FACTS/TIPS:

TOPIC: SKELETAL AND MUSCULAR SYSTEM.

The skeletal system is the bony framework of the body. It is made up of approximately 206 bones.

FUNCTIONS OF THE SKELETAL SYSTEM.

- It gives shape and form to the body.
- The skeleton protects the body’s delicate organs e.g. the brain, the heart, the lungs etc.
- The skeleton supports the muscles. Muscles cover the bones.
- Bones are vital for there to be movement.

The bones also store minerals for cells to use in other parts of the body.

THE MAIN PARTS OF THE SKELETAL SYSTEM.

- the skull
- the ribcage
- the vertebral column or backbone
JOINTS

- Movements occurs at joints.
- A joint is the point where two bones meet.

TYPES OF JOINTS.

- Fixed joints allow little to no movements.
- Pivot joints allow movement in an up and down and left and right direction.
- Hinge joints facilitate the action of bending and straightening.
Ball and socket joints or freely moveable joints allow movement in all directions.

**DISEASES ASSOCIATED WITH THE SKELETAL SYSTEM.**

There are many diseases that affect how the skeletal system works including rickets, osteoporosis and arthritis.

**FOR YOU TO DO.**

1. The bony framework of the body is called the ________________.
2. The skeletal system consists of ________________ bones.
3. Which part of the skeletal system protects the brain? ________________.
4. Red blood cells are manufactured in the ________________.
5. Ball and socket joints are also called ________________.
6. In a bicycle accident, Harry broke a bone which punctured his lung. The bone is most likely from his ________________.
7. Where in our body can we find freely moveable joints? ________________.
8. What type of joint is located in our elbows and knees? ________________.
9. Which is the longest bone in our body? ________________.
10. Which part protects the heart and lungs? ________________.
# Skeletal System

**Directions:** Label the parts of the skeleton.

<table>
<thead>
<tr>
<th>skull</th>
<th>fibula</th>
<th>sternum</th>
<th>radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>coccyx</td>
<td>ulna</td>
<td>pelvis</td>
<td>femur</td>
</tr>
<tr>
<td>scapula</td>
<td>phalanges</td>
<td>tibia</td>
<td>humerus</td>
</tr>
</tbody>
</table>

[Diagram of the human skeleton with labeled parts]
THE MUSCULAR SYSTEM.

- The muscular system is an organ system comprised of skeletal, smooth and cardiac muscles.
- It permits movement of the body, maintain posture and circulates blood throughout the body.

TYPES OF MUSCLES.

There are three types of muscles:

- **Skeletal muscles**: are attached to the skeleton by tendons.
- **Cardiac muscles**: are muscles located in the heart
- **Smooth muscles**: are found all over the body in many of our organs.

PARTS OF THE MUSCULAR SYSTEM.
The Biceps (contracts)  
The Triceps (relaxes)  

The Biceps (relaxes)  
The Triceps (contracts)  

HOW IT WORKS.

- Muscles work by contracting and relaxing. To bend upwards, the biceps contracts and the triceps relax.
- To straighten the arm. The bicep relaxes, the triceps contract.
- The strongest and largest working muscle is the heart.
- Ligaments attach bone to bone.

There are many diseases that affect how the muscular system works including muscular dystrophy, cerebral palsy and fibromyalgia.

FOR YOU TO DO.

1. The main function of the muscular system is ____________________________ .
2. There are _______________ types of muscles.
3. Name two types of muscles.

   ______________________________________________________________________

4. Muscles work by _________________ and ___________________.
5. To straighten the arm the biceps ________________ and the triceps ___________________.
6. To bend the arm upward, the biceps ________________ and the triceps _________________.

7. Ligaments attach ________________________________________________________________

**Match these**

8. Smooth muscles are attached to the skeleton by tendons.

9. Cardiac muscles are muscles located in the heart.

10. Skeletal muscles are found all over in many of our organs