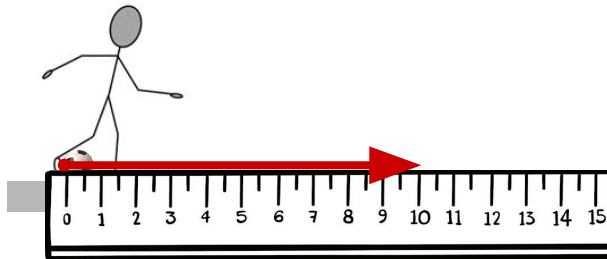


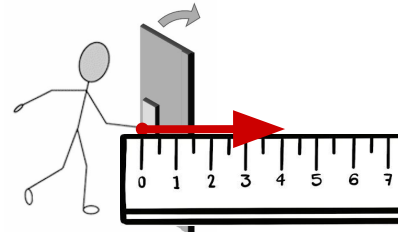


# Using force arrows

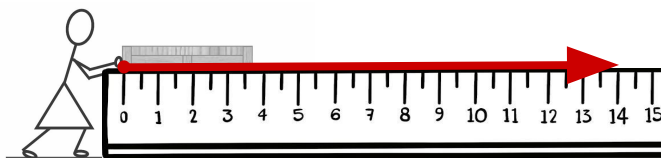
## Task A: The length of force arrows



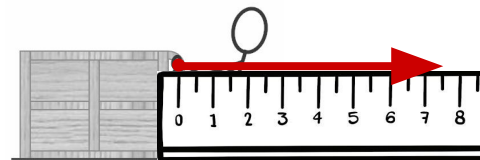
1) A 10 N force from the foot on this football.



2) A 4 N force from the hand on this door.



3) A 14 N push force from the hands on this crate.

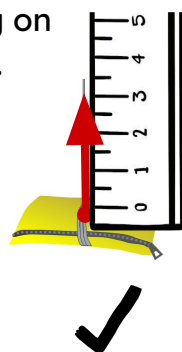


4) A 7.5 N pull force from the hands on this crate.

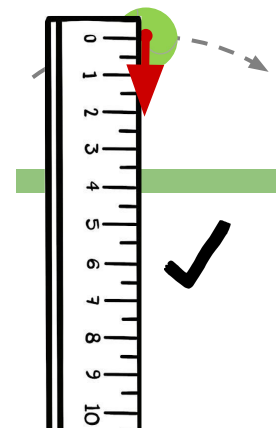
## Task B: Placing force arrows

Add one arrow to each diagram to represent the force described. Use 1 cm for 1 N.

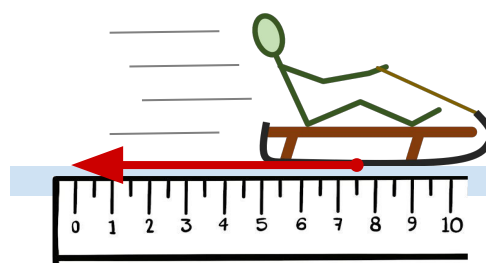
1) The tension force of the string on the hanging pencil case: 3 N.



2) The gravitational force of Earth on the moving ball: 2 N.

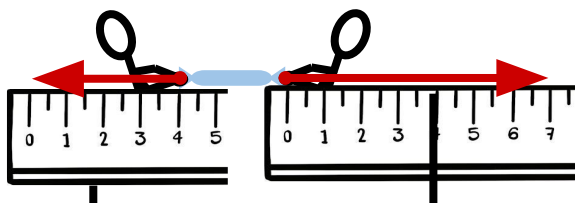


3) The friction force of the ice on the sledge: 7.5 N.



### Task C: Drawing and labelling forces acting

- 1) The two pulling forces on the cracker, 4 N and 7 N.

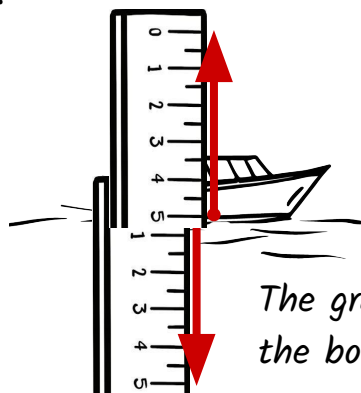


*The force of person A on the cracker.*

*The force of person B on the cracker.*

- 2) The gravitational force and the upthrust force on the toy boat, both 5N.

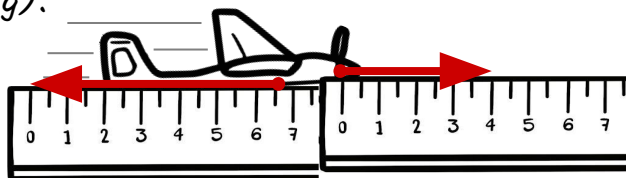
*The upthrust force of the water on the boat.*



*The gravitational force of Earth on the boat.*

- 3) A driving force (4 N) and air resistance (6.5 N) acting on the model aeroplane.

*The force of the air on the plane (air resistance/drag).*



*The driving force on the aeroplane from the motor/propellor.*

