



BUILDING A MODEL OF THE HUMAN SKELETON



In this experiment, you will build a model of the human skeleton and learn the names and functions of some major bones.

QUESTION

What are the major bones in the human body, and what do they do?

HYPOTHESIS

I think building a model skeleton will help me understand how bones work together to support and protect the body.

MATERIALS

- 1 craft stick (for spine)
- Assorted cotton swabs
- Small marshmallows or foam balls (for joints and skull)
- Toothpicks
- Scissors
- White glue or tape
- Black marker (optional)
- Skeleton reference image (provided or online)

SAFETY FIRST



Use scissors carefully.
Ask an adult for help if needed.
Do not eat any materials.

PROCEDURE

1. Plan Your Skeleton

Look at your reference image. Identify the major bones you will include (skull, rib cage, spine, arms, legs, etc.). Sketch your plan on a separate sheet if you like.

2. Build the Spine

Use the craft stick as the spine (or tape several cotton swabs in a line).

3. Add the Skull

Attach a marshmallow or foam ball to the top of the spine for the skull.

4. Make the Rib Cage

Attach cotton swabs horizontally on both sides of the upper spine to form the rib cage.

5. Build the Arms

Use cotton swabs and toothpicks to make the upper arm, lower arm, and hand. Attach to the shoulder area.

6. Build the Legs

Use cotton swabs and toothpicks to make the thigh, shin, and foot. Attach to the hips.

7. Add Joints

Use small pieces of marshmallow or tape at the shoulders, elbows, hips, knees, and ankles so the limbs can move.

8. Label Key Bones

Use small pieces of paper and a marker to label the major bones on your model.

9. Check Your Model

Make sure your skeleton is standing (or can lay flat) and the parts are secure.



OBSERVATIONS

What bones did you include in your model?

What was easy to build?

What was difficult?

What changes would you make next time?

CONCLUSION

Answer the questions below in complete sentences.

1. What are three important functions of the skeleton?

2. How do bones and joints work together?

3. What did you learn from building your skeleton model?



THINK FURTHER!

How would your model be different if it had 206 bones like the real human skeleton?
Research and write one interesting fact about a bone. _____