

What do seeds need to grow?

These dandelions get their energy from light. They capture sunlight on their leaves. But it's different for seeds. Scientists tell us that a seed only needs to be warm and damp to germinate (start growing). Let's see if they're right!

In this investigation we investigate the germination of another well known plant ...

Predict, Observe, Record

You'll need two transparent plastic beakers and two or more broad beans. Line the beakers with damp kitchen towel and push a bean between the side of the beaker and the towel. Cover one beaker with a box.

Check your beans daily and add water if the towel seems dry. Record your observations of the beans. Would it be a good idea to repeat the investigation, why?



Record the progress by taking photos or using a ruler to measure the length of the green shoot.



Science can help us to understand and appreciate plants – how they grow, what they need to grow and which ones are good sources of food.

What about the other disciplines that you study at school?

What can they tell you about 'Why plants matter'? And can there be many answers that are right?

Why do seeds matter?

Seeds produce plants that give us food, shelter and clothing. Science tells us how.



Seeds need warmth and water to germinate (to start to grow)...



The plant needs water, light and air to make its own food. This is called photosynthesis.



Some plants flower and produce fruit or vegetables. Other plants make good food for animals.

Humans and animals rely on plants to live, so seeds are vital for life!



After a few days, roots begin to poke out of the bottom of the seed. (We saw this in our bean investigation!)

Botanists have tried germinating these ancient seeds... but find they just crumble as they are so old!



They believed the person may come back to life. Seeds were left with them as an emergency food source.

Seeds and food were often buried in the tomb with a mummy.



History tells us that seeds were important in life and death to the Ancient Egyptians too.