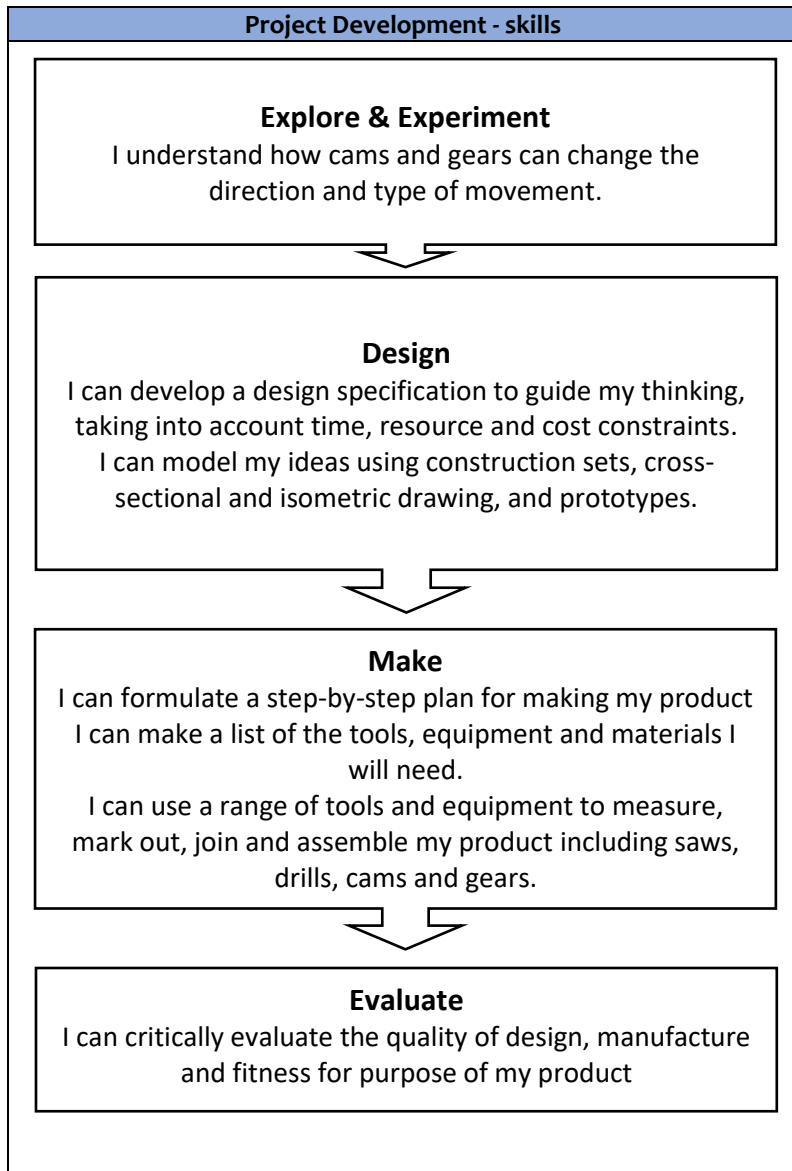




<b>Subject</b>	Design & Technology	<b>Theme</b>	Moving Model Stage	<b>Term</b>	5 & 6
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- What should I already know?**
- How gears change the direction of movement (Y5 Science)
  - That a mechanical system can create movement (Y3: levers, Y4: pneumatic systems)
  - How to create and use a list of design criteria
  - How to select appropriate tools and materials to meet a particular purpose
  - How to model ideas using prototypes

Key Vocabulary	
Word	Definition
Cam	A shaped component use to turn one form of movement to another
Rotational movement	Spinning around a pivot point
Pivot point	The point around which the rotational movement occurs
Linear movement	Up and down movement caused by a non-circular cam
Circular cam	A round cam
Non-circular cam	Any cam which is not round
follower	The component that is moved up and down or rotated by the cam
cross-section	a picture of a product that has been cut open to reveal the inner workings
pulley	a simple machine used to reduce the force needed to lift an object

**D&T Knowledge**

*Know and explain the D&T cycle: explore – design – make - evaluate*

**How mechanical systems such as cams, pulleys or gears create movement**

Know that a cross-section is a picture of a product that has been cut open to reveal the inside workings

Know that 3D product designs can be drawn to scale using isometric paper

Know how a cam changes a rotational movement into an up/down movement

Know that pulleys can be used to reduce the force needed to lift an object

Know that gears can be used to transmit movement from one part of a product to another, and change speed or direction of movement

Labels: Follower, Slide (the case), Pivot Point, Cam