

British Science Week

British Science Week falls on from the 7th to the 18th of March 2024 and this year celebrates the 30th anniversary of the week. The week aims to inspire both young people and adults with all types of science, including engineering and technology. British Science Week began in 1994 and is one of the country's largest national celebrations of science, which is organised by the British Science Association. All around the county, you will find so many events which the girls can take part in. Here are some ideas which you can do with your unit:

Visit the British Science Week website

The British Science Week website has lots of downloadable activity packs for your section's age:

The theme of this year's celebration is 'Time', and you can explore these activities through hands-on activities and fun discussions: <https://www.britishscienceweek.org/activity-packs/>

Check out Girlguiding North West England's Clever Cogs Challenges

The original Clever Cogs challenge was released as part of International Women's Day back in 2017, when Girlguiding teamed up with BAE systems. Although an older badge, there are tonnes of fun activities you can use to celebrate British Science week, there are 5 challenges in total, which include:

The original Clever Cogs challenge - Themes around engineering.

Clever Cogs Saving Places - Themes around environmental engineering.

Clever Cogs On the Mend - Themes around medical engineering.

Clever Cogs Making Waves - Themes around marine engineering.

Clever Cogs Going Places - Themes around transport engineering.

Challenge packs can be bought from the Girlguiding North West England Shop.

Experiments to try with your units - Unit meeting activities!

Rainbows

Check out the 'What is that?' unit meeting activity from the Skills for my Future theme. A fun activity to make a substance called 'oobleck', which is created using cornflower. Oobleck is a liquid or a solid, depending on how much pressure you place on it. You will need the:

2 Cups of Cornflower

1 Cup of water

A large bowl and a spoon

Once you have all of your ingredients, place the cornflower into the large bowl, and slowly add the water, mixing to combine the ingredients. One mixed, experiment with the mixture, can you pick it up? What happens if you hit it and what happens if you squeeze it between your hands and then release your grip? Check out the video below for the tutorial:

<https://www.youtube.com/watch?v=CmjBpkLxWpg>

*Please double check any allergies before trying out this experiment, do not eat, and please dispose of in the bin, do not pour it down the drain

Brownies

Have a look at 'Fizzy flying', a unit meeting activity from the Have Adventures theme. You can create a rocket using a bottle and a chemical reaction!

What you will need:

2 Effervescent tablet

Water

A bottle with a sport-cap lid

Plastic beaker

This is an outdoor activity, and your rocket will be able to travel quite high. Once you have everything for the activity, begin by filling your sport-capped bottle half full of water and head outside.

Put your plastic beaker on the ground, with your half-filled bottle, break up an effervescent tablet and put it into the water. Once done, screw your lid on quickly, with the lid closed, and shake the bottle for 5 seconds. Then put your bottle upside down into your plastic beaker, and your rocket will fly.

This experiment can also be done with vinegar and bicarbonate of soda, with these, you can experiment with how much of one ingredient works well with the other. Remember, always take a big step backwards once your rocket is ready to fly, and don't eat any of the ingredients used.

Find the video below for the full tutorial:

https://www.youtube.com/watch?v=x4nPWx6Gz_4

Guides

Take a look at the unit meeting activity 'Solar Simulation', from the Have Adventures theme. You can discover how the sun works by creating a fun chemical-reaction. To do this, you will create your own lava lamp. You will need the following equipment:

A bottle, over 0.5L

Water

Food Colouring of your choice

Vegetable oil

4 Antacid tablets

A Spoon to mix

Fill your bottle roughly $\frac{1}{4}$ full of water, and drop in some food colouring. Fill the rest of your bottle with the vegetable oil, letting the mixture separate. Once this is done, you can break up two of your antacid tablets and place them into your bottle and put the lid on tight, and watch the chemical reaction take place!

Follow the link below for the tutorial:

<https://www.youtube.com/watch?v=kES-2lw1xKA>