

Knowledge Map – design and technology

| Topic | Cycle A | | | | | | Cycle B | | | | | | Cycle C | | | | | |
|-------|----------------|------------|------------|---|----------------------|---|---------------|------------------------------------|--|----------|--|---------------|-----------------------|----------|--|--|--------------|---|
| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| | Town & Country | Traditions | A New King | The Sinking of the Titanic | Our wonderful world! | I do like to be beside the seaside | All about me! | Fire! Fire! | Food | Tanzania | How our school used to be | Grace Darling | The Three Little Pigs | Poppies | Man on the moon | Mary Anning | Meerkat Mail | The hills are alive |
| R/1/2 | | | | Levers and sliders can be used to make things move. | | Structures need to be stable and strong. There are different ways of making things stronger and more stable. | | Wheels work by turning on an axle. | Different foodstuff come from different places eg grown/animal. Some foodstuff are grown locally. | | Pieces of fabric can be joined by stitching them together. | | | | If a design is to be successful it has to meet certain criteria. | If a design is to be successful it has to meet certain criteria. | | A structure is anything made of parts held together in a particular way. While this could be something made by humans, like a building or a bridge, it could also be something natural, such as a skeleton, eyes or leaves. |

| Topic | Cycle A | | | | | | Cycle B | | | | | |
|---------|---|---|--|--|----------|--|--|---|----------|----------|----------------|--|
| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| | Cooking | Living things and their habitats | The Romans and their impact on Britain | South West England compared to Scandinavia | Rivers | D Day | Forces of nature | King Alfred and Winchester | Biomes | Mayans | The Human Body | Ancient Greece |
| 3/4/5/6 | Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in the 'Eat well' plate. Know that to be active and healthy, food and drink are needed to provide energy for the body. | Pneumatic systems are where tools and appliances are driven by compressed air | | | | Textiles can be used to create products and should be chosen for functional and aesthetic qualities. | Electrical circuits can be used to create functional products. | Objects, materials can be joined in different ways. | | | | Watermill - A mill for grinding grain that is powered by water. The Greeks invented the waterwheel used to power the mill and the toothed gears used to transfer the power to the mill. Crane - The Greeks invented the crane to help lift heavy items such as blocks for constructing buildings. |

| Topic | Cycle C | | | | | | Cycle D | | | | | |
|---------|---|-----------------|---------------------|-----------|---|------------------------------------|----------|---|-----------|---|---|---------------------------|
| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| | Egyptians | Earth and Space | Portsmouth & Boston | Evolution | Local land use | Local history – history of Andover | Energy | Animals | Stone Age | Iron Age Hillforts | Food | Life in Anglo-Saxon times |
| 3/4/5/6 | A shaduf attaches a bucket to a lever that is then strung from a tripod or a Y junction to ease pull water from a river or well. A lever is a rigid bar resting on a pivot, used to move a heavy or firmly fixed load with one end when pressure is applied to the other | | | | Different foods grow better at different times of the year. This is called seasonality. The purpose of kneading bread is to strengthen the gluten (the protein in grain such as wheat) It is important to be accurate when weighing and measuring | | | A lever is a long component resting on a point of support called the fulcrum, that allows an object called a load to be lifted with ease. | | Structures need to be stable and strong. There are different ways of making more complex structures stronger and more stable. It is important to have a healthy diet. | There are savoury dishes and sweet dishes. Different techniques are used when preparing food safely. | |