



“Whatever you do, work at it with all your heart” Colossians 3:23

‘CAM Toys’

Key question: How do I make my toy move when turning the axle?

Year 5

Spring 1

Key Knowledge

To know that:

A CAM mechanism turns rotary motion into linear (up and down) motion, using gravity.

There are different types of glue for different purposes e.g. wood glue to stick frame and PVA to stick decorations

Reinforcing structures with things like wooden dowel will strengthen our work and make it last longer

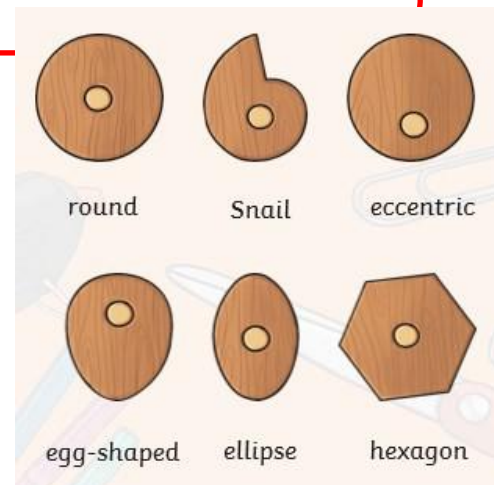
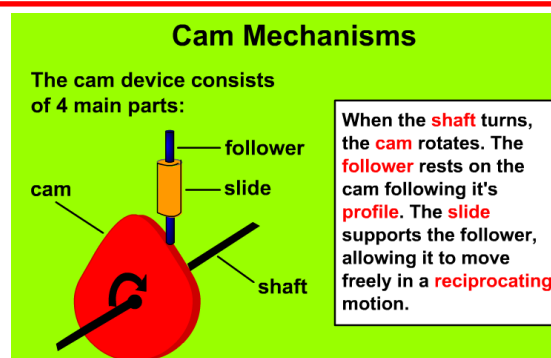
It is important to consider factors such as: sustainability, carbon footprint and cost effectiveness when designing a new product.

Inaccurate measuring can affect the functionality and outcome of a product

A product must work and look good to meet a brief



We start by trying different ideas then decide which one is best, thinking about: function, appeal, resources, time, cost, sustainability

We do a mid-project review and adjust our plans as we might find ways to improve our work or solve problems we are having



Different shape cams will create different movements

Key Vocabulary:

Cam	A wheel with an off-centre hole or strange shape 
Axle / shaft	Horizontal stick to turn
Follower	Vertical stick - goes up and down
Dowel	Round wood
Mechanism	A series of moving parts that work together to make a model or machine work. 
Annotated diagram	A drawing of the design with labels and explanations added to show what will happen.
Assemble	To put the model together.