**FORCES AND ENERGY**

1. Look at the cartoon below. Find examples of:

(a) pushing forces (what is doing the pushing?)

(b) pulling forces (what is doing the pulling?).

(c) Which of the examples in the picture are:

• lifting forces

• forces where something bends

• electrical forces



2. The diagrams below show some forces in action.

The forces are shown with arrows.

**a** For each picture name the object that the force acts on. For example, in **A** the force acts on the ball.

**b** Choose from the list below to say what the force is doing in each picture.

• starting an object moving

• slowing down an object that is moving

• changing the direction of movement

• balancing another force, and preventing movement

• bending an object



B



C



D



**3. After watching the video on Forces, work and energy, determine if the statements are true or false**

(a) A force is a push or a pull **T/F**

(b) Forces cannot stop a moving object **T/F**

(c) Forces can change the direction of a moving object **T/F**

(d) The force that slows down a moving toy car on carpet is called friction **T/F**

(e) The force of friction is greater on a smooth surface than on carpet **T/F**

(f) The force of gravity attracts everything toward the centre of the Earth **T/F**

(g) Work is using a force to push a chair **T/F**

(h) The ability to do work is called energy **T/F**

(i) Heat, light and electrical are all types of energy **T/F**