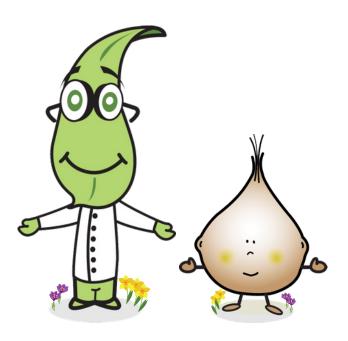
Spring Bulbs for Schools Activity Pack



#BulbBuddies @Professor_Plant @Amgueddfa_Learn





Welcome Bulb Buddies!

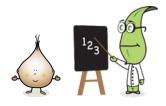
In this pack you'll find hands-on weather and gardening themed activities to help you get the most out of Spring Bulbs for Schools!

These activities support the KS2 science curriculum and are perfect to try at home or in the classroom.

What's Inside?

Discover how to...

- Build a weathervane to track wind direction.
- Measure rainfall with a homemade rain gauge.
- Keep track of your all important weather data with a weather log.
- · Become a gardener with DIY seed planters.
- Reuse plastic bottles as self-watering plant pots.
- Make your own seed paper.



Happy Gardening!

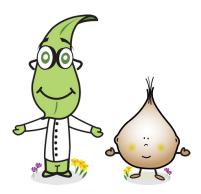
We hope you enjoy trying these activities!

Don't forget to visit the Spring Bulbs for Schools website for more fantastic learning resources as well as Professor Plant's blog. (https://museum.wales/spring-bulbs/)

This is also where participating schools can submit their all important weather and flower data!

Why not share your progress with these activities on Twitter? Find me at <u>@Professor Plant</u> and <u>@Amgueddfa Learn</u> and remember to use the hashtag #BulbBuddies

Good Luck Bulb Buddies! Professor Plant & Baby Bulb











Make a Weather Station.

Weathervane

You Will Need...

- Empty tin/jar with a thin plastic lid (a coffee tin is ideal)
- Empty biro pen casing
- Skewer
- Thin plastic (such as a food tray)
- Gravel or pebbles
- Compass



Method

- **1 -** Why not start by decorating your container? You could use coloured tape or paint.
- **2 -** Cut an arrow shape out of the plastic and stick it to the skewer with tape (you could use cardboard, but it won't be as weatherproof).
- **3** Fill the container with gravel/pebbles to weigh it down and avoid it blowing over.
- **4 -** With an adult's help, carefully make a hole in the container lid. When it's big enough, push the biro casing through and thread the skewer through it. This enables the skewer and arrow to turn easily in the wind.
- **5 -** Decide where to put your weathervane and use a compass (there is one on most smartphones) to mark North, East, South and West on the jar, or on the ground nearby.
- **6** Use your weathervane to see which direction the wind is blowing from! Keep watching your weathervane to see how it works. Could you improve it somehow?



Need a Hand?

https://www.youtube.com/watch?v=xganMMrfegc

Make a Weather Station.

Rain Gauge

You Will Need...

- Clean empty plastic bottle
- Scissors/craft knife
- Tape
- · Sharpie pens
- Ruler



Method

- 1 With help from an adult, cut the top off the bottle, around 10cm down from the opening.
- **2** Turn the part you've just cut upside down and place inside the rest of the bottle. This will be the funnel to collect rainwater. Tape in place.
- **3** Use the ruler and Sharpie to to measure and mark a scale in centimetres on one the side of the bottle. You could also stick a strip of masking tape to the bottle and write on this.
- **4 -** Your rain gauge is ready! Choose a spot out in the open to leave it, away from the shelter of trees or buildings. You might need to dig it into the ground, or use something heavy to prop it up so it doesn't get blown over.
- **5** Use the scale on the side of the bottle to make a note of how much rain has fallen.



Need a Hand?

https://www.youtube.com/watch?v=Sc0q-3m24Aw

Keep a Weather Log

Use your weather station to keep a daily weather log!

- Make sure to check your weather station at the same time every day and record your findings in the table.
- This is a simple version of what meteorologists do they
 are scientists who specialise in the weather and climate,
 and try to make sense of any patterns they notice.
- Do you notice any patterns in your data? What do you think would happen if you repeated this experiment in the summer?

Date	Rainfall	Wind Direction	How is the Weather Today?

You can use the **Weather Observations Website** to log your findings. This helps meteorologists learn more about how our climate is changing.

Growing and Gardening

DIY Planter

You Will Need...

- Toilet roll tube
- Scissors
- · Potting mix
- Seeds





Method

- 1 Cut the tube in half, then make 4 small cuts to create 4 flaps of equal size.
- **2 -** Fold the flaps inward in turn. Tuck the corner of the last flap under the corner of the first flap (like closing a cardboard box).
- **3** Gently press the flaps down on a flat surface. This makes a stable base to help keep the planters upright.
- **4 -** Fill the planters with soil and plant your seeds.
- **5** Once the seeds have sprouted you can plant the pots straight into the ground. The cardboard will disintegrate in the soil.





Eco-tip:

Use rainfall from your weather station to water your seeds! A lot of plants prefer rainwater to tap water.



Growing and Gardening

Self-Watering Plant Pot

You Will Need...

- 2 Litre plastic bottles.
- Cotton string, twine or even strips of cut up cotton t-shirts.
- Scissors
- · Potting mix.
- · Seeds.



Method

- **1 -** Rinse your empty bottles, peel off the labels and cut them in half. Make sure to ask for help using scissors.
- **2 -** Use cotton twine or strips of an old cotton t-shirt to make wicks. Cut four stands of cotton roughly 10cm long and tie the strands into a knot about 4cm from the bottom.
- **3** Make holes in the caps of the bottles (be extra careful here) and put one wick through each cap. Put the caps back onto the tops of the bottles and place the tops of the bottles upside down on the bottom halves.
- **5 -** Fill each top about 1/3 of the way with potting mix. Make sure to spread out the strands of the wick and continuing filling. Stop about an inch below the top.
- **6** When the pottles are all filled, plant your seeds and add water to the base. Water will travel up the cotton wicks into the soil to water the seeds
- 7 Watch your seeds grow!

Eco-tip:

Use rainfall from your weather station to water your seeds! A lot of plants prefer rainwater to tap water.



Growing and Gardening

Make Seed Paper

You Will Need...

- Scrap paper and cardboard
- Large bowl
- · Flower seeds
- Baking paper
- A towel
- Sponge
- Blender (optional)
- Cookie cutters (optional)







Method

- 1 Rip up your scrap paper into little pieces. Put the ripped pieces of paper in your container, cover with hot water (be careful!) and leave to soak over night.
- **2 -** Mush the mixture with your hands until smooth (if you have a blender you can blend the mixture instead).
- **3** Sprinkle the flower seeds over the mixture and mix them in well. Spread the mixture out onto baking paper over a towel and flatten the mixture with your hands or a spatula. Dab with a sponge to strain as much water as possible.
- **4 -** Drape the towel on a flat surface. Place a small amount of the strained pulp directly onto the towel. Shape with your fingers or with a cookie cutter.
- **5** Press the shaped pulp firmly with a sponge to soak up more water. Repeat to make as many shapes as you like.
- **6** Let the shapes to dry completely by repeatedly turning them over.
- **7 -** Once your seed paper is completely dry you can plant in a pot or your garden!