

Movement & Forces - Study Guide:

Understand the meanings of the following Key Science Words/Terms:

Skeletal system, axial skeleton, appendicular skeleton, bone, cartilage, joint, hinge/ball-and-socket/gliding/pivot/saddle/ellipsoid joints, muscular system, muscle, cardiac/skeletal/smooth muscle, involuntary/voluntary muscle, ligament, tendon, force, simple machine, lever, fulcrum, input force, output force, mechanical advantage

Textbook pages:

1. Describe how the human skeleton is organized.
Understand that bones are living structures that protect, support, make blood cells, store minerals and provide for muscle attachment. Joints are classified as either movable or immovable – know examples of each and the types of joints in the body and their range of motion. Pp 349-355
2. Understand the main functions of muscles. Know that muscles contract to move bones and body parts. Know the difference between involuntary and voluntary muscles, give examples of each and know their location in the body. Be able to describe the functions of skeletal, smooth and cardiac muscle. Know that muscles work in pairs. When one contracts the other relaxes. Pp 356-588
3. Understand how muscles exert forces to cause movement. Know that the direction of forces can be changed and explain how parts of the body can be described as simple machines. Pp 364-369
4. Know about levers in the human body. Understand the 3 classes of levers and know an example of each. Know how to find the mechanical advantage of a lever. Pp 371-377
5. Review the chapter summaries, vocabulary and questions. Pp 380-383

Some helpful strategies for studying:

- Write summaries of all the key points.
- Use Flash cards for vocabulary practice.
- Create drawings and tables to help compare and contrast.
- Practice drawing and completing punnet squares and pedigree charts.
- Practice questions in the review section.
- Work with a friend and discuss the information.
- Check with your teacher on anything you are not clear about.
- Try to attend the morning review class.