

Making moving easier

a) Below are a number of simple machines which people use every day. Draw a line to match the type of simple machine to the machine that is used by people. (One of the machines used by people is not needed.)

Simple machine

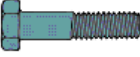
Lever •

Ramp •


Wheel •

Screw •


Machine used by people

• Nuts and bolts 

• Windmill 

• Stairs 

• Table 

• Garden spade 

b) Ian needs to move a large rock to the middle of his garden. He is going to use a metal bar and a block of wood as a lever to move this rock. He has a choice of 3 metal bars and a block of wood. The bars are exactly the same except for how long they are. The lengths are $\frac{1}{2}$ m, 1 m, $1\frac{1}{2}$ m, and 2 m.

i) Which metal bar should he choose to use? (*circle one*)

(A) $\frac{1}{2}$ m (B) 1 m (C) $1\frac{1}{2}$ m (D) 2 m

ii) Draw in the box below how he would set up the metal bar and block of wood to move the rock.

Metal bar  Block of wood 

