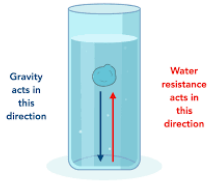
Chacewater School – LEAP Into Learning – Summer 1 – Red Oaks
SCIENCE: Forces

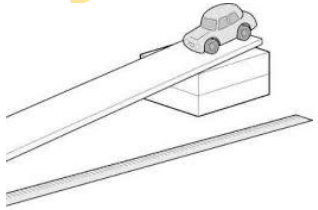
What I might already know:
The planets and the Sun do not touch and the planets stay in orbit around the Sun

KEY QUESTIONS:

How does the shape of an object affect the speed it falls in water?



How does the surface travelled on affect the speed of a toy car?



Key Vocabulary:
forces
gravity
mass
weight
friction
resistance
buoyancy
streamline
mechanisms

Comparative and Fair Testing

Pattern Seeking

How does the design of your spinner affect how slowly it falls?

???

What we will be learning:

Forces make things begin to move, get faster or slow down.

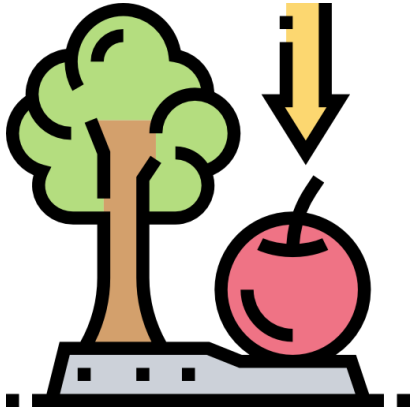
Air resistance *is a force that acts in the opposite direction to gravity.*

It acts between a moving object and the air molecules around it, slowing the object down.

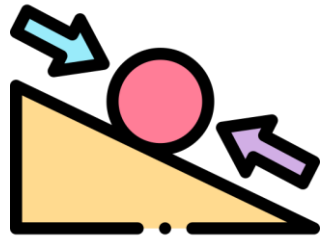
Water resistance *is the force responsible for making it difficult for us to move through the water.*

It acts between a moving object and the water molecules around it, slowing the object down

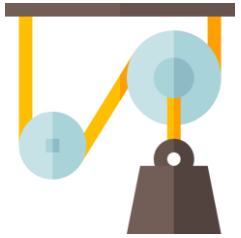
Unsupported objects fall towards the Earth because of the force of ***gravity*** *acting between the Earth and the falling object. (link back to earth and space)*



Some objects require large forces to make them move; ***gears, pulley and levers*** *can reduce the force needed to make things move. They allow a smaller force to have a greater effect.*



Friction *is a force that slows or stops moving objects and is caused by two surfaces rubbing against each other.*



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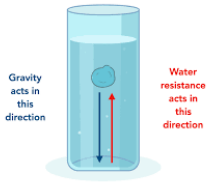

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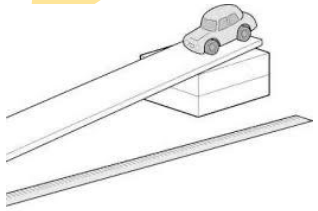

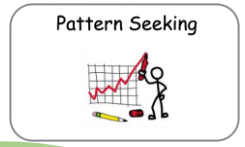

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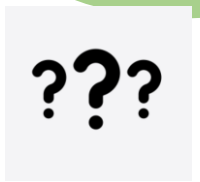

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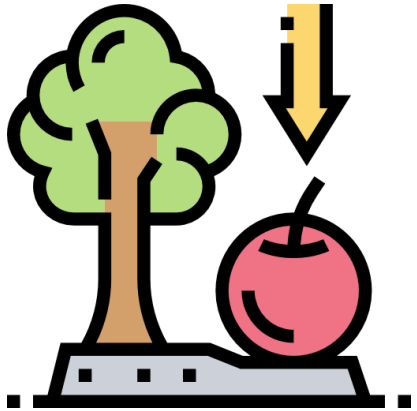

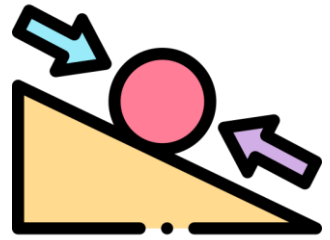

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