**Earth’s Life History**

**Nebular Theory**

The nebular theory is the current belief on how the solar system formed. It goes like this…

1. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (cloud of gas and dust) is left behind after

a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (explosion of a dying star).
2. Gravity pulls the gas and dust particles together into a ball.

 As the ball gets bigger…

 it’s gravitational pull \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 so the ball \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 etc.
3. When the ball gets large enough, the pressure inside is strong

enough to start \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and it “ignites” to

become \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Radiation from the sun pushes the light elements away from it.

Then they clump together to form \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. The heavier elements (e.g. \_\_\_\_\_\_\_\_\_\_\_\_) are left close to the sun,

clumping together to form the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**The Age of Earth**

* The oldest earth rock that we’ve ever found is about 4 billion years old.

(This was determined by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

* So, the Earth must be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* The moon and the Earth \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,

and we have found rocks from the moon that are 4.5 billion years old.

The conclusion…

**Earth Grows Old**

* As a molten ball of goo (mostly iron), Earth started to cool.
* A collision with a large object caused chunks of “mantle-like”

material to be flung out, forming \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Earth’s exterior begins to cool, allowing for volcanoes which expel gas and create an atmosphere.
* As cooling continues, steam in the atmosphere condenses and falls

to make \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Plant-like creatures called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ form and convert
CO2 to oxygen.
* Earth continues on like this for a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* As far as life evolving, nothing much happens until about

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* This really long, boring chunk of time is called the Pre-Cambrian era.