

**.SOL 4.7 Earth Patterns, Cycles, and Change****Question/Answer Packet**

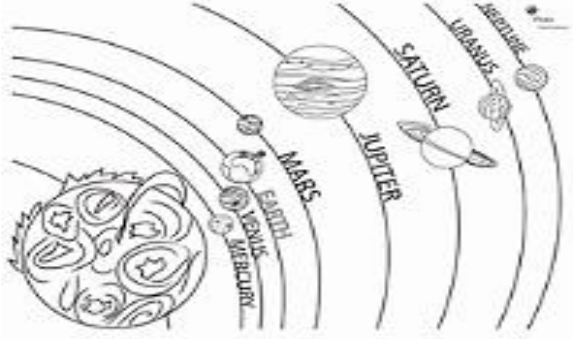
4.7 The student will investigate and understand the organization of the solar system. Key concepts include:

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**4.7 a) the planets in the solar system**

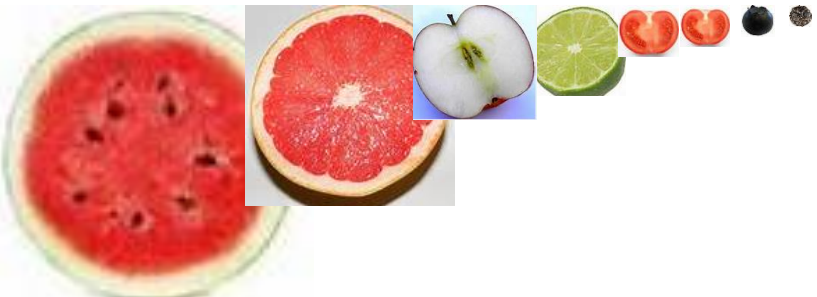
1. Solar system	All the planets, their moons, and the other bits of rock and ice that orbit the sun.
2. Name the 8 planets.	Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, & Neptune
3. Terrestrial planets	Planets that have hard rocky surfaces.
4. Name the terrestrial planets in our solar system.	Mercury, Venus, Earth, and Mars (the 4 planets closest to the Sun)
5. Gas Giants	Planets that are huge compared to the terrestrial planets and they are made of different combinations of gasses, mostly helium, hydrogen, and water.
6. Name the gas giants in our solar system.	Jupiter, Saturn, Uranus, and Neptune
7. Dwarf planet	A spherical object orbiting the sun that is similar to a planet but not large enough to clear its orbit of other object ( <i>Pluto, Ceres and Eris are dwarf planets</i> )

**4.7 b) the order of the planets in the solar system**

8. Name the 8 planets in order from the sun.	Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, & Neptune ( <u>M</u> y <u>V</u> ery <u>E</u> xcellent <u>M</u> ama <u>J</u> ust <u>S</u> erved <u>U</u> s <u>N</u> oodles.)
9. Draw a model of our solar system.	

**4.7 c) the relative sizes of the planets.**

10. Name the planets from largest to smallest.	Jupiter, Saturn, Uranus, Neptune, Earth, Venus, Mars, & Mercury ( <u>J</u> . <u>S</u> <u>UN</u> <u>E</u> ats <u>V</u> ery <u>M</u> any <u>M</u> arshmallows.)
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<p>11. Size representation of the planets: (size comparison)</p>	 <p>Jupiter-Watermelon, Saturn-large grapefruit, Uranus-apple, Neptune-lime, Venus-cherry tomato, Earth-cherry tomato, Mars-blueberry, Mercury-peppercorn</p>
<p>Extra Planet Information</p>	
<p>12. Describe the planet Mercury.</p>	<ul style="list-style-type: none"> <li>• <b>It is the smallest planet.</b></li> <li>• It is the closest planet to the sun.</li> <li>• It has many craters and looks like our moon.</li> <li>• <b>Terrestrial planet</b></li> </ul>
<p>13. Describe the planet Venus.</p>	<ul style="list-style-type: none"> <li>• It is similar to Earth in both size and mass.</li> <li>• It is the 2<sup>nd</sup> planet from the sun.</li> <li>• It has a permanent blanket of clouds that trap heat.</li> <li>• The temperatures are hot enough to melt lead.</li> <li>• <b>Terrestrial planet</b></li> </ul>
<p>14. Describe the planet Earth.</p>	<ul style="list-style-type: none"> <li>• It is the 3<sup>rd</sup> planet from the sun.</li> <li>• Its atmosphere, liquid water, and distance from the sun allow it to support life.</li> <li>• <b>Terrestrial planet</b></li> </ul>
<p>15. Describe the planet Mars.</p>	<ul style="list-style-type: none"> <li>• It is the 4<sup>th</sup> planet from the sun.</li> <li>• The atmosphere is thin.</li> <li>• There are many canyons and riverbeds.</li> <li>• Scientists believe the red planet once supported life.</li> <li>• <b>Terrestrial planet</b></li> </ul>
<p>16. Describe the planet Jupiter.</p>	<ul style="list-style-type: none"> <li>• It is the 5<sup>th</sup> planet from the sun.</li> <li>• <b>It is the largest planet in our solar system.</b></li> <li>• It is a gas giant.</li> <li>• It has no solid surface.</li> <li>• It has rings.</li> <li>• <b>Gas giant</b></li> </ul>
<p>17. Describe the planet Saturn.</p>	<ul style="list-style-type: none"> <li>• It is the 6<sup>th</sup> planet from the sun.</li> <li>• It has rings.</li> <li>• <b>Gas giant</b></li> </ul>
<p>18. Describe the planet Uranus.</p>	<ul style="list-style-type: none"> <li>• It is the 7<sup>th</sup> planet from the sun.</li> <li>• <b>Gas giant</b></li> </ul>
<p>19. Describe the planet Neptune.</p>	<ul style="list-style-type: none"> <li>• It is the 8<sup>th</sup> planet from the sun.</li> <li>• It appears blue through a telescope.</li> <li>• <b>Gas giant</b></li> </ul>