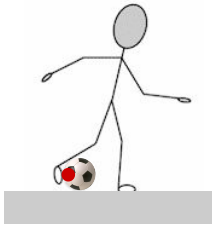




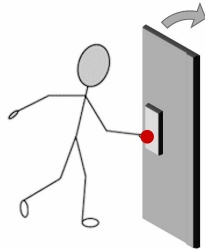
Using force arrows

Task A: The length of force arrows

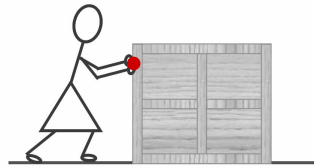
Draw force arrows for these forces - they all act horizontally to the right. Start each arrow from the centre of each dot. Use 1 cm for 1 N.



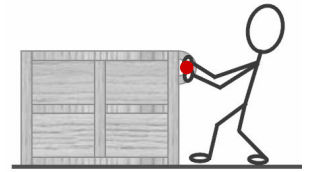
1) A 10 N force from the foot on this football.



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



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



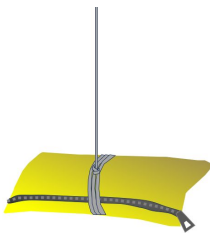
4) A 7.5 N pull force from the hands on this crate.

Task B: Placing force arrows

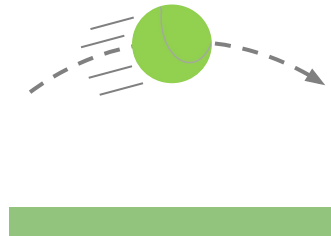
Add one arrow to each diagram to represent the force described.

Use 1 cm for 1 N.

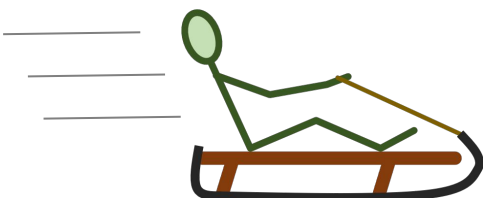
1) The tension force of the string on the hanging pencil case: 3 N.



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.

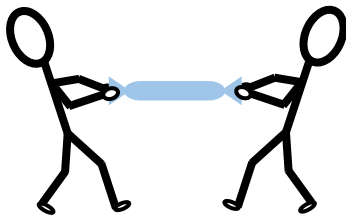


Task C: Drawing and labelling forces acting

Add arrows for the following forces to each diagram. Use 1 cm for 1 N.

Label each force arrow fully.

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



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



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

