

Renewable Energy from Space

Renewable Energy · Practice Test · 15 Questions

1. What is the primary source of solar energy on Earth?

- A) The Moon
- B) The Sun
- C) Jupiter
- D) A distant black hole

2. Which type of energy is captured from the wind, which is caused by the Sun heating Earth's atmosphere?

- A) Wind energy
- B) Nuclear energy
- C) Geothermal energy
- D) Magnetic energy

3. What celestial object creates the gravitational pull that causes tides, which can be harnessed for tidal energy?

- A) Mars
- B) Venus
- C) The Moon
- D) Saturn

4. Solar panels convert energy from which of the following into electricity?

- A) Moonlight
- B) Starlight
- C) Sunlight
- D) Meteorites

5. What is the main substance that powers the Sun through nuclear fusion, providing energy to the solar system?

- A) Hydrogen
- B) Iron
- C) Gold
- D) Oxygen

6. Where is the most powerful source of solar energy found in our solar system?

- A) On Pluto
- B) At the center of the Sun
- C) On the surface of Neptune
- D) Inside a crater on Mercury

7. Earth's atmosphere protects us from harmful radiation while allowing what form of energy to pass through for solar power?

- A) Gamma rays
- B) Visible light and heat
- C) X-rays
- D) Radio waves

8. Which renewable energy source relies on the internal heat of our planet, which was formed during the birth of the solar system?

- A) Geothermal energy
- B) Solar energy
- C) Wind energy
- D) Tidal energy

9. What process occurs inside the Sun that releases the massive amounts of energy we capture via solar panels?

- A) Chemical combustion
- B) Nuclear fusion
- C) Mechanical friction
- D) Planetary rotation

10. The amount of solar energy that reaches the Earth's upper atmosphere is known as the solar constant, which is influenced by:

- A) Earth's distance from the Sun
- B) The Moon's phase
- C) The orbit of Mars
- D) The number of rings around Saturn

11. Which planet receives the most solar energy because it is the closest to the Sun?

- A) Earth
- B) Mars
- C) Mercury
- D) Venus

12. Wind turbines convert the kinetic energy of moving air into electricity; what causes this air movement?

- A) Earth's rotation and uneven solar heating
- B) Volcanic eruptions
- C) Meteor impacts
- D) The Moon's orbit

13. Hydroelectric power relies on the water cycle, which is driven by heat from:

- A) The Sun
- B) Deep space
- C) The Moon's gravity
- D) The Earth's core

14. What color star is our Sun, which provides the spectrum of light used by solar panels?

- A) Blue
- B) Red
- C) Yellow
- D) White

15. The Earth acts like a giant battery, storing solar energy in the form of biomass through which process?

- A) Photosynthesis
- B) Evaporation
- C) Condensation
- D) Sublimation