## **PSSA SCIENCE GRADE 8**

## **OPEN-ENDED ITEM**

17. Meteor Crater is a rimmed, bowl-shaped feature that lies in the desert of northern Arizona. The crater measures 1,200 meters (m) in diameter, with the crater floor lying 180 m beneath the rim. The rim rises about 60 m above the surrounding desert. In the early twentieth century, most scientists theorized that the crater formed as a result of volcanic activity (volcanism theory). However, Daniel Barringer proposed that a powerful meteor impact formed the crater (impact theory).

Part A: Explain why the impact theory is classified as a theory rather than an opinion.

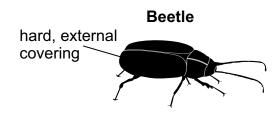
Part B: Barringer's impact theory was eventually accepted by a majority of scientists. Describe what is needed for a new theory to become widely accepted by the scientific community.

AFTER YOU HAVE CHECKED YOUR WORK, CLOSE YOUR ANSWER BOOKLET AND TEST BOOKLET SO YOUR TEACHER WILL KNOW YOU ARE FINISHED.



## **OPEN-ENDED ITEM**

18. Use the drawing below to answer the question.



Beetles have a hard, external covering on their bodies.

Part A: Describe one function of the hard, external covering on the beetle.
Part B: Identify a human body structure and describe how its function is similar to the hard, external covering of a beetle.
Human Body Structure:
Similarity in Function:

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