Bure Valley School Science Curriculum Map

Blue: Physics strand – structure of matter and force and how parts of the universe interact.

Green: Biology strand – living organisms and processes.

Red: Chemistry strand – properties of matter and how they change and interact.

YEAR 3	**Substantive curriculum**				
3	**Order of units explanation: Plants** unit focus in summer where there is sufficient light in the classroom to grow seedlings. **Forces**, **Light** and **Rocks** before **Plants**, to be able to make conceptual links to the Plants topic.				
3	Animals and Humans **Key Idea:** The human body has a number of systems each with its own function.	Forces: **Key Idea:** There are contact and non-contact forces which affect the movement of objects.	Light **Key Idea:** Light enables us to see and can be reflected and absorbed.	Rocks **Key Idea**: Different rocks have different properties. Soils and fossils are formed.	Plants – **Key Idea:** Life exists in a variety of forms and goes through a cycle. Habitats provide living things with what they need to exist.
4	**Substantive curriculum**				
4	**Order of units explanation: Habitats** – naming and identifying plants, referred to throughout the year as they grow and change. **States of matter** unit before **Sound** unit because knowledge of solids, liquids and gases is needed to understand how sound travels through a medium to the ear.				
4	Electricity **Key Idea:** Electricity can make circuits work and can be controlled to perform useful functions.	Animals and Humans **Key Idea:** The human body has a number of systems each with its own function.	States of Matter **Key Idea:** Materials can exist in different states which can sometimes be changed.	Sound **Key Idea:** Sound can be reflected and absorbed. It enables us to hear.	Living Things and Habitats **Key Idea:** Living things can be classified according to observable features. Habitats provide living things with what they need.
3 &4	**Working Scientifically Disciplinary curriculum.** **PLAN**: Ask questions and use enquiries to answer them. **DO:** Set up enquiries, observe, measure, gather, record and present data. **REVIEW:** Report on findings, using oral, written and pictorial methods. Use results to draw conclusions, make predictions and ask further questions.				
5	**Substantive Curriculum**				
5	**Order of units explanation: Forces** unit taught before **Earth and Space** unit, so that understanding of gravity can be applied to understanding of why planets orbit the sun and the moon orbits the earth.				
5	Forces **Key Idea:** There are contact and non-contact forces which affect the movement of objects.	Properties and changes of materials **Key Idea:** The physical properties of materials determine their uses.	Living things and habitats **Key Idea:** Life exists in a variety of cycle forms.	Animals and Humans **Key Idea:** The human body changes as it develops from birth to old age.	Earth and Space **Key Idea:** Day, night, month, seasonal change and year are caused by the position and movement of the Earth.
6	**Substantive Curriculum**				
6	**Order of units explanation: Light** and **evolution and inheritance** units are conceptually more challenging so are taught later in the year.				
6	Electricity **Key Idea:** Electricity can make circuits work and can be controlled to perform useful functions.	Animals and Humans **Key Idea:** The human body has a number of systems each with its own function.	Light **Key Idea:** Light enables us to see and can be reflected and absorbed.	Living things and Habitats **Key Ideas:** Living things can be classified according to observable features. Habitats provide living things with what they need.	Evolution and Inheritance: **Key idea:** Variation and adaptation may lead to evolution
5 &6	**Working Scientifically Disciplinary curriculum** **PLAN:** Plan different types of enquiries to answer own questions including variables. **DO:** Use results to set up further enquiries. Take (repeat) measurements using range of scientific equipment and increased accuracy and precision. Record data using scientific diagrams, classification keys, tables, scatter graphs, bar and line graphs. **REVIEW:** Report and present findings including conclusions using appropriate scientific language. Explain degrees of trust. Identify evidence that has been used to support or refute ideas or arguments.				