



## How plants grow (germination)

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**Aim:** To explain how plants grow

**Age:** 6-15

**Complexity & duration:** Low; 1-3 weeks

**Location:** Inside

**Cost:** < £5

**Materials & Equipment:** an empty and clean yogurt pot for example, cotton, seeds (beans, lentils, wheat, chickpeas)

### Procedure:

- place a bunch of cotton in the yogurt pot (fill more than the half of the pot)
- add different seeds (more than 5) in different pots on the top of the cotton and water them
- place the pots in a sunny place and label the pots in order to remember what kind of plant you are growing
- everyday check if the cotton is dry or wet (if dry add some water)

**Q.** What do you observe every day? Can you see any differences? If so, what kind of differences? Are there any difference between the different seeds/ plants?

### Learning outcomes:

1. The experiment gives an idea of how the plants grow and what is germination and what do they need in order to achieve that.
2. A useful video explaining germination can be found here (<https://www.youtube.com/watch?v=TE6xptjgNR0>).

**Science fact:** The plants come from the seeds and they need water, soil and sun (in that case the soil is the cotton) in order to grow. The seed contains many necessary nutrients the plant uses when germinates. The nutrients are used by a part of the seed called the embryo which grows in the form of a tiny root. In few days-week time the roots getting bigger. The seed open to reveal the leaves of the new plant and starts germination (the process where the plant makes food for itself).

### RISK ASSESSMENT

**Adult supervision is required for any experiment!**

HAZARD	Likelihood and Seriousness of Injury	Control Measures	Remaining Risk
seeds	Ingestion, choking	In case of choking follow NHS guide <a href="https://www.nhs.uk/conditions/pregnancy-and-baby/helping-choking-baby/">https://www.nhs.uk/conditions/pregnancy-and-baby/helping-choking-baby/</a>	Low to high
cotton	Ingestion, choking	In case of choking follow NHS guide <a href="https://www.nhs.uk/conditions/pregnancy-and-baby/helping-choking-baby/">https://www.nhs.uk/conditions/pregnancy-and-baby/helping-choking-baby/</a>	Low to high

**Remember - never do experiments alone!**

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