Overview of Substantive Knowledge across EYFS – Year 6

Biology	Chemistry	Physics
Key concepts • Organisms require a supply of energy and materials: Living things are special collections of matter that reproduce, use energy and grow. Food provides materials and energy for life and growth. Plants and bacteria use energy from the sun to generate food. Animals break down food and are ultimately dependant on green plants for energy. In any ecosystem there is competition for the energy and materials needed to live and reproduce. • Genetic information: Genetic information is passed down from one generation of organisms to another. Genes determine the development and structure of organisms • Evolution: The diversity of organisms is the result of evolution. Different kinds of life, animals, plans and microorganisms, have evolved into different forms best suited to the environments in which they live. Organisms not able to respond sufficiently to changes in their environment become extinct.	**Key concepts** • All matter (stuff) in the universe is made of tiny building blocks. • Materials (properties and changes): The arrangement, movement and types of building blocks of matter, and the forces that hold them together/push them apart, explain all the properties of matter (e.g. hot/cold, soft/hard, light/heavy etc…) • States of matter: Matter can change if the arrangement of these building blocks change (e.g. chemical reactions)	**Key concepts** • The universe follows unbreakable rules that are all about forces, matter and energy • Forces are different kinds of pushes and pulls that act on all the matter in the universe. Changing the movement of an object requires a force to be acting on it. Gravity is a universal force of attraction between all objects, however large or small • Energy: There are many different forms of energy e.g. light, sound, electricity, heat and wind. Energy can be transferred from one object to another and can cause changes. The total amount of energy in the universe is always the same but energy can be transformed when things change or are made to happen

	Plants	Animals, including humans	Living things and their habitats	Evolution and Inheritance	States of matter	Materials and their properties	Rocks	Seasonal changes	Electricity	Light	Sound	Forces and magnets	Earth and Space
EYFS													
1													
2													
3													
4													
5													
6													