

SCIENCE SCENARIO

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

Six metal weights are available for the tests; each weight has the same volume and mass. The strength of the electromagnet is measured by counting the number of metal weights that can be suspended from the rod like a chain. A description of the functions of the device's switches is below.

Functions of Adjustable Selector Switches

- switch 1: determines whether the batteries are part of a series circuit (S) or a parallel circuit (P)
- switch 2: determines the number of batteries that are part of the circuit
- switch 3: determines the number of wire coils that are receiving electrical current