Plant Investigation Ideas

We have learnt that plants need soil to grow well. Do you think this is always true? Do plants **only** grow in soil? Plants are amazing living organisms and can adapt to many different situations!





These plants all look healthy, but they don't seem to have very much soil....

This is your challenge! See if you can grow plants without soil. Here are some suggestions to get you going, but I'm sure you can think of your own ideas too. Don't worry if it doesn't work very well. Science is all about investigating the world around us!

- Try cutting the top off a carrot and putting it in a shallow saucer with a small amount of water in it. Put it somewhere sunny, make sure it doesn't dry out and observe carefully to see what happens. You could also try it with a parsnip top. Does that do the same thing? Are there any other root vegetables you could try? Do they all work equally well?
- Try growing cress seeds in or on different materials. Some ideas are cotton wool and kitchen paper. What else could you try? Can you grow them on an old dishcloth, or a sock?
- Watching plants grow is fascinating! If you have any runner bean seeds, or other large seeds, you could plant them down the side of a clear plastic cup so you can watch them slowly develop. Remember to make some holes in the bottom so the water can drain away and the seed doesn't get too soggy, but make sure it doesn't dry out! Perhaps you could plant three seeds in separate cups and have different materials for the seed to grow in, for example soil, cotton wool and kitchen paper. Which one do you think will grow best? You could even measure the roots or shoots every day to see how fast it grows. There is a sheet attached to the timetable to help you do this if you would like to use it.