

## Unit 1- Life on Earth Review

1. Which of the following properties is least important for sustaining life on Earth?

- a. Distance from the Sun
- b. Orbit Shape**
- c. Atmosphere
- d. Surface Structure (rocks and water)

2. What is microgravity? (define) Objects seem to be weightless

3. How does microgravity affect human muscles in space?

- a. It causes muscles to swell and work harder.
- b. There is no effect of microgravity on muscles of humans in space.
- c. It causes muscles to shrivel and not function in space.
- d. It causes the muscles to work less causing muscular atrophy.**

4. Explain how greenhouse gasses and radiation in the atmosphere contribute to life on Earth?

Gases- \_\_\_\_\_ CO2 - traps heat and

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Radiation- Ultraviolet

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5. How does water in liquid form help life to exist on Earth?

Explain. Dissolves and transports chemicals within and to and from a cell

6. How does water in solid form (ice) help life to exist on Earth?

Explain. **Can melt to provide liquid water as needed**

7. How does water in gas form (water vapor) help life to exist on Earth? Explain.

**Can be cooled down to provide liquid water as needed**

8. Which of the following would be a **priority** to recycle in space shuttle for survival of explores?

**a. Waste water to drinking water**

b. Oxygen gas to Nitrogen gas

c. Nitrogen to Carbon dioxide

9. All of the following factors of a space suit help manned exploration, except

a. Protection from micro meteors

b. Body temperature regulation

c. Radiation protection

**d. Nitrogen gas storage**

Analyze the diagram above to answer the questions below.

10. Solar panels are used to convert

a. Chemical energy into mechanical energy

b. Mechanical energy into radiant energy

**c. Radiant energy into electrical energy**

d. Electrical energy in to chemical energy

11. Identify the correct location for the construction of a solar panel

a. Multiple solar panels come together to form a solar module

**b. Multiple solar cells come together to form a solar module**

c. Multiple solar cells come together to form a solar panel

d. Multiple solar modules come together to form a solar cell

12. What is mean to be in the “habitable” proximity to the Sun? Explain.

Habitable – suitable or good to live in

1. Determines how much liquid water exists on our planet

2. What temperatures of the air and ground/surface temperature can be