**Intro to Earth**

**Layers of the Earth**

Crust – thinnest layer (5-25 miles)

Mantle – Thickest layer (1800 miles)

* Mostly solid, liquid towards surface
* Comes out through cracks in crust/volcanoes/etc.

Outer Core – liquid iron and nickel

* ~9000o F

Inner Core – solid iron and nickel

* Made solid by extreme pressure/gravity

**Latitude and Longitude**

Latitude

* “Latitude is like a Ladder”
* Horizontal lines
* Measures North and South
* 0o is the Equator

Longitude

* Vertical Lines
* Measures East and West
* 0o is the Prime Meridian

**Metric System**

* Basic Units – grams (mass/weight), liters (volume), seconds (time), meters (distance)
* USE THE PROVIDED CHART!!

**Earth in Space**

**Rotation vs Revolution**

Rotation – spinning on axis

* 24 hours

Revolution – orbit around the sun

* 365.25 days

Both spin counter-clockwise

**Seasons** – Caused by:

* Tilt of Earth on axis
* Distance from Sun/Revolution

**Extra Vocab**

Nutation – swaying and rocking of Earth on its axis

* The “wibble-wobble”

Precession – change in degree/direction of tilt

Barycenter – where to objects balance

* Closer to heavier object
* Like a see-saw

**Atoms**

Atoms are the smallest unit of matter

**Made of 3 parts**

* Protons – positive – in nucleus
* Neutrons – neutral – in nucleus
* Electrons – negative – orbit/cloud

**Changes in Elements**

* Protons 🡪 New/Different element
* Neutrons 🡪 Isotope
* Electrons 🡪 Ion