


## Ex 5 Forces on a tin of peaches

A tin of peaches is dropped from about 10 cm above the cushion seat of a chair.

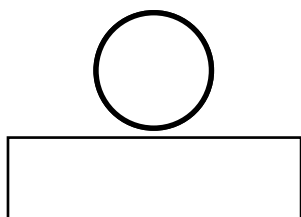
On the diagrams below draw forces acting on the **tin** when the tin

- is about to touch the cushion,
- has contacted the cushion and has just started to move down,
- has come to rest on the cushion, and
- is at rest lying **on a bench**.

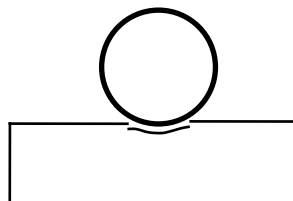
Represent forces

- by drawing lines with arrowheads, e.g. 
- with the **length** of the line representing the **size** of the force,
- with the same scale for all forces,
- using as large a scale as possible,
- with the **tail** of each force at the point where the force acts, and
- labelling forces, e.g. the force exerted **on the Tin (T) by the Cushion (C)** would be labelled  $F_{TC}$ .

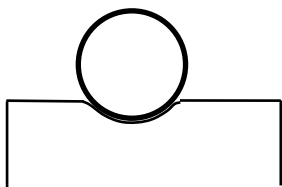
(a) **About to touch the cushion**



(b) **Just started moving down into the cushion**



(c) **Has finally come to rest on the cushion**



(d) **At rest on a bench**

