**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.