



Enriching Learning Spring Term 2019 Year 4 'Mad Scientists'



The following links will help you to practise some of the key learning for Maths and English this term. If you are very confident, you should try the diving activities. If you need to develop your confidence, try the swimming activities. If you think you need to develop skills, try the paddling links. **You can choose which things you most need to practise and when and how long you spend on them.**

Choose one of these activities to complete and hand in each week. Homework should be handed in on Thursdays in your homework book. Make sure you choose a range of activities (some from each box) during the term.

Mathletics

We would like the children to become Mathletics whizzes, where they can hone a wide range of mathematical skills.

Paddling: Mathletics live - practise simple mental skills by competing against members of your class or children from around the world.

Swimming: Learning activities - pick a mathematic area that you would like to improve in. Times tables would be a good place to start.

Diving: End of unit test - found at the bottom of each unit page under the learning tab.

Useful website:

www.mathletics.com/signin

Reading Reminder:

This term, I expect you to read for at least 20 minutes each session and aim for a minimum of three sessions per week. Make sure these are recorded in the school reading diaries, which should be brought into school every day. Diaries will be checked on a Friday.

Word work activities to be supplied by phonics / spelling teacher.

Science Focus:

The following links will help you to develop your understanding of our topic this term:

<http://www.primaryhomeworkhelp.co.uk/revision/Science/index.html>

<https://www.bbc.com/bitesize/subjects/z2pfb9q>

<https://www.dkfindout.com/uk/science/>

<https://www.ducksters.com/science/>

English Activities:

- Research a famous scientist and create a fact file about them. You could research: Albert Einstein, Isaac Newton, Marie Curie, Charles Darwin, Stephen Hawking, Thomas Edison, Louis Pasteur, Mary Anning, Valentina Tereshkova or Brian Cox.
- Research a famous mathematician and create a fact file about them. You could research: Pythagoras, Archimedes or Alan Turing.
- Write a short story set in the distant past. It should include either an inventor, scientist or magician. You need to include tension and suspense in the story. It could end with a cliff-hanger.
- Write a science or magic-based acrostic poem. Your main word could be a name of a famous scientist or mathematician. It could also be a key scientific term, such as: solubility, conductivity, evaporation, condensation, melting, freezing or solidify.
- Create a wanted poster for a fictional criminal. Remember to include a really detailed description of the criminal and the crime.

Maths Activities:

- Create a graph for the following investigation:
Put the same amount of water into different sized saucepans and time how long it takes for the water to evaporate. Does the size of the saucepan affect how long it takes for the water to evaporate? (Make sure you have an adult to help you with this.)
- Practise your measuring skills. Which of the cups in your house holds the most liquid? Are eggs all the same weight? How long does it take to cook pasta? You could write these up as an investigation and include a graph.

Science Activities:

- Research 'non-Newtonian fluid' and write your own definition for it with pictures.
- Design a poster that explains the differences between solids, liquids and gases.
- Create a timeline of key scientific discoveries. You could focus on general discoveries or be more specific and look at developments in medicine, physics, maths or technology.
- Make a 3D model to represent the particles in solids, liquids and gases.
- Have a go at the following Science tricks. You could take photos of the results.
 - Place white flowers in coloured water and watch how they soak up the hues.
 - Drop popping candy into a bottle of fizzy drink and then place a balloon on the opening. What happens?
 - Use lemon juice to make invisible ink that can only be seen when held up to a heat source.
 - Learn about surface tension by dropping food colouring into milk. What happens to the colours when you add soap?
 - Mix Diet Coke and Mentos and stand back to watch the explosion. (Really, stand back!) An adult and an outdoor space is needed for this experiment!
 - Put an egg in a glass of water. Does it float or sink? What happens when you add salt to the water?



- Create a piece of art using Maths.
- Create a rainbow cake. How many different colours can you use? We'd love to taste them!

The above is a suggested list of ideas. If you would like to carry out your own Science project, we would be excited to see it.