

## Summer Term Science Grid 2020

For each session - Choose one **ACTIVITY** to investigate on the left and focus on one **SKILL** from the scientific method below.  
(This should be 1 sheet of printed paper for each activity – or read from the screen and record in home learning book)

Activity			Scientific Method - Skills
Science Challenge 1 (Changing States)	Science Challenge 3 (Floating Ping Pong)	Science Challenge 9 (Bright as a new penny)	<b>1. Question</b> <i>What question will you investigate?</i> <b>2. Prediction</b> <i>What do you think will happen?</i> <b>3. Method</b> <i>Decide the steps and equipment you'll need</i> <b>4. Diagram</b> <i>A scientific drawing with labels to explain the test</i> <b>5. Observations</b> <i>What happened?</i> <i>(Sometimes this may take several days / weeks)</i> <b>6. Results</b> <i>Record what has happened – a table, drawing, chart, notes</i> <b>7. Conclusion</b> <i>What did you find out – did it answer your question? Did it generate a new question to investigate?</i> Although we follow all these steps when investigating we would generally only write up one skill which we are focusing on – try to do a different one each time. Investigations often lend themselves to particular skills to focus on.
Science Challenge 15 (Floating paper clip)	Science Challenge 17 (Scared Pepper)	Science Challenge 18 (Dancing Raisins)	
Engineering Challenge 4 (strong as a drinking straw)	Engineering Challenge 12 (Design and build a helicopter)	Engineering Challenge 15 (Jelly and Oil)	
See the STEM Challenge cards for details about the activities above – on school website in the Y5/6 Home learning area.  Find more science information on; <ul style="list-style-type: none"><li>• Youtube</li><li>• BBC Bitesize</li><li>• BBC Live Fantastic Science</li></ul>			

## Working Scientifically

Although this sounds quite technical it isn't at all. There are lots of simple ways to work scientifically whilst working from home. Here is a brief explanation of the 5 different enquiry types that we use at school and examples of how you could do them at home.

1. **OBSERVING OVER TIME** – what has changed by minute, hour, day, week, season?

Examples: Melting ice cubes and chocolate, growing plants, rotting vegetables, the plants in the garden, the phases of the moon

Recording Results – Notes on paper, what you notice

2. **SEEKING PATTERNS** – identifying links between 2 variables (but not having a cause an effect)

Examples: Do biggest trees have biggest leaves? Can the tallest people jump the furthest? Is there a link between hair colour and eye colour?

Recording Results - These types of investigation can often be done using a survey or tally chart

3. **CLASSIFYING** – This is a simple test which usually follows a 'yes / no' style of questioning

Examples: Is this material waterproof / magnetic / transparent? Does this animal have gills / wings / 4 legs?

Recording Results – Branch diagram, Venn diagram, Carroll Diagram

4. **COMPARITIVE / FAIR TESTING** – This is the more traditional science test. This enquiry will consider the effect of one variable on another.

Examples: Which material makes the best parachute? Which wheels make the car go fastest? How much light make the plant grow tallest?

Recording Results – Line graphs, bar charts, tables

5. **RESEARCH** – there are times when it isn't possible or safe to investigate a question or an expert is needed to provide answers.

Examples: How far is the moon from Earth?, How much voltage runs through a pylon?, How does water get transported through the body?

Recording Results – Notes on paper, what did you find out?

**So as you can see, children are always questioning and as a result often working scientifically. Have a think about these types of enquiry if you are doing any science and see if you can match your activity to the type of enquiry. Sometimes it can be more than one.**