

Name _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) How can a capacitor be used as a power source?

2) How does a capacitor store an electrical charge?

3) How should two capacitors be electrically connected if greater capacitance is needed?

4) How can a capacitor be used as a noise filter?

5) In what units is capacitance measured?

Answer Key

Testname: AEEP8_SHORT10

- 1) A capacitor can be used as a power source if it is first charged by being connected to an electrical circuit. When the circuit is opened, the capacitor can supply electrical current when it is discharged through a circuit.
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- 2) A capacitor stores an electrical charge by using a condenser, such as aluminum foil separated by an insulator, where electrons are stored at a voltage potential.
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- 3) To increase the capacitance, two capacitors should be connected in parallel.
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- 4) A capacitor is used on a noise filter because most radio noise is AC and a capacitor passes AC voltage. A capacitor connected to the power lead will then pass the AC voltage to ground through the capacitor without affecting the DC power line.
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- 5) Capacitance is measured in farads, which is named after Michael Faraday (1791–1867), an English physicist.
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