

# Key Stage 3

# Science



For the next four weeks, select different challenges to complete. Choose the ones that you are most interested in, but make sure that you do a range of tasks. The video is a chance for you to really show what you understand about a topic we have studied this year. Make it as fun as possible and then send it to Mr Ayliffe or your class teacher.

You can submit your work to your teacher via SMHW or email or send it back in the envelope at the end of these four weeks.

## Science Matrix-Developing Your Science Knowledge

Write a letter to your local MP outlining your concerns over global warming (climate change).	Choose an element from the periodic table. Draw a labelled diagram of the atom. Describe the atom in as much detail as possible.	List the sources of renewable energy and describe the advantages and disadvantages of each.
Write a short story to describe what happens when a sperm meets an egg and fertilisation occurs.	Draw a poster to explain what happens when sugar dissolves in a cup of tea.	Write 10 multiple choice questions about electricity. Include your answers.
Describe the effect of smoking and asthma on the lungs.	Write two lists of the properties of metals and non-metals.	Describe how sound waves are formed by wind chimes. Explain what effects the intensity and pitch of the sound.
Describe how the air we breathe in differs from the air we breathe out.	Describe a sink full of washing up. State whether each item is solid, liquid or gas and an element, mixture or compound.	For the following answers, write down the question: Friction, Weight, Contact and Magnetism.
Complete the "What are cells?" section on BBC Bitesize KS3. Biology	Complete the "Types of reaction" section on BBC Bitesize KS3. Chemistry	Complete the "What are forces?" section on BBC Bitesize KS3. Physics
Look at a raw egg and describe its properties. Cook the egg and explain how it has changed and why.	<u>OUTSIDE YOUR HOME</u> add some Mentos sweets to cola fizzy drink. Describe the reaction you see. Is this physical or chemical reaction.	Using only 10 sheets of A4 paper and nothing else, create the tallest structure you can. Take a picture for evidence.
Write a song or poem inspired by any topic you have covered in science this year.	Create an A4 poster explaining important safety rules for a practical you have done this year.	Choose a maths topic and describe how it can be used in science.

**Think like a scientist – we can always improve upon our best!**

Have you included capital letter and full stops in the correct place?

Have you used the correct scientific language in your explanations?

Have you chosen the best word choices?

Have you drawn graphs / charts with pencil and added the correct labels to the axis?

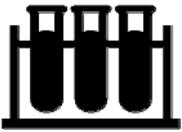
Have you used paragraphs for any extended pieces of writing?

Are you proud of what you have done?

Could you make some changes to make it even better?

## Science Project

Create a video showing a science practical you have done at home or explaining a science idea. Your video should be between 3-8 minutes. You are the teacher in your video and need to explain the science.



If you have any problems, questions or queries please contact Mr Ayliffe (Head of Science) on [g.ayliffe@passmoresacademy.com](mailto:g.ayliffe@passmoresacademy.com)