Astley C.E. Primary School
Science Curriculum: The Big Ideas

Physics
P1: The universe follows unbreakable rules that are all about forces, matter and energy. P2: Forces are different kinds of pushes and pulls that act on all the matter that is in the universe. Matter is all the stuff, or mass, in the universe. P3: Energy, which cannot be created or destroyed, comes in many different forms and tends to move away from objects that have lots of it. E1: The Earth is one of eight planets that orbit the sun. E2: The Earth is tilted and spins on its axis leading to day and night, the seasons and the climate. E3: The Earth is made up of several layers, including a relatively thin, rocky surface which is divided into tectonic plates, and the movement of these plates leads to many geologic events (such as earthquakes and volcanoes) and geographical features (such as mountains.)
Chemistry
C1: All matter (stuff) in the universe is made up of tiny building blocks. C2: The arrangement, movement and type of the building blocks of matter and the forces that hold them together or push them apart explain all the properties of matter (e.g. hot/cold, soft/hard, light/heavy, etc). C3: Matter can change if the arrangement of these building blocks changes.
Biology
B1: Living things are special collections of matter that make copies of themselves, use energy and grow. B2: Living things on Earth come in a huge variety of different forms that are all related because they all came from the same starting point 4.5 billion years ago. B3: The different kinds of life, animals, plants and microorganisms, have evolved over millions of generations into different forms in order to survive in the environments in which they live.

The big ideas of science are referred to in each unit of work enabling children to make links between their learning and gain a secure concept base.