

Curriculum Record Science. Elmbridge January 2019 March 29th 2019

Week One.

Subject Physics - core curriculum Electronics.

Introduction to simple circuits, looking at and building simple circuits using 1, Power source / output. 2 Power source/ output/ switch. 3 adding components. 4 Building own circuits using selection of components to develop skills and understanding from previous lessons.

Week Two. Subject Physics - core curriculum Magnetism.

Learning the ruction of positive and negative poles. Using magnetism to build a locking device [ school gate is an example]

using skills from electronics week one to build an electro magnet.

Week Three.

Subject Chemistry - core curriculum chemical reactions.

BY use of model volcano - learning the way chemicals react with each other to give different outcomes. Why reactions are important in cooking and in medicine

Assessment Record.

There is clear differential between the groups and what they can do as extension work. It is not suitable to just repeat the same lesson plan for all four groups. even amongst groups there are individual pupils who are able to expand their learning. Each lesson will have at least two and in some cases four units. this will allow for Individual Learning Plans to be available.

Week Four.

Subject Biology. core curriculum parts of the body.

Dissection of an organ [Lambs heart]

Each group to direct a lambs heart looking at each part of the heart and how it works.

Model of human body to show where the heart is and how it functions in the human body.

Each pupil to complete work sheet[s] on labelling the human organs and how they link.

Week Five.

Subject biology - core curriculum Generation lines and food chains.

Work sheet on genetics and food chain lines.

Testing for Fats, carbohydrates, etc. four pair sheet for the individual folders on the chemistry of cooking which will link into future work programme and helps link each of the three core Science areas together.

Week Six.

Subject Chemistry. - core curriculum Slime - Reaction to chemicals and materials.

Each group will have the opportunity to make four different slime outcomes. [ Some may only make one or two some will make all four]

Then how to make Salt crystals on a sponge.

Assessment.

Having up to four units available for each group is working because the wish to learn and the learning levels differ from lesson to lesson and between the individuals.

Week Seven.

Subject Physics - core curriculum - physics and the environment. [ Green Energy]

exploring the use of solar power and wind power.

Use of solar kits to build a solar panel and use it to power , a Bulb, a buzzer and a motor.

Using balloons and made cars demonstrate how wind power can be utilised.

Week Eight.

Subject Biology core curriculum - Bug Life.

Using old logs to take samples and examine them under the electro microscope. Looking for the variety of plant, fungi and insect life on a small area of a log.

Recognising different elements that are needed for survival.

Week Nine.

Subject Biology / Physics - core curriculum. Parts of the body [ eye] and what information is acquired by sight and how it can be used and deceived.

Development work = Human and animal growth, what is required to grow and develop at different stages of life.

How do diets [meat] [vegetarian] [Vegan] provide vital elements for growth and health.