

Renewable Energy from Space

Renewable Energy · Answer Key · 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