, soil. Look at **Grow potatoes investigation factsheet 4** for ideas.

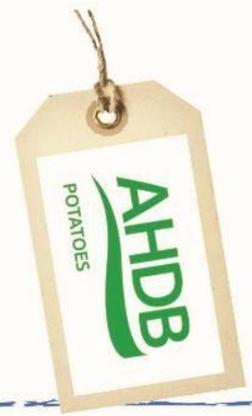
With older children, these can be referred to as variables or factors.

Explain that in order to see whether making these changes makes any difference, you must grow a potato in the usual way as well, so you can compare them.

The potato grown in the usual way is called the control. The other potato/es must also been grown in the same way with just one condition/variable/factor changed so you can see if that is what really makes a difference.



GROW YOUR OWN POTATOES



Growing Potatoes

Lesson 3: What potatoes need to grow – contd.

Task

Let the children plant their potatoes.

Talk this through together first to emphasise the importance of ensuring that only the variable/factor is changed and the rest are the same, so it is a fair test.

Discuss the idea of a 'fair test' with the children to ensure they understand.

Ages 5-7

You could set up a class record or children could keep their own records. You may wish to use **Potato investigation worksheet 4** (compares a control potato and a potato with a variable changed) or **Potato investigation worksheet 5** (compares one control and three variables).

Ages 7-11

Each child can have their own copy of a worksheet to record their observation. You could use **Potato investigation worksheet 4 or 5**.

Summary

Re-cap on what you have done, question the children:

- What are we trying to find out?
- What have we done?
- What do you think will happen?
- How have you made sure it is a fair test?

Discuss how you will be recording the investigation including how often observations will be made.

Why not...

- Grow different types of potatoes and investigate which type grows faster and how they differ in appearance?

You could use the two varieties provided by AHDB Potatoes.

You could use the **Are they the same? worksheet 6** to help record your findings.

- Let the children have a go at the Grow Your Own Potatoes game on the website below.

