

Xtra

Architects and engineers must ensure that the forces exerted by walls and other parts of a building should be balanced. Otherwise the building would collapse.



↑ The collapse of Hotel New World in 1986 was due to structural error in the design.

B. Forces at work

Forces can help us to do work but they can also destroy things.

What are some examples of useful and harmful forces?



↑ A tsunami is a huge wave that can exert a large force. The large mass of water pushes and destroys buildings and other structures in its way.



↑ A building collapsed and crushed this car. The heavy weight of the building changed the shape of the car's body.



↑ A small force can be used to cut objects. The sharp blade pushes its way through the orange.

Building Block

- Do the fingers exert a push or a pull on the keys?
- A tennis ball moves towards a tennis player. She hits the ball which bounces back to her opponent. What effect of force does this show?
- Describe the various ways forces are applied in a game of football.

