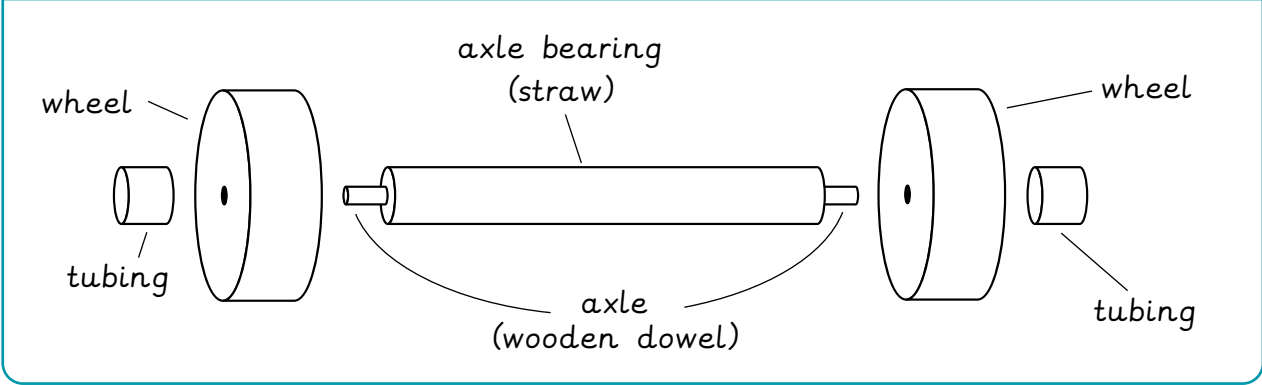


The parts of a **machine** that move together are called a **mechanism**. When a machine has more than one mechanism, it is a **mechanical system**.

Wheel mechanism: the axle spins freely inside the bearing, while the wheels are secured to the axle so they spin with it, allowing the car to roll.

Exploded diagrams are used to show how different parts of an object fit together.



A **prototype** is a simple model built to test a design before making the final product.



Prototype one mechanism: an **inclined plane** (ramp) is used to make the car roll.



Prototype two mechanism: a rubber band is used to **slingshot** the car forwards.



Prototype three mechanism: a rubber band is wound around the back axle and unwinds to make the car move.