Year 1 Term 1 Knowledge Organiser: DT — **Me and my community—Mechanisms, Wheels and axles**

Subject Specific Vocabulary

word	definition
Accurate	Neat, correct size, shape and pattern with no mistakes.
Axle	A long straight rod that connects to a rotating part, for example, the wheels of a car.
Axle holder	The part of the mechanism that holds the axle steadt.
Chassis	The body of a car.
Design	To make, draw or write plans for something.
Fix	To mend something so that it will work properly again.
Mechanic	A person who can build or mend vehicles or other
Mechanism	Parts of an object that move together to make
Model	A practise version, often on a smaller scale, that lets you test out your idea and see how it will look and work.
Test	To find out whether something works as it should.
Wheel	A circular object that turns round. It can be fixed to a vehicle like a bike or a car to allow the vehicle to move

Knowledge

Know that wheels need to be round to rotate and move.
Understand that for a wheel to move it must be attached to a rotating axle.
Know that an axle moves within an axle holder which is fixed to the vehicle or toy.
Know that the frame of a vehicle (chassis) needs to be balanced.
Know some real-life items that use wheels such as wheelbarrows, hamster wheels and vehicles.

Skills

Design a vehicle that includes wheels, axles and axle holders, that when combined, will allow the wheels to move.
Create clearly labelled drawings that illustrate movement.
Adapt mechanisms, when: they do not work as they should; to fit their vehicle design; to improve how they work after testing their vehicle.
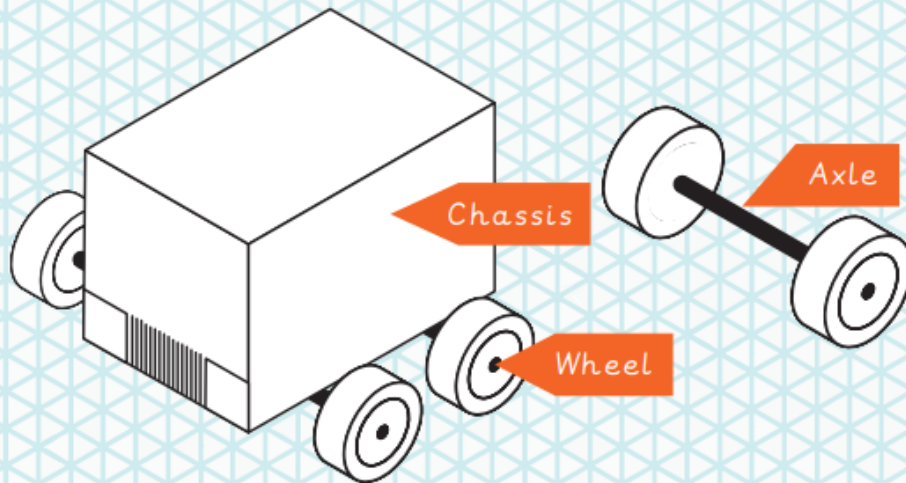Test wheel and axle mechanisms, identifying what stops the wheels from turning, and recognising that a wheel needs an axle in order to move.
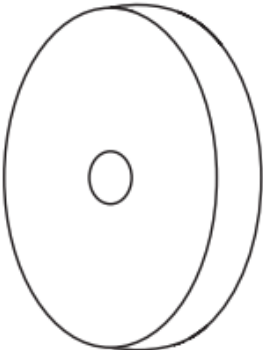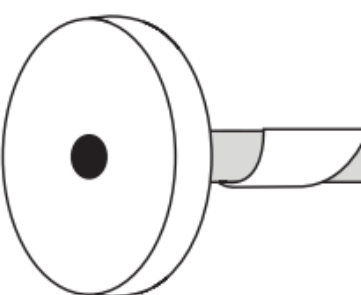
Inspiration

Kapow Primary™

How do wheels move?
The wheels need to be round and balance the body of the vehicle.

Axle

Chassis

Wheel

The wheels need to be attached to an axle.
The axle needs to fit inside the axle holder but must not be attached to the axle holder otherwise the wheels will not turn properly.

Wheel	Axle	
	Axle holder	

Wheels are on many objects, not just vehicles. Have you seen any of these?