**Year 8 Science ‘at home learning’ resource**

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| Write a list of 10 rules for being safe in a school laboratory  | Write a method for safely boiling 100ml of tap water. What equipment will you need? How will you carry it out? | Explain why we must not eat or drink in a lab in an article to be placed in a school newsletter  | Design an experiment to test how good different washing powders are at removing tomato sauce stains. Remember your IV, DV and control variables.  | Research who developed the scientific method and why this is important. Include what peer review is and why it is needed.  | Research 10 pieces of scientific apparatus and explain what they are used for.  | Make a list of key scientific words from A to Z.  | Write a paragraph on why science is important, what it has contributed to the world and your life.  |
| Explain why Earth has seasons. | Define the terms star, constellation, galaxy, black hole, universe, light year. | Explain why the term light year is used to measure distances in space. | Draw a diagram of the heliocentric and geocentric models of the solar system. Compare and contrast them. | Write a newspaper article about why Galileo Galilei was placed under house arrest.  | Write a Facebook profile about Nicolaus Copernicus and what he is famous for regarding the solar system. | Describe the Earth’s magnetic field (you can use a diagram) and explain how a compass works to show what direction you are travelling in. | Create some flashcards about the Earth and space topic.<https://www.bbc.co.uk/bitesize/topics/z8c9q6f>  |
| Write an acrostic poem about ‘combustion’. | Define combustion. Write a word equation for the combustion of a fuel in oxygen. | Research the Hindenburg disaster and create a bullet point summary of the key points including what caused it. | Write word equations for the reaction of the following substances with oxygen.Copper, magnesium, sulphur, carbon, iron. | Explain the concept of ‘conservation of mass’ in a chemical reaction. | Describe the fire triangle and explain the different types of fire extinguisher available and which part of the fire triangle you would remove to put the fire out. | Plan an experiment to test ‘How does the volume of a beaker affect the time a candle burns for?’Include the equipment you would use and why, variables and a method. | What is incomplete combustion? What pollutants are produced? What affect do these pollutants have on people and the environment? |