Science Department
Birchensale Middle School

All of the below work is optional, but is provided for pupils if they are able to continue their studies in the event of a school closure. We realise that some families may not have the facilities/ability to complete the work.

Birchensale Science Department – Supporting offsite learning of science at home

Year Group	Topics / Units currently being taught / moving onto	Ideas to help continue / further your learning whilst away from school
Year 5	**Human Changes / How human grow & develop / reproduce.** **Forces / Forces all around the world / different types of forces (Friction, push pull, air resistance)**	• Create a timeline using pictures and keywords to show how you have changed since you were born. • How do other living organisms grow and develop? How does the life cycle of an amphibian compare to the life cycle of a human? Create a poster / leaflet to show this process. • Carry out a small-scale investigation into air resistance by making parachutes of different materials and testing them out at home. • Can you design a box which can protect a raw egg when dropped from different heights in your house? Think about material / how to package it in the box, can you try this experiment and photograph the stages. • Carry out this investigation into friction and see if you can figure out how it works: (Friction Investigation) https://www.youtube.com/watch?v=U-8mW_gD8Xw
Year 6	**Electricity and Circuits** **The Human Body / Healthy lifestyles / How the lungs and human heart work.**	• Pupils can carry out an investigation to see how their pulse rate changes before and after exercise. Collect data and make a report of your findings. • Pupils can investigate which materials in their house are conductors of electricity. Can you make a simple circuit using a battery and wire(s)? Can you investigate an old piece of electronic equipment and see how it works? • Can you use a balloon to generate static electricity and see how many objects you can attract / push away using this force? • Use bbc bitesize to watch small clips on iPlayer on how to make simple circuits and then play the test yourself section to see what you have learnt.
Year 7	**Space and the universe /** **Forces**	• Carry out a small-scale investigation into air resistance by making parachutes and testing them at home. • Explore all the different forces in your house and crate a report about what they are and how they work.

		• Space: Choose a space mission launched in the last 10 years and produce a report / presentation all about it. • Space: Read a space-based book / magazine / watch a BBC / YouTube programme and then produce a review all about what it was about / your viewpoints.
Year 8	**The Heart / Circulatory system / The Human body** **Light and Sound / How waves work / Reflections / Refractions**	• Produce a revision booklet / mind map on the heart / circulatory system • Use the website "Canva" to create an infographic all about major organs in the human body and how food groups are used for certain jobs. • Create a series of KS3 flash cards which identify key words and their meanings on how to carry out food tests. • Download and attempt a range of KS3 questions based on the human body (see link below)

Websites to support learning

Year 5:

Living things: https://www.bbc.co.uk/bitesize/topics/zgssgk7

Year 6:

Electricity : https://www.bbc.co.uk/bitesize/topics/zj44jxs

Year 7:

Forces: https://www.bbc.co.uk/bitesize/guides/zttfyrd/revision/1

Space : https://www.bbc.co.uk/bitesize/topics/z8c9q6f

Year 8:

The Heart: https://www.bbc.co.uk/bitesize/guides/zhnk7ty/revision/1

Digestive System: https://www.bbc.co.uk/bitesize/guides/z9pv34j/revision/1

General

Education City: (Pupils should have log in details) - https://www.educationcity.com/

Easy science experiments to carry out at home: https://sciencebob.com/category/experiments/

Science fair project ideas – Fancy entering this years science fair? Use this link to start thinking of potential ideas and practice simple investigations at home: https://babbledabbledo.com/20-science-fair-projects/

You-tube Crash Course - https://www.youtube.com/user/crashcourse

Ted – Ed: Educational videos produced by quality educators and outstanding animators: https://www.youtube.com/user/TEDEducation