

Muscular and skeletal system worksheet

[Science](#), [Biology](#)



Muscular and Skeletal System Worksheet Muscular and Skeletal System

Worksheet Questions List two factors that keep bones healthy. Describe in detail how these factors impact bone health.

a. Diet – Diet affects bone health by allowing nutrients required to maintain the strength of bones to reach the skeletal system. A diet rich in calcium and vitamin D compensates for surplus calcium loss and the ease of calcium intake respectively.

b. Exercise – Regularly working out rouses the renovation of the skeletal system. Lack of exercise causes a reduction in bone density, which leads to bone loss.

2. Describe the process of healing a fracture

Fracture healing is an intricate procedure that needs the recruitment of proper cells and the consequent manifestation of the proper genes at the correct time and correct, structural locations. Three phases of fracture healing exist, and are swelling, repairing, and remodeling. Proper cells include fibroblasts, macrophages, chondroblasts, osteoblasts, and osteoblasts while proper genes regulate matrix regeneration and arrangement.

3. In the case study, what type of joint did Torin injure? What is the range of motion of this joint?

Torin injured her Glenohumeral joint, which has a range of motion of 120o of independent flexion.

4. How does the saying “ use it or lose it” apply to muscles? What type of exercise is the best way to improve muscle strength? Muscle size? In your answer, be sure to explain how the different types of exercise work to

increase strength or size!

The saying “ use it or lose it” applies to muscles in the sense that muscles grow because of usage and working out. The lack of these activities brings about atrophy to muscles and their core neuro-pathways. The best type of exercise for improving muscle strength is resistance exercise while weightlifting improves muscle size. Resistance training develop muscle mass that causes one to revel in sturdier bones, an increased metabolism, and improved glucose management. Weightlifting enables one to regulate the quantity of weight that one lifts, target specific muscles, determine direction, rate, and scope of motion of every lift accurately.

5. Why do all muscles cross a joint? Define the attachment points of muscle to bone.

All muscles cross a joint to allow the movement of body parts. The attachment points of muscle to bone allow bone-to-bone connections through the muscles origins and insertion points. The origin point of a muscle connects a stationary bone to a more flexible one at the insertion point.