

Student Name: _____

Class: _____

Due Date: _____


Introduction to the Skeletal System

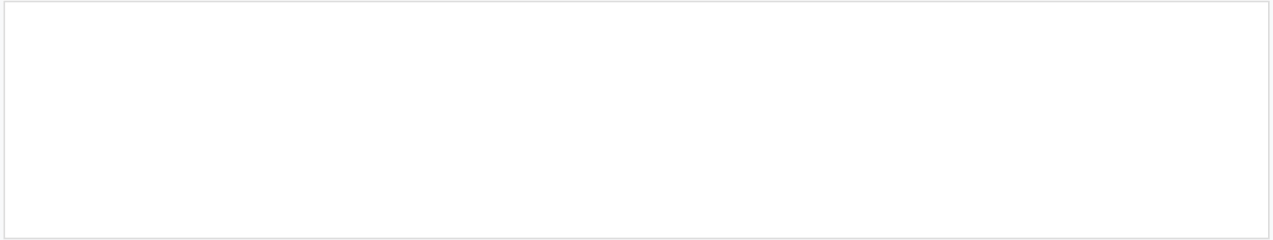
The skeletal system is the system of bones, joints, and ligaments that provides support and protection for the body. It is made up of 206 bones that work together to facilitate movement, protect internal organs, and produce blood cells.

In this worksheet, we will explore the different parts of the skeletal system, how bones grow and develop, and the importance of the skeletal system in maintaining overall health and wellbeing.

Activity 1: Label the Bones

Label the different bones in the human body using the diagram below.

 Skeletal System Diagram



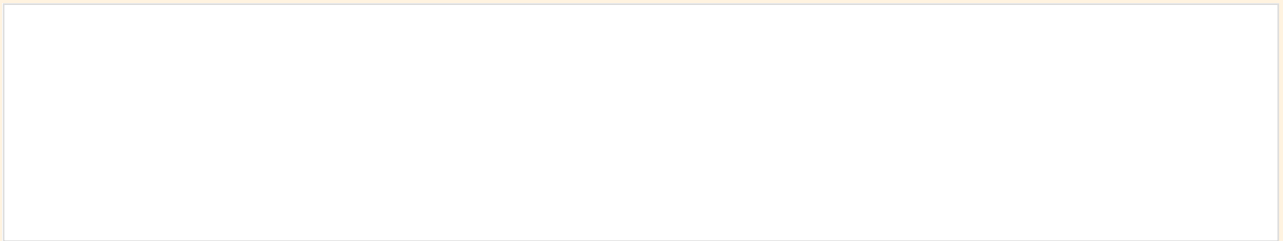
Activity 2: Bone Functions

Match the following bones with their functions:

1. Femur (thigh bone)
2. Humerus (upper arm bone)
3. Ribcage
4. Skull
5. Vertebrae (backbone)

Functions:

- Protects the brain
- Facilitates movement of the arm
- Supports the body's weight
- Protects the heart and lungs
- Facilitates movement of the leg



Activity 3: Bone Growth and Development

Read the following passage and answer the questions that follow:

Bones grow and develop through a process called ossification, which involves the formation of new bone tissue from cartilage or mesenchyme. There are two types of ossification: intramembranous ossification and endochondral ossification. Intramembranous ossification involves the formation of bone tissue from mesenchyme, while endochondral ossification involves the formation of bone tissue from cartilage.

1. What is the process by which bones grow and develop?
2. What are the two types of ossification?
3. What is the difference between intramembranous and endochondral ossification?

Activity 4: Skeletal System Disorders

Read the following passage and answer the questions that follow:

The skeletal system is susceptible to a variety of disorders and diseases, including osteoporosis, osteoarthritis, and fractures. Osteoporosis is a condition characterized by a loss of bone density and strength, while osteoarthritis is a condition characterized by inflammation and degeneration of the joints.

1. What are some common disorders and diseases that affect the skeletal system?
2. What is osteoporosis?
3. What is osteoarthritis?

Activity 5: Nutrition and Bone Health

Read the following passage and answer the questions that follow:

A healthy diet that includes a variety of foods from different food groups is essential for maintaining strong and healthy bones. Calcium and vitamin D are two essential nutrients that are necessary for bone growth and development.

1. What nutrients are essential for bone growth and development?
2. Why is a healthy diet important for maintaining strong and healthy bones?
3. What are some food sources of calcium and vitamin D?

Conclusion

In conclusion, the skeletal system is a complex and fascinating system that plays a vital role in maintaining overall health and wellbeing. By understanding the different parts of the skeletal system, how bones grow and develop, and the importance of the skeletal system, we can appreciate the importance of taking care of our bones and maintaining a healthy lifestyle.

Assessment

1. What is the main function of the skeletal system?
2. What are the two types of ossification?
3. What is osteoporosis?
4. What are some common disorders and diseases that affect the skeletal system?
5. Why is a healthy diet important for maintaining strong and healthy bones?

Extension Activity

Research and create a presentation on a topic related to the skeletal system, such as bone cancer, bone fractures, or osteoporosis. Be sure to include information on the causes, symptoms, and treatment options for the topic you choose.

A large, empty rectangular box with a light gray border, intended for the student to create a presentation on a topic related to the skeletal system.