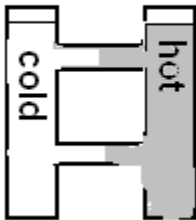


The lab quiz will use a scantron form, and have a page to do some activity work. It will be multiple choice, true false, matching, label diagrams, interpret graphs, etc. You may also be required to show calculations in the written part of the quiz.

Answer all questions. Include units and formulas for calculations where appropriate. You may use your lab reports, textbook, lecture notes. You may not use printed copies of the lab keys, or ask for help from your lab partners.

- 1.1. What is the Fahrenheit equivalent of 22°C ?
- 1.2. What metal is a cylinder having a volume of 45 mL and a mass of 120 g?
- 1.3. calculate the percent error in the above measurements
- 1.4. What property of water allows a pin to float on it?
- 1.5. Describe the results of your evaporation test on the unknown fluids. Did it eliminate any of the fluids? Which?
- 2.1. What is the Celsius equivalent of 283 K?
- 2.2. Does metal conduct heat better than wood?
- 2.3. Draw an arrow showing the flow of hot water to the other cylinder.

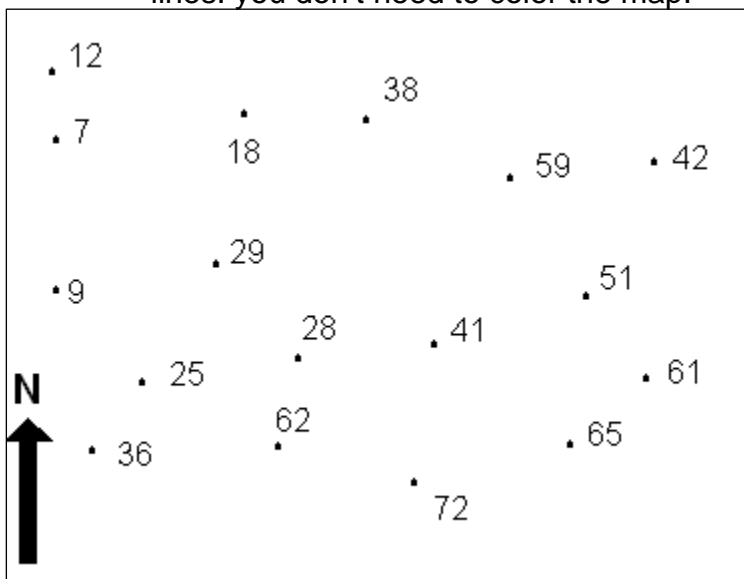


- 2.4. Think of examples of convection transfer of heat in your daily life.
- 2.5. Think of examples of conduction of heat in your daily life.
- 2.6. Which metal rod expanded most?
- 2.7. What area of the graph of heat added to melt ice contains ice, ice and water, only liquid water, water and steam, only steam

- 3.1 If the salinity of ocean water is 35 ‰, what is the mass of dissolved salts in 3 kg of ocean water? Show calculations with units.
- 3.2 In the northern hemisphere, at 20° N latitude, what percent of Earth's surface is ocean, if there are 130 million square km of ocean, and 74 million square km of land? Show calculations.
- 3.3 How does the salinity of the Atlantic Ocean compare to the Pacific Ocean at 50° N latitude?
- 3.4 Where is surface ocean water most dense?
- 3.5 What is the approximate latitude and longitude of the Sea of Okhotsk?
- 4.1 Suppose that a scale on a map is 1:5000. How many km does 4 cm represent? Show calculations with units.
- 4.2 Approximately how high above the surrounding sea floor is the Mid-Atlantic Ridge?
- 4.3 If the sea floor about 500 km from the oceanic ridge is 50 million years old, what is the rate of spreading in cm/yr? Show calculations with units.
- 4.4 What can distinguish pillow lava from basalt that cooled on land surfaces?
- 4.5 Oceanic ridges are associated with what process of lithospheric plate movement?
- 5.1 If you are in Oregon, on what date each year is there the most hours of daylight?
- 5.2 What special name does this date have?
- 5.3 For what reason are the poles cooler than equatorial areas?
- 5.4 Objects that reflect most incoming radiant energy are described as having _____ albedo.
- 5.5 Water has _____ albedo than dry sand.
(Compare)
- 6.1 If air can hold 14 grams of water per kilogram of air, and it has 3.5 grams/kg, what is the relative humidity? Show formula for calculation.
- 6.2 With a decrease in air temperature, and no change in moisture content, how will the relative humidity change?

- 6.3 What is the dew-point temperature of air that contains 20 grams of water per kilogram of air?
- 6.4 When using a sling psychrometer, if the air has a dry-bulb temperature of 22°C , and a wet-bulb temperature of 12°C , what is the relative humidity?
- 6.5 Air that begins at 20°C at sea level, and changes temperature at the dry adiabatic rate, will have what temperature at 800 meters? Show formula for calculation, with units.
- 7.1 What is the effect of orographic lifting in areas of Oregon west of the crest of the Cascades?
- 7.2 Name a physiographic province east of the Cascades that is influenced by orographic lifting.
- 7.3 Compare the precipitation of Government Camp to Bend. How important is the elevation of these areas to the difference in precipitation? What else may affect the precipitation?

- 7.4 Draw in precipitation classes on the map below. Only draw the division lines: you don't need to color the map.



Make divisions for:

- Less than 10 in/yr
- 10-30 in/yr
- 30-60 in/yr
- More than 60 in/yr

- 7.5 What area (N, S, E, W) do you think has the highest elevation on the map?