

Science
What are forces?

Watch the lesson (<https://classroom.thenational.academy/lessons/what-are-forces-6dh3ec>) and then complete the tasks when directed to do so.

Task One

Write down the definition of a force and write the three things it can do to an object.

Task Two

What were the four examples of contact forces?

Task Three

What are two examples of non-contact forces?

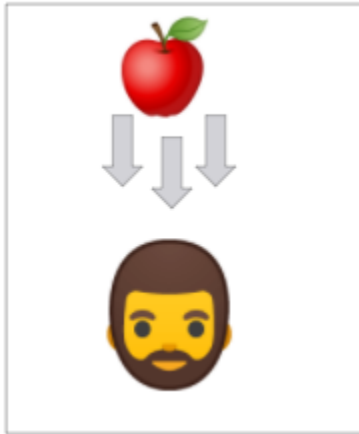
Task Four

Air resistance
Gravitational force
Friction
Magnetic force
Upthrust

Pushes objects upwards when they are in water.
Pulls everything downwards towards the Earth.
Acts when something tries to move quickly through air.
Acts between two surfaces that are sliding, or trying to slide, across each other.
Makes magnetic objects attract or repel each other.

Task Five

Which force is shown in each of the diagrams below?







Task Six

Which force is shown in each of the diagrams below?





Task Seven

What has happened?	Which force?	Why do you think it was that force?
Jenna fell over and scraped the skin on her knee. Which force acted on her skin?	Friction has acted	Because the force was caused by the floor and her knee rubbing against each other.
When Julia's ball fell into a pond she noticed it did not sink. Which force pushes upwards from the water?		
Maryam placed a new fridge magnet onto the side of the fridge and it stayed stuck to the side. Which force keeps it sticking to the fridge?		
Thomas has toy soldiers and he noticed that the one with a parachute falls slowly to the ground when he drops them from the top of the stairs when the others fall quickly. Which force slows it down?		

Task Eight

What are all the forces acting on a boat when it is moving forward in water?

Task Nine

Draw your own arrows and label them to show the forces acting.

