Make a plant self-watering device

Activity overview

30 mins+ Year 3 – 4

Science topics:

Plants, Materials, Living things and their habitats

You will need:

Building materials such as yoghurt pots, plastic bottles etc, as well as tape and glue; several large plant pots, compost and plants.

Get creative with recycling materials and build a plant self-watering device!

Run the activity in 5 steps

1. This hands-on making activity will put pupils' knowledge to the test and improve their ability to work as a team. Sometimes you have to solve a problem on the spot. Explain that today the class will need to make something using just the materials provided. Discuss what pupils think they might learn from doing this.

2. Explain that they will have 15 minutes to create a device to allow a plant to get water itself.

3. At the end, it's peer review time. Discuss each other's creations as a class. Encourage pupils to provide kind, specific and helpful feedback on how each other's creations might be refined.

4. Allow five more minutes and give everyone a chance to act on their feedback by refining their creation.

5. When time is up, survey the final creations. Discuss what they've made and how their creations have changed as a result of the feedback. What have they learned from swapping things?

Top Tips: How to run Problem Solvers activities

Background science

There are lots of automated ways to water plants, from automated sprinklers to timed dripping devices. Perhaps the easiest option is a large pan of water and some string!

Take it further

Add in an extra challenge to this learning by asking your class to swap their creations halfway through! Perhaps you could ask the class how their designs would scale if they were to be used on a farm rather than for a house plant?

Take a closer look at the importance of water for plants with our <u>Sudden downpour</u> video. There's more information on <u>the lifecycle</u> of plants and what they need as 'food' on the Science & Plants for Schools website.

We've plenty of other plant activities for the class, why not try <u>Sensitive plant</u>, or <u>What if</u> <u>plants could talk?</u>

Related activities

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Friends of flowers

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WHAT IF...

We did not plant trees?

Challenge the class to think about the importance of trees in t...

WHAT'S GOING ON?

Furry fruits

Spark a conversation with this video showing some strange straw...

WHAT'S GOING ON?

Sensitive plant

Spark a conversation with this video showing a delicate plant r...

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