| 1 |
|---|
| **Question:** What is the primary function of photovoltaic cells in solar panels? |
| A) To store electricity for later use. |
| B) To convert sunlight into electricity. |
| C) To regulate the flow of electricity. |
| D) To reduce the cost of electricity. |
| **Correct Answer:** B |
| 2 |
| **Question:** Which of the following is NOT mentioned as an advantage of solar energy? |
| A) Renewable source |
| B) Low maintenance |
| C) Increased home security |
| D) Cost-effective in the long run |
| **Correct Answer:** C |
| 3 |
| **Question:** What is one of the main challenges associated with solar energy? |
| A) High installation costs |
| B) Limited availability of sunlight |
| C) Noise pollution from solar panels |
| D) Depletion of natural resources |
| **Correct Answer:** A |
| 4 |
| **Question:** How do solar-powered chargers provide a practical solution for certain situations |

- A) They generate their own Wi-Fi signal.
- B) They can charge devices without access to traditional electricity.

| C) They are waterproof and can be used underwater. |
|---|
| D) They can power small appliances like refrigerators. |
| **Correct Answer:** B |
| |
| 5 |
| **Question:** What makes solar water purifiers particularly beneficial in specific locations? |
| A) They can desalinate seawater. |
| B) They can generate hot water for showers. |
| C) They provide safe drinking water in areas with limited clean water access. |
| D) They can be used to irrigate crops in arid regions. |
| **Correct Answer:** C |
| |
| 6 |
| **Question:** According to the text, what was the approximate global capacity of installed solar |
| photovoltaic (PV) capacity in 2020? |
| A) 770 megawatts |
| B) 770 gigawatts |
| C) 770 terawatts |
| D) 770 petawatts |
| **Correct Answer:** B |
| 7 |
| 7 |
| **Question:** How has the levelized cost of electricity (LCOE) from utility-scale solar PV projects |
| changed since 2010? |
| A) Increased by over 80% |
| B) Decreased by over 80% |
| C) Remained relatively stable |
| D) Fluctuated unpredictably |
| |

| **Correct Answer:** B |
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| 8 |
| **Question:** What is one of the key environmental benefits of solar energy? |
| A) It reduces reliance on fossil fuels. |
| B) It increases biodiversity in surrounding areas. |
| C) It improves air quality by releasing oxygen. |
| D) It strengthens the ozone layer. |
| **Correct Answer:** A |
| 9 |
| **Question:** How does solar energy contribute to energy access? |
| A) It establishes new fossil fuel power plants. |
| B) It provides electricity in remote and underserved areas. |
| C) It reduces the need for energy conservation. |
| D) It centralizes energy production in urban centers. |
| **Correct Answer:** B |
| 10 |
| **Question:** According to the text, what is driving increased residential adoption of solar energy? |
| A) Government mandates requiring solar panel installations. |
| B) Rising costs of traditional electricity sources. |
| C) A growing trend of homeowners wanting to live off-grid. |
| D) Increased availability of solar panel installation professionals. |
| **Correct Answer:** B |
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