Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_

**Unit 9: Earth and Space Test Review**

1. What is the #1 characteristic that makes it possible for life to exist on a planet? Liquid water
2. What is another characteristic needed for life to exist on a planet? Atmosphere with oxygen
3. What 2 instances would keep a planet from having liquid water?
	1. Too close to the star = too hot = water vapor
	2. Too far away from the star = too cold = solid water (ice)
4. What is the insulation feature of a spacesuit for? Temperature regulation
5. How do astronauts get into space? \_rocket\_
6. What does a space station provide for astronauts in space? Protection from cosmic radiation, air pressure, oxygen, water, food …
7. Categorize the following into the T-Chart below: (*the list will not be even*)

**Air pressure Atmosphere Carbon dioxide Cosmic radiation Gravity Light Microgravity Oxygen Water**

|  |  |
| --- | --- |
| Space Lacks | Present in Space  |
| Air pressure | Light |
| Oxygen | Microgravity |
| Atmosphere | Cosmic radiation |
| Water |  |
| Carbon dioxide |  |
| Gravity |  |

1. What happens to astronauts’ bodies in space? Loss of muscle mass, reduced bone density, reduced circulation of blood Why does this happen? Microgravity
2. What is the purpose of the Magnetosphere? Protect Earth’s atmosphere from cosmic rays and solar radiation\_
3. A planet that is the correct distance from a star so that the water cycle is possible would be considered within what area? Habitable Zone / Goldilocks Zone / Inhabitable Zone
4. Why is Earth able to support life? Earth’s proximity to the Sun allows it to have liquid water
5. Which planet(s) in the diagram would be able to support life similar to that on Earth?



Planet e, f, & g

1. What does the atmosphere provide for Earth? Shields the Earth from small collisions, protects Earth from Sun’s radiation, it allows gas exchange between plants and animals.
2. Why is Mars not capable of supporting life? Mars is too cold
3. When scientists look for a possible place to look for life, what are they looking for? Liquid water
4. Why is it difficult for astronauts to exercise in space? Lack of gravity
5. How do we know which way is up or down here on Earth? Gravity
6. What do space suits provide for astronauts in space? \_Oxygen, air pressure, protection from the Sun’s radiation, temperature regulation, waste management, moon/mars dust.
7. What is one thing that humans would NOT have to worry about having on Mars? Light for solar power