Year 7 Science: Home Learning Week 7

Hello Year 7, more from the BBC Bitesize lessons this week and an optional practical to dissect flowers. As always, follow the instructions carefully, get permission from an adult before doing anything and clean up after yourself when you're finished!

Stay at home & stay safe

Miss Johnston ☺

Task	Description
1	Watch the BBC Bitesize lessons on Tuesday (biology), Wednesday (chemistry) and Thursday (physics). Here's a link to the daily lessons page: https://www.bbc.co.uk/bitesize/tags/zf9yy9q/year-7-lessons/1 If you have trouble watching online, you can access the Bitesize lessons via the red button on your TV remote. Just switch the TV to BBC1, press the red button and the Bitesize options should come up…
2	**Biology** a) Visit BBC Bitesize, revise your knowledge and complete the quizzes on plant reproduction: https://www.bbc.co.uk/bitesize/guides/zs7thyc/revision/1 b) Write down the similarities and differences between insect pollinated plants and wind pollinated plants. c) Watch the following video clip from The Amoeba Sisters: https://www.youtube.com/watch?v=fcGDUcGjcyk d) What does "asexual reproduction" mean in plants?
3	**Chemistry** a) Visit BBC Bitesize, revise your knowledge and complete the quizzes on physical changes: https://www.bbc.co.uk/bitesize/guides/zc9q7ty/revision/4 b) Give a definition and an example for each of the following: i. Physical change ii. Chemical change iii. Volume iv. Mass v. Conservation of mass c) Use your answers from b, and terms that a child in year 5 would understand, baking a cake is a chemical change and melting ice is a physical change.
4	**Physics** a) Visit BBC Bitesize, revise your knowledge and complete the quiz on magnets: https://www.bbc.co.uk/bitesize/guides/z3g8d2p/revision/1 b) Answer the following questions: i. What does attract mean when we are talking about magnets? ii. What does repel mean when we are talking about magnets? iii. If you put two north poles together, will they attract or repel? iv. If you put a north and a south pole together, will they attract or repel? c) Scrap yard owners use huge electromagnets to move cars around. In the past, cars were made from steel. Some modern cars are made of aluminium. What problems will this cause for scrap yard owners? Explain why.

Practical details

Dissecting Flowers

About this activity

This practical describes how to dissect and identify the parts of a flower, linking to our Year 5 topic – Living Things and Their Habitats.

For parents: Why do this?

Reproduction in flowering plants is an important part of the science curriculum, recurring in KS3 and KS4 and so it is useful to revisit and revise this topic to consolidate understanding of this topic.

Safety note

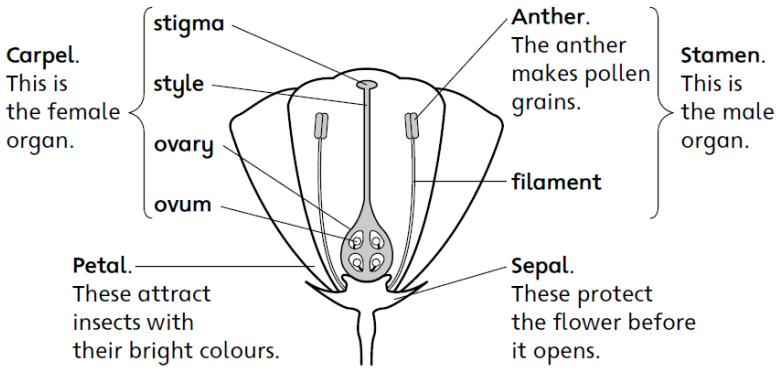
You must wash your hands thoroughly after completing this activity and do not eat any part of the flowers. Many plants that you will find in your garden are very poisonous, any plant with milky coloured sap can cause severe burns to your skin! I've suggested some here, but please do check with an adult that it's OK to pick them. Please note that daffodils and tulips are poisonous, so, again, DON'T EAT THEM!

Equipment & materials

- Flowers: daffodils, fuchsia, tulips & poppies are ideal for this. Try to avoid compound flowers such as daisies as the parts are too small to work with.
- Paper or kitchen roll to set out the flower parts on.
- Paper and pencil / pen to record your observations.

Method

1. Carefully take off the petals from one side of the flower.
2. Draw a diagram of what the inside of your flower looks like. Try to label the parts. This diagram might help you:



3. How many stamens are in your flower? Remove one of the stamens – this can be tricky, can you get the whole thing out in one go?
4. Remove the carpel. Is the stigma sticky? If you can, try to peel open the ovary – can you see any ovum inside?

Possible further activities

You could dissect different types of flower and compare the structure – do all of the parts always look the same or appear in the same place? Think about why this might be. You could try to look at wind pollenated flowers such as those on ash, oak or sycamore trees, or grasses (if like me you've had awful hay fever symptoms over the last few days, these are to blame!). What do you notice about the structure of wind pollenated flowers?