Name: _____ Foundations

Date: _____ Period: _____ Earth Science

Packet: Measurement

CLASS NOTES

- Measurement - _____
  _____
  - Must include a number and a unit

- US Customary Measure - system of measure used in the US that uses _____, _____, _____ and _____ for units

- Metric System - international decimal system for measure that uses meters, grams and liters for units
  - Prefixes of the metric system are based on powers of 10
  - Each step is either 10 times larger or ten times smaller

			meter gram liter			
1	10	100	1,000	10,000	100,000	1,000,000

- When using the Metric System for all conversions, each “step” you move is either 1 decimal point to the right or one decimal point to the left

Packet: Measurement

- Length - _____
  _____
  - Instrument: _____
  - Units: _____

- Mass - _____
  _____
  - Instrument: _____
  - Units: _____
  - Rounding: _____

- Weight - _____
  _____
  - Instrument: _____
  - Units: _____

- Volume - amount of space an object occupies
- Displacement - the volume of fluid that is displaced when an object is submerged
- Measuring Volume
  - Instrument: _____
  - Units: _____
- Calculating Volume
  - Formula: $V = l \times w \times h$
  - Units: _____
  - Rounding: _____

- Temperature - degree or intensity of heat present in a substance or object
  - Instrument: _____
  - Units: _____

- Air Pressure - force exerted by air
  - Instrument: _____
  - Units: _____

Packet: Measurement

PRACTICE QUESTIONS: CONVERTING

Directions: To convert from larger units to smaller units move the decimal one “step” to the right and to convert from smaller units to larger units move the decimal one “step” to the left. Use the chart below to help you convert all the sample problems.

kilo	hecto	deca	**meter gram liter**	deci	centi	milli
0.001	0.01	0.1	1	10	100	1,000

1 m = _____ cm

1 cm = _____ mm

25 m = _____ cm

3 km = _____ cm

4,500 mm = _____ m

579 km = _____ cm

19,847 cm = _____ km

596 cm = _____ mm

895 km = _____ m

50 cm = _____ mm

4 km = _____ cm

400 mm = _____ m

345 cm = _____ mm

90.5 cm = _____ mm

1.5 m = _____ cm

0.7 km = _____ cm

0.5 mm = _____ m

0.7 m = _____ cm

8.5 cm = _____ km

3,000 mg = _____ g

1 mL = _____ L

400 mL = _____ L

0.1 cm = _____ mm

24.1 mg = _____ g