

# Organisms

# 1. Movement

## CONCEPT 3

## TEST YOURSELF

### EXPLORING PROBLEMS WITH THE SKELETAL SYSTEM

#### KNOW

- Q1 Suggest how a fracture may happen.
- Q2 Describe how a fracture may be treated
- Q3 Explain why a compound fracture is often more serious than other fractures.

#### APPLY

- Q4 Explain why sufferers of osteoporosis are more likely to have bone fractures
- Q5 What is arthritis? And why can it be so painful?

#### EXTEND

- Q6 *Powered exoskeleton is a wearable mobile machine that is powered by a system of electric motors, pneumatics, levers, hydraulics, or a combination of technologies that allow for limb movement with increased strength and endurance.*

The image shows an exoskeleton device which assists patients with lower spine injuries. It allows them to walk and climb stairs which would otherwise be impossible. Other powered exoskeletons are being used to help patients with arms injuries and neck injuries.



- (a) What are two advantages of powered exoskeletons?
- (b) What are two disadvantages of powered exoskeletons?