**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**3.1  
Learning Target:**   
  
**The basics:**  
**Plants are \_\_\_\_\_\_\_\_\_\_\_\_\_organisms.  
A plant cell has a \_\_\_\_\_\_\_\_\_\_ and is surrounded by a \_\_\_\_\_\_\_\_wall.  
Plants are \_\_\_\_\_\_\_\_\_\_\_\_.  They capture energy from the sun.  
Plant life cycles are divided into two stages, or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**There are about 320 thousand \_\_\_\_\_\_\_\_\_\_ of plants, which provide most of the world's \_\_\_\_\_\_\_\_\_\_\_\_.  They are the basis of most ecosystems.  Plants produce:  
1.**

**2.**

**3.   
  
They are used as  
1.**

**2.**

**3.**

**4.**

**The scientific study of plants is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**The most abundant type of plant found on earth is grasses.**

Find 10 interesting facts about plants.

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

In the space below draw a tree and label the stem, leaves, and roots. 

The stem serves as the pathway for transporting water, nutrients, and energy-rich compounds from one part of a plant to another.  In most plants the materials move through a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ system that is made up of long, tube-like cells.    
  
Transport is carried out by two types of tissues.  **\_\_\_\_\_\_\_\_\_** is a tissue that carries water and dissolved nutrients up from the roots.  **\_\_\_\_\_\_\_\_\_\_** is a tissue that transports energy-rich materials down from the leaves.  The xylem cells are a little larger than the phloem cells.  Draw a diagram of plant transport below.

For photosynthesis to occur, a plant must maintain the balance of carbon dioxide and water in its body.  Carbon dioxide gas from the air surrounding a plant enters through **\_\_\_\_\_\_\_\_\_\_** in its leaves.  Open stomata allow **\_\_\_\_\_\_\_\_\_\_\_\_\_** and **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**to move into and out of the leaf.  These openings also allow water to evaporate.  The movement of water vapor out of a plant and into the air is called **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.  Both **\_\_\_\_\_\_\_\_\_\_\_** and **\_\_\_\_\_\_\_**cause water in leaves to evaporate and transpire.