The Search for Life on Other Planets

Name:_____ **Date:**_____ **Period:**____

1. To live, I need _____ and_____
   and _____.

   ALL organisms need _____
   and_____ and _____.

2. I get my nutrients from _____. Plants get their nutrients from _____.
   Plants get their energy to grow from the _____.

3. The _____ protects me from bad radiation from the Sun and helps to keep Earth's temperature just right!

4. Extremophiles can live in e_____ environments. They can live where most organisms _____. Some examples of extreme conditions are:_____

5. What is an extremophile? _____ _____
   Organisms **<u>can / cannot</u>** live in very hot Geothermal hot springs, like in Yellowstone National Park.
   What are thermophiles?
   Each different color in the pond is a different kind of _____
   that life at different temperatures, up to _____•C or _____•F.

6. Organisms **<u>can / cannot</u>** live in very salty seas, like in the Great Salt Lake. Explain. . .

7. Organisms **can / cannot** live in water that is more acidic than vinegar, like the Rio Tinto in Spain. Explain . . .

8. Why are we interested in knowing the extreme conditions in which life exists on Earth? _____

   _____

   On what planets/satellites might conditions be - or have been - right for life? Circle them! Earth? Mars? Venus? Pluto? Europa?

9. What is one thing that ALL life, as we know it, needs? _____

   Which planets or moons in our solar system have – or had – liquid water at their surface?

   A) Earth only
   B) Earth and Mars
   C) Earth and Venus
   D) Earth, Mars, and Jupiter's moon Europa
   E) Pluto only

10. What planets and/or satellites in our solar system may have – or once had – life?

    A) Earth only
    B) Earth and Mars
    C) Earth and Venus
    D) Earth, Mars, and Jupiter's moon Europa
    E) Pluto only

    Which had evidence of water in the past? _____
    Which have evidence of water now? _____