

SCIENCE SCENARIO

Directions: Use the information presented on pages 25 and 26 to answer questions 13 through 16.

A.2.1.3

16. The power switch is on. Which procedure will **best** determine the type of circuit that makes an electromagnet?
- A Set switch 1 to S.
Change switches 2 and 3 to every combination.
Observe the motion of the metal weights.
 - B Set switch 1 to P.
Change switches 2 and 3 to every combination.
Observe the motion of the metal weights.
 - C Set switch 2 to a constant setting.
Change switches 1 and 3 to every combination.
Observe the motion of the metal weights.
 - D Set switches 2 and 3 to constant settings.
Change switch 1 from P to S.
Observe the motion of the metal weights. *

- A *This procedure would not test both types of circuits.*
- B *This procedure would not test both types of circuits.*
- C *This procedure tests too many variables.*
- D *Key: This procedure tests the type of circuits while holding other variables constant.*