

Forces on a tin of beans

A tin of beans is dropped from about 10 cm above a foam cushion.

On the diagrams below, draw all the forces acting on the tin:

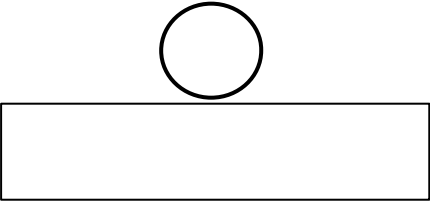
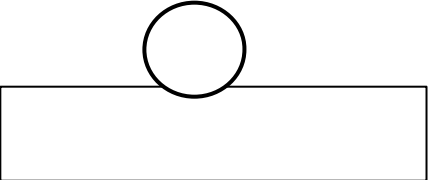
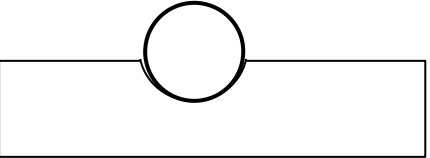
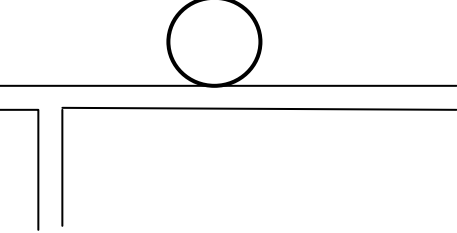
- (a) just before it touches the cushion,
- (b) when it has touched the cushion and is moving down into it,
- (c) when it has come to rest on the cushion,
- (d) when it is lying on a table.

Represent forces:

- by drawing arrows to show the direction of each force,
- with the **length** of the arrow representing the **size** of the force.

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Label each force to indicate what it is.

<p>(a) just before it touches the cushion</p> <div style="text-align: center; margin-top: 20px;">  </div>	<p>(b) moving down into the cushion</p> <div style="text-align: center; margin-top: 20px;">  </div>
<p>(c) has finally come to rest on the cushion</p> <div style="text-align: center; margin-top: 20px;">  </div>	<p>(d) at rest on a table</p> <div style="text-align: center; margin-top: 20px;">  </div>