Design & Technology Roman Chariots Year 4

Key Vocabulary	
Wheel	Round flat object that rotates around an axis; invented in the stone age.
Axle	A rod or spindle passing through the centre of a wheel.
Exploded diagram	A diagram or drawing that shows the relationship of parts to each other.
Measure	Identify the size, amount or degree of something using an instrument or device.
Chariot	Two wheeled vehicle pulled by horses used in military or construction in the past.
Durable	A trait that shows an object is strong or sturdy; will not break.
Frame	A rigid structure used to support moving parts of a machine.
Glue	Substance used to permanently attach two materials together.
Reinforce	To make something stronger by supporting it with other material.
Rotation	A part of machinery that is able to turn or spin on purpose.

Resources	
• Paper • Pencil • Ruler • Goggles	• Wood • Cams • Hacksaw • Bench-hook

What key knowledge will I have by the end of this unit?

I will know:
- How to design parts that will move in a diagram
- Draw exploded diagrams effectively
- Identify areas of weakness in a design
- How to choose appropriate pieces for specific purposes

What key skills will I have by the end of this unit?

I will develop the skill of:
- Measuring wood accurately
- Cutting wood safely and accurately
- Reinforce areas of weakness
- Creating moving parts that do not stick
- Making adjustments when parts do not align effectively
- Testing products for durability

In Year 3:	In Year 4:	In Year 5:	
Moving Cards We will create cards that can move using a range of linkages and levers. Our outcome will be a card that can be given to someone.	Roman Chariots We will create a solid frame that can support an axle and wheels, inspired by the chariots used during the Roman period.	Cam Toys We will use our knowledge of axles and frames to use one piece of machinery to move another, ensuring accurate measurements.	