Science Long Term Map

	AUT 1	AUT 2	SPR 1	SPR 2	SUM 1	SUM 2
Y1	Materials Compare and group by simple properties. Describe simple properties. Identify and name everyday materials. Scientist: Martin Brock, Charles Macintosh	Seasons Observe the changes across 4 seasons. Observe/describe weather and how day length changes. Light Sources	Animals inc Humans Label parts of human body. Animals have offspring which grow into adults.	Materials Distinguish between an object and its material. Scientist: Helen Sharman	Plants Basic structure of plants and trees. Scientist: Tim Peake	Animals inc Humans Identify and name a variety of common animals. Describe and compare the structure of common animals.
	Element of Seasons unit taught per half term with summary Sum 2					
Y2	Animals inc Humans Basic needs of animals. Importance of diet, exercise and hygiene. Animals have offspring which grow into adults. Scientist: Elsie Widdowson (UK nutritionist)	Living Things & their Habitats Explore and compare differences between living, dead and never been alive.	Plants That plants need water, light and a suitable temp. Obs and describe growth from seed/bulb to adult. Name common plants	Materials Identify and compare suitability of everyday materials and uses Solid materials can be changed by squashing, bending etc. Scientist: Julie Brusaw, John Macadam	Living Things & their Habitats Identify and name plants and animals in their habitats including micro-organisms. Suitability of habitat.	Living Things & their Habitats Describe how animals obtain food using simple food chains.
Y3	Animals inc Humans Humans have skeleton and muscles for support, protection and movement. Scientist: Marie Curie (brought x ray to the battlefield)	Rocks Compare and group rocks. Describe how fossils are formed. Soils are made from rocks and organic matter. Scientist: Holly Betts Mary Anning	Forces and Magnets Magnets attract or repel each other and attract some materials and not others. Magnetic force can work at distance. Identify some magnetic materials.	Light Identify shadows as blocked light. Light is reflected. Light is needed to be able to see. The sun can be dangerous to look at. Identify patterns in shadow size changes. Scientist: Thomas Edison	Plants Requirements for life and growth. Identify and describe names and functions of main parts. How water is transported. Identify flowers' roles in life cycle.	Animals inc Humans Nutrition- animals require right type, amount and can not make their own.

Y4	States of Matter Compare and group materials according to whether they are solids, liquids or gases. Observe that some materials change when they are heated or cooled and measure or research the temperature at which this happens in degrees Celsius.	Electricity Conductors and insulators. Construct simple circuits, naming components. Identify everyday appliances. Identify if a lamp will light or not, including switches. Scientist: Michael Faraday	States of Matter Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Animals inc Humans Teeth and their functions. Human digestive System. Food Chains- producers, predators, prey.	Sound How sounds are made. Vibrations from sound travel through a medium to the ear. Patterns in volume and pitch. Scientist: Alexander Graham Bell	Living Things & their Habitats Using keys to identify living things in local and wider environment. Living things can be grouped in a variety of ways. Environments can change, posing dangers. Scientist: Seirian Sumner (evolutionary biologist and behavioural ecologist)
Y5	Living Things & their Habitats Differences in the life cylcle of mammals, amphibian, insect and a bird. Describe life processes of reproduction in some plants and animals. Scientist: Jane Goodall	Animals inc Humans Changes at old age.	Earth and Space Sun, Earth and Moon as spherical bodies. Explain day and night and the apparent movement of the sun. Describe the movements of the earth and other planets relative to the Sun in the solar system. Describe the movement of the Moon relative to Earth Scientist: Maggie Aderin-Pocock, Galileo	Properties and Changes of Materials Reversible and irreversible changes and dissolving.	Properties and Changes of Materials Separating mixtures through filtering, sieving and evaporation.	Forces Gravity. Friction (air and water resistance) Levers, pulleys and gears. Scientist: Emma England Isaac Newton,
Y6	Light Travels in straight lines and may reflect into the eye. Why shadows are same shape as the object that cast them. We see because light goes from source to eyes or source to object to eyes.	Electricity Compare brightness and volume when varying power. Give reasons for variation in how components function. Know and use symbols. Scientist: Peter	Animals inc Humans Circulatory system- main organs and functions. Impact of diet/ exercise/ lifestyle.	Living Things & their Habitats Describe how living things can be classified into broad groups. Give reasons for classifying plants and animals based on specific characteristics	Living Things & their Habitats Micro-organisms as both helpful and harmful – Scientist: Edward Jenner Ruby Hirose (polio)	Evolution and Inheritance Living things have changed over time and that fossils provide information. Recognise that living things produce offspring that vary.

	Scientist: Ernesta Jonkute, Alhazen Revision of Sound (Y4)	Rawlinson (electric vehicles engineer)	Transportation of water and nutrients within humans and animals. Scientist: John Boyd Orr	Scientist: Carl Linnaeus		Identify how animals and plants are adapted to suit their environment. Scientist: Charles Darwin