Properties of Light:

* Energy, **NOT matter** (no mass)
* **Photons** (tiny energy particles) transfer energy
* Travels in **straight lines** and waves (\_\_\_\_\_\_\_\_\_\_\_\_\_)
* Waves have a wavelength and frequency that can be

measured (\_\_\_\_\_\_\_\_\_\_\_ for each different color of light)

Objects that produce light are called ***luminous* (Ex. Sun)**, and objects that reflect light are called ***non-luminous* (Ex. Moon)**.

There are **two types of visible light energy**:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Luminescent light* is divided into **four categories**:

1. *Fluorescent light* gives off light only while it is supplied with **electrical energy**. Generally, fluorescent bulbs are in the shape of a tube. The electricity reacts with the chemicals within the tube.

*Example:*

1. *Phosphorescent light* **absorbs energy** from a light source andcontinues to give off light even after the initial source of energy is taken away.

*Example:*

1. *Chemiluminescent light* occurs when a **chemical reaction** between substances gives off light without creating heat.

*Example:*

1. *Bioluminescent light* is a form of chemiluminescence that occurs in **living organisms**.

*Example:*

***Complete the following flow chart using the words in the word bank below:***

candlelight Fluorescent Phosphorescent **Visible Light**

Chemiluminescent fireflyLuminescentBioluminescent

Incandescent glow stick fluorescent bulb glow-in-the-dark sticker