

Performance-Based Assessment

OBJECTIVE

In this activity, you will design and build a hinge joint that moves like some of the joints in your body.

KNOW THE SCORE!

As you work through the activity, keep in mind that you will be earning a grade for the following:

- how well you design and build your joint (50%)
- how well you explain joint functions (50%)

MATERIALS AND EQUIPMENT

- hole punch
- paper-towel rolls, empty
- poster board
- scissors, safety
- straws, drinking
- string
- tape, transparent
- toothpicks

SAFETY INFORMATION



- Remember to be careful when you are using scissors and toothpicks.

PROCEDURE

1. Look at the materials in front of you. Choosing from these supplies, build a model of a hinge joint. Make it as similar to a real joint as you can.
2. Which materials did you use for your joint?

3. Which joint(s) in your body does your model resemble? How is it similar to the joint(s)?

Performance-Based Assessment *continued*

DRAW CONCLUSIONS

4. What are the advantages of a hinge joint compared with the other types of joints in your body?

5. What are the disadvantages of a hinge joint compared with the other types of joints in your body?

BIG IDEA QUESTION

6. Joints are part of the skeletal system. How does the skeletal system work with other organ systems to help maintain homeostasis?
