

The Vikings

Design and make a piece of Viking armour. It could be a weapon (e.g. a sword), or something to protect yourself with such as a helmet or shield. You may wish to make a whole set! Upload a scary Viking selfie to ClassDojo when you have finished!



Maths

Continue to use your whizz.com Maths subscription which will automatically set work appropriate to your ability. Please see attached letter (in the home learning book) and login and spend some time on this everyday.

Wider curriculum

Motivational messages: Write a slogan that can be represented using Art. This could be stuck to your window or gate and act as a motivational message for passers-by.

Art: One of our favourite artists, David Hockney, has recently produced some new works depicting spring. Have a look at his new iPad work and see if you can create your own spring related art in any media you wish: <https://www.bbc.co.uk/news/entertainment-arts-52109901>



PE and active learning

Can you create a Joe Wicks style workout for you and your family? Google "Joe Wicks workout" for ideas. Can you also find some things around your home to create a game which will leave you (and your family) out of breath everyday?

St Michael's Home Learning



Year 5

To cover the Easter Holidays

Daily practice

We understand that this is the Easter holidays but we know that some of you are enjoying the routines you have established and would like to continue with these.

These are the activities that can be done on a daily basis (if you wish!).

Reading - Read, or be read to, for 15 minutes and complete a task from the reading activities grid.

Maths - Complete one workout per day in your CGP book.

Continue to practice your times tables using 99 Club and Times Table Rock Stars.

Spellings - The Year 5/6 Spelling Rules and some suggested daily activities were posted to the class story. Practise one spelling rule per week.

RE

Having familiarised yourself with the Easter story, create your own Easter art showing a silhouette of the three crosses. Here is a good example of what one might look like. Alternatively, you could create a piece of work called 'Hope.' it could be a story, art, a poem... your choice! Have a conversation with your families: Which is more important—Easter or Christmas?



English: Continue to write your diary over Easter, keeping a record of your response to significant events that take place at home and in the wider world. You do not have to write everyday, but when something you feel significant occurs.

Creative Writing Challenge: Choose one of these story starters and get creative, writing your own story. Think about the purpose of your writing e.g. is it to make your audience feel scared, to make them laugh... etc. Remember to focus on that higher level language, varying your sentence lengths and using a range of punctuation! I look forward to reading them...

I had never seen a ghost. But like they say, there is a first time for everything.

It was spring 2014 when I first realised I could breathe under water.

Cold and wet, tired and exhausted she made her way along the path through the forest.

Footsteps slowly creaked on every step of the stairs. The bedroom door handle turned slowly

Icy fingers gripped my arm in the darkness.

It was the day after the moon fell...

Science

Attached is a page of really cool science experiments for you to investigate at home. The documents tell you how to carry out the experiments and explain some of the science behind them ... Have fun!

How to Grow a Rainbow

You will need:

- Kitchen roll/paper towel
- Felt tip pens
- Two small bowls of water
- Paper clip
- Thread



1. Cut your kitchen roll into the shape of a rainbow.
2. Colour a rainbow with felt tips about 2 cm up on both sides.
3. Attach your paper clip to the top and tie a piece of thread to it. This will give you something to hold your rainbow with.
4. Fill each small container with water.
5. Hold your rainbow with the ends slightly submerged in the water then watch your rainbow grow!



THE SCIENCE

A brief introduction to 'capillary action'! Water molecules like to stick to things - including themselves. Sticking to things is called *adhesion* and sticking to itself is called *cohesion*. The fibres in kitchen roll make lots of little holes. Water is 'sucked' through the holes because of adhesion (liking to stick to other things) and cohesion (liking to stick to itself) means the rest of the water follows. The water pressure will eventually slow down and the pressure of gravity will mean it stops moving.

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The Leakproof Bag

You will need:

- Sharpened pencils or skewers
- A sealable bag
- Water



1. Make sure your pencils are sharp before you begin.
2. Fill three quarters of your bag with water and seal it.
3. Holding the top of the bag with one hand, use the other hand to push a pencil right through to the other side. Like magic, there are no leaks!
4. Repeat with several pencils - making sure they are pushed through in different places on the bag.

Test how many pencils your bag can hold!

