

Organisms

1. Movement

CONCEPT 3

EXPLORING PROBLEMS WITH THE SKELETAL SYSTEM

NOTES

Medical problems can arise within the skeletal and muscular systems. The complex combination of muscle, bone, tendon, cartilage and ligaments are at risk of a range of injuries, from fractures to genetic conditions that we inherit.

The mineral collagen allows for some bending within the body's bones, however if they bend to far, they will fracture (break). When a bone fractures, an X-ray machine will be used to diagnose the extent of the break. Mild fractures may be treated by covering the limb with fibreglass or plaster, whilst more complex fractures may require surgery to re-align the broken bone.

As people age bones become more brittle. The density of the bone reduces from roughly the age of 35, making the bones more prone to fractures, this condition is called **osteoporosis**.

Arthritis is a bone condition that affects the joints of the body. As bones rub together around a joint, friction can make the joint painful. Over a longer period of time joint replacement may be considered. However, surgery to replace joints carries a risk of infection and decreased movement is likely to result from a joint replacement procedure.