Name	Date	Period

Part I – List the six characteristics of life:

1.	
2.	



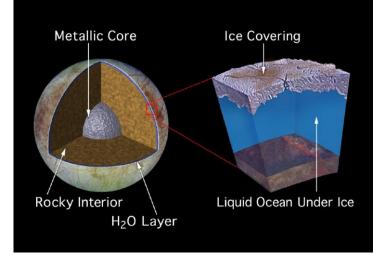
Part II - Read the letter below and answer the questions that follow. You should use complete sentences and well constructed paragraphs in your answers.

Dear Cadet: October 15th, 2175

Because of your outstanding knowledge of life science, you have been chosen to join the Space Agency's mission to explore Europa – one of Jupiter's many moons. This could be one of the most important space missions in the history of the world.

Our scientists believe that there may be microbes (aka-microorganisms) on Europa. It is believed that this moon has a thin atmosphere and contains traces of oxygen. The surface is covered with ice sheets, but there is evidence that they are floating over oceans of liquid water. Also, there are similar sources of energy as we have here on earth. Our latest infrared satellite photos show microscopic forms, which may be living creatures, on the surface of the planet. The photos do not provide enough evidence to decide if the forms are in fact living. We need your help to decide.

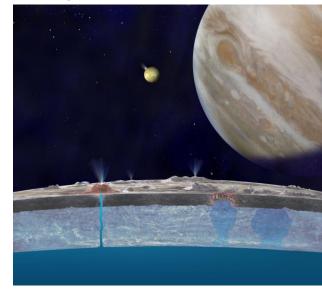
Good Luck,



Linda Starr, Mission Commander

7. Once you arrive on Europa, you examine several of the microscopic forms. List three pieces of evidence you could look for to help determine if they are living or non-living forms.

1		 	
2			
3			



8.	The microscopic forms you found closely resemble Earth's bacteria. What characteristics might these organisms have that helped you determine this?			
The EastCurs relitation of Paracet www.restcas.com	9. After closely observing the behavior of these forms, you realize that although they are similar to bacteria, their reproductive process is exactly like multicellular organisms found on Earth. Below, identify the two main types of reproduction and explain how each works.			
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10). You find that the forms are made of cells and have DNA, but do not grow or develop. They are able to reproduce shortly after birth. What might you conclude about them? EXPLAIN YOUR ANSWER			
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11	. Do you think these mysterious forms are living things or not? PROVIDE EVIDENCE FOR YOUR ANSWER .			
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12	2. Name THREE things on earth that use energy and respond to change, but are nonliving. Explain!			
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