

## **Science Vertical Concepts**

4. 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

Nursery	
	Reception  To make observations of animals/plants and look at differences (need food/make food)
Year 1 Things around us can be made to change or happen. We can pull objects behind us or push them across the table.	
	Year 2 All living things needs food to give them energy.  The arrows in a food chain show where energy is transferred from and to.
Year 3	
Year 5 Many processes and phenomena are	Year 4  The arrow in a food web shows where energy is being transferred from and to Things around us can be made to change or happen. We can turn on a light bulb and make it brighter or dimmer.
explained in terms of energy exchanges  Energy cannot to created or destroyed. When energy is transferred from one object to others,	
the total amount of energy in the universe remains the same; the amount that one object loses is the same as the other object gains	Year 6
Year 7/KS3 Objects have energy because of their	

chemical compositions, their movement, their temperature, their position in a gravitational or other field, or because of compression or

distortion of an elastic material