ALBERTA SCIENCE 30 · UNIT D · 5 QUESTIONS

Energy and the Environment — Practice Test

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1 **Which of the following energy sources is non-renewable?**

- A Wind
- B Natural gas
- C Tidal energy
- D Geothermal energy

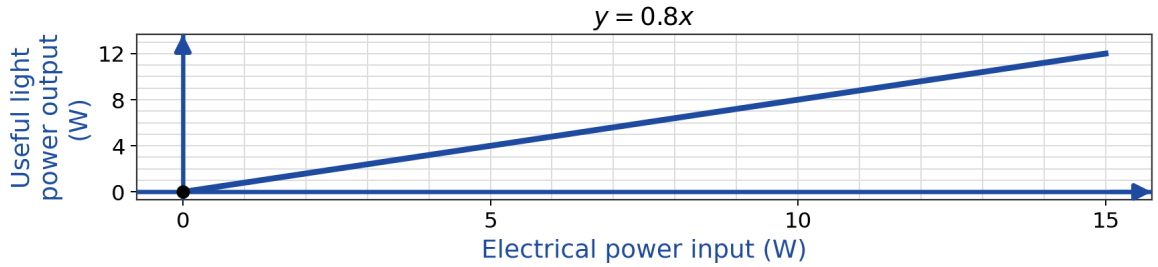
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2 **A photovoltaic cell converts**

- A light energy into electrical energy
- B thermal energy into light energy
- C chemical energy into light energy
- D electrical energy into chemical energy

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3 **The graph below shows useful light power output against electrical power input for an LED bulb. The efficiency of the bulb, expressed as a percent, is**



A 60%

B 80%

C 100%

D 120%

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4 **A self-sustaining chain reaction occurs in a fission reactor because**

- A each fission absorbs all of the neutrons around it
- B the fuel becomes hotter with every fission
- C neutrons released by one fission can trigger further fissions
- D the control rods continuously emit neutrons

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5 **A single tall white wind turbine against a clear blue sky. The sequence of energy conversions in a wind turbine is**



A electrical → kinetic → kinetic

B kinetic → electrical → kinetic

C thermal → kinetic → electrical

D kinetic → kinetic → electrical

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ANSWER KEY

1. B
2. A
3. B
4. C
5. D

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