Do pencils with flat or round edges work best?

Try different thicknesses of bag to see which works best.

THE SCIENCE

The Science for this one is quite complicated! The bag is made out of a polymer which has lots of molecules attached together in long chains (think strands of cooked spaghetti!). The tip of the pencil can easily push apart the flexible strands of spaghetti but the strands' flexible property helps to form a temporary seal against the edge of the pencil. When the pencil is removed, the hole in the plastic bag remains because the molecules were pushed aside permanently and the water leaks out.

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DIY Lava Lamps

You will need:

- Vegetable/sunflower oil
- Vinegar
- Food colouring
- Bicarbonate of soda
- Tall glass or bottle
- Spoon
- Small cup



1. Add three spoons of bicarbonate of soda into the tall glass or bottle.
2. Fill two thirds of the container with oil - but don't mix!
3. In the small cup, add some vinegar and several drops of food colouring.
4. Slowly add drops of your coloured vinegar into your oil/bicarb mixture and watch your lava lamp come to life!

Why not try adding different colours to your lava lamp?

THE SCIENCE

Oil and vinegar do not have the same density (how heavy something is for its size). Vinegar is more dense than this type of oil - that's why it sinks to the bottom of the container.

Once the vinegar touches the bottom of the container, it reacts with the bicarb. This chemical reaction creates bubbling carbon dioxide which rises - these are the bubbles you see within the container.

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Unpoppable Balloon

You will need:

- Balloon
- Skewer
- Oil or liquid soap



1. Inflate the balloon until it's nearly full size and then let about one-third of the air out.
2. Tie a knot in the end of the balloon.
3. Look at the balloon - there's a thick area of rubber at both ends of it (where you tied the knot and at the opposite end).
4. Coat the wooden skewer with a few drops of vegetable oil or dish soap.
5. Push the skewer through the thicker area of rubber at each end of the balloon - your family and friends will be amazed with your magic!

THE SCIENCE

Think back to the polymers in the Leakproof Bag activity. The balloon is made of a similar polymer which contains molecules attached in long, flexible chains. Blowing up the balloon stretches these strands of polymer chains. At either end of the balloon, the rubber molecules are under the least amount of stress or strain so they are flexible enough to push apart by the skewer. The polymer chains at any other part of the balloon are under too much strain to be pushed apart without breaking.

How full can you blow the balloon and still get the skewer through?

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Balloon Rockets

You will need:

- Balloon (round ones work but the longer ones are best)
- String
- Straw
- Tape
- Clothes peg



THE SCIENCE

1. Tie one end of a piece of string to a chair, door handle etc. or have someone hold the end.
2. Put the other end of the string through a straw and pull the string tight.
3. Inflate the balloon, twist the end and secure it with a clothes peg.
4. Use tape to attach the balloon under the straw.
5. Release the peg to launch your rocket!

The rocket moves by something called thrust. As the air rushes out of the balloon, it creates a forward motion called thrust. Thrust is a pushing force created by energy. This thrust comes from the energy of the balloon forcing the air out. Different sizes and shapes of balloon will create more or less thrust. In a real rocket, thrust is created by the force of burning rocket fuel as it blasts from the rocket's engine - as the engines blast down, the rocket goes up.

Mark on the string with pen where your balloon ends and try to beat it.

Why not set up two and have a race?

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Reversing Arrows

You will need:

- Glass
- Paper
- Pen
- Water



1. Draw an arrow on a piece of paper and prop it up against something so it stands. Make sure you pay attention to the direction the arrow is pointing!
2. Put an empty, transparent (see-through) glass in front of the arrow.
3. Fill the glass with water and watch what happens to the direction of the arrow!

Does it still work with different sizes and shapes of glass?

Try writing backwards messages to reveal as you fill the glass!

THE SCIENCE

This concept is called *refraction* which means the bending of light as it passes from one 'medium' to another. During the experiment, the light travelled from the image, through the air, into the glass and water, then out of the glass and into the air once more before it reached our eyes. This means that the light bends once when it travelled through the glass into the water, and then it bends again when it travelled out of the glass and into the air. As a result, the light paths cross and the image appears to be flipped horizontally (left/right).

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