Name:_____ Unit 4 Study Guide

List the 4 components that make up soil (4.1.1):

a. clay
b. sand
c. silt
d. clay

2. Define each of the following, and how they relate to soil formation (4.1 How Soils Are Formed Notes):

a. Topography: the arrangement of the top soil

b. Climate: weather conditions

c. Time: how to tell the what the hour and minutes are

d. Organisms: living objects

e. Parent material: soil underneath the topsoil

3. List all the potential problems that erosion could cause (4.1 How Soils are Formed Notes and 4.1.3): compaction, low organic matter, no structure

4. List the three main particle sizes in mineral soil (4.2.1): sand silt and clay

5. Be familiar with the soil texture flow chart. (4.2.1)

6. Define the following terms (4.2.1 and 4.2.2):

a. Permeability: state of material that allows liquids to pass threw

b. Pores: small opening in surface

c. Loam: fertile mix of clay and sand

d. Clay: stiff sticky fine grained earth

e. Organic Matter: decaying plants and animals

7. Explain the permeability of the following soil particles (1 = fastest/highest permeability 5 = slowest/lowest permeability) (4.2.2):

a. Loam:4

b. Clay:5

c. Gravel:1

d. Sand:2

e. Silt:3

8. List the 5 locations of water in the water cycle (4.3 The Water Cycle Notes).

condensation, precipitation, infiltration, runoff, evaporation

9. Define the following (4.3 The Water Cycle Notes).

a. Melting – from solid to liquid

b. Freezing – liquid to solid

c. Evaporation – liquid to vapor

d. Condensation – water vapor that becomes liquid when on a cold surface that comes in contact with warm air

e. Evapotranspration – when water is evaporated to the atmosphere

f. Percolation/Infiltration – when water absorbs into something.