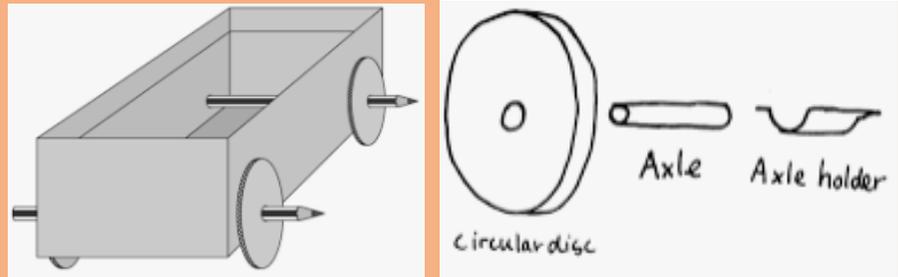
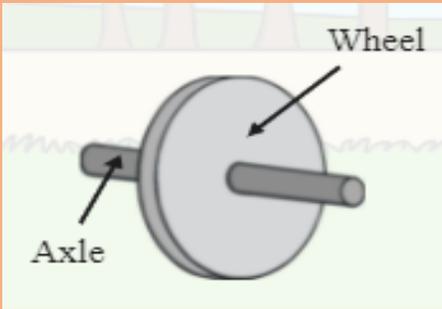




Year 2—Design and Technology—Knowledge Organiser

Wheels and Axels

Machines that have wheels also have an axel. The axel is a bar that holds the wheel in place and allows them to turn. The axel also needs to be strong enough to carry the load of the rest of the machine.

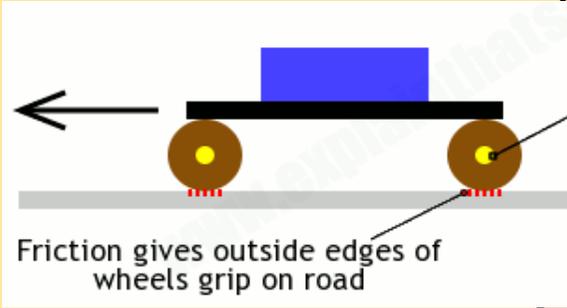


The size of the axel will depend on the wheel that needs to be turned. A single Ferris wheel or bicycle wheel will have a shorter axel than a mechanism that needs more wheels.

Although the axel is fixed to the model that moves, the axel needs a holder so that it can rotate and allow the wheels to move

Friction

Dragging objects across the ground can be hard work due to friction that stops an object moving. Wheels can reduce the friction and make it easier to move heavier objects from one place to another.



Key Vocabulary

Mechanism	The different parts of a machine.
Axel	bar keeping wheels in place and allowing them to turn.
Axel holder	The way the axel is attached to allow movement.
Chassis	A frame or base that the vehicle is built upon
Wheel	A circle shaped device to make models move
Test	To measure how something works.
Rotate	To turn on or around a fixed point.
Friction	A force that stops an object from moving
Ingredients	Different items mixed together to cook with
Healthy	Being fit and well (not poorly)
Slice	To cut into thin flat pieces.
Balanced diet	A mixture of different food types.

Year 2—Design and Technology—Knowledge Organis-

Vegetables

Vegetables comes from plants and can be grown above and below the ground. Vegetables that grow underground are called root vegetables and those above ground are often called leafy vegetables. Vegetables are grown from seed. Some vegetable are actually fruit. If there are seeds inside then they are probably fruit and not vegetables. But we tend to use the term fruit for those that taste sweeter.



Healthy Eating

When deciding what to eat it is important to plan for a healthy diet. To keep your body healthy it is important to eat a mixture of fruit and vegetables, dairy products like milk and cheese, meat or protein, bread or wheat and some smaller amounts of sugar.



Designing a healthy pizza

Using a bread base, cheese, vegetables and some protein, a healthy pizza can be a way of eating a balanced meal. You need to plan what to add to a pizza and to make sure you have a healthy mix of ingredients. It also needs to look good to!



Cutting vegetables



Vegetables need preparing before you cook or eat them. This may mean cutting them. There are a few points to remember:
Always ask an adult for help.

Never walk around holding a knife.

Cut on a firm surface.

Keep fingers away from the blade