



Lesson Plan

Bloom or Doom – The Seedling Game

This is a fun and active way to reinforce students' understanding of seeds and germination. It requires making some resources but it's popular with children and can be used again and again.

Key info

- 50 minutes
- Suitable for Key Stages 1 & 2

Activity Details

Outcomes and Curriculum links

This lesson enables students to:

- discuss the importance of seeds and plants
- engage in active play, discovering the conditions needed for seed germination and growth

This lesson links to themes from the following subject areas:

Year 1 Programme of study – plants

- Identify and describe the basic structure of a variety of common flowering plants, including trees.

Year 2 Programme of study – plants


- Observe and describe how seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Year 3 Programme of study – plants

- Pupils should be taught to: explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.

Resources

To set up the lesson you will need:

- 4 / 5 sets of small Germination Cards
 - 1 x set of large Germination Cards A4
 - 5 baskets / bags
 - 5 x sets of ribbons of different colours (one ribbon of each colour per child). Each set should match the themes of the germination cards – water (blue), sunshine (yellow), air (white), warmth (orange), soil (brown)
 - 1 x chicken of doom hat / bird mask
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- An open space

Getting started (0-5 minutes)

Explain to the group that today they are going to find out why seeds/plants are important and then play a game to help understand what seeds need in order to germinate and grow.

First, however, ask the children the following question: Why are seeds and plants important?

Give the children a chance to discuss this question with a partner and then collect feedback from them. Their answers might include; plants provide food, oxygen, materials for making things, medicines habitats for other living things. Seeds of course germinate and grow into plants. We also eat seeds themselves remember!

Recapping Germination (5-20 minutes)

Ask the children if they can explain what germination is. Collect their ideas, reinforcing that this is process by which a plant grows from a seed. The beginning of [this clip](#) from BBC Teach has some great footage of seed germination which might be of use.

Give out a set of small germination cards to each group, ask the children to discuss the cards and pick the cards showing what a seed needs to germinate and grow.

Discuss their answers (light, warmth, water, air, soil).

Highlight the differences and similarities between the needs of plants and our own body's needs.

It's also worth remembering that despite the differences between plants and humans we are both connected to and dependent on the natural world around us for our survival.

Play Bloom or Doom (20-40 minutes)

Instructions

- Give 5 volunteers a large germination card each and a basket containing the coloured ribbons associated with that card.
- Stand the volunteers around the edge of the space and pick an area on one side of the space called the flower bed, and another called the foodie area.
- Tell the rest of the children to imagine they are seeds. Ask them what they need to germinate and grow into seedlings.
- Encourage the 5 volunteers to wave their sign in the air and show their coloured ribbons when they are called out by the children (light, warmth, water, air, soil).
- Explain to the children that their challenge is to run to each of the 5 stations and collect a ribbon from each. Once they have collected all 5 ribbons they can go and stand in the flower bed area where they can germinate and grow.
- However, ask the children - do all seeds succeed with growing into plants?

- No - some seeds become food for mice, birds, squirrels and us.
- Produce the 'chicken of doom hat' and choose a sensible student to wear the hat. Their job is to chase and tag as many pupils as they can before they get all their ribbons and reach the safety of the flower bed area.
- If a seedling gets tagged, they must stand in the 'foodie area'. Keep an eye on the 'tagged' seeds, who may try to carry on and stress that they need to be gentle – no rugby tackles!
- Give the seeds a chance to spread out before you start the game.
- Play until nobody is left running around.
- Congratulate the seeds that managed to germinate and grow and make a fuss of those that didn't because, after all, they are an important source of food for other animals!

Finally (40-50 minutes)

- You can play additional rounds and tweak the game.
- Try swapping the chicken hat to another child who runs at a different speed or try adding an extra chicken. What do the children notice happening now?
- Try removing some of the ribbons from a particular basket. For example, if you reduce the number of water ribbons then the seeds will be faced with greater competition for that limited resource and fewer seeds will be successful. Beware, the seeds can get really cross about this! This models what happens in the event of a drought. You can discuss how this might impact other living things such as bees and other insects. If the seeds were from food crops what might that mean for people?

Follow up activities

- Have a look at our [wildflower resources](#). Wildflowers are a great way to bring colour and interest to your school grounds, and taking education outside is good for your learners, and for the planet.
- [Germinating a bean in a jar](#) has been a classic experiment in primary schools for decades. It's very easy to do and can be a spring board into a multitude of scientific enquiries.
- Collect some tree seeds, for example acorns or conkers. Plant the seeds outside in pots. They will take longer to germinate but could grow into massive trees outliving the pupils. Where could the children plant them on the school grounds?
- Buy some vegetable seeds as well as examples of the vegetables that grow from them. Run a **tasting session and encourage pupils to grow their favourites**. We recommend picking examples that are easy to germinate and grow and that will be harvestable before the summer holidays. [Micro salads](#) are really great for this sort of thing and you won't require much space. Cress and mustard are really easy to grow.