









STUDENT GUIDE

OBSERVING SOILS

CLASS COPY

Observe the soils with a hand lens or stereoscope. Fill out the chart based on your observations.

| <u>NAME OF SOIL</u> | <u>SOIL COMPOSITION</u> (B) What is the soil made of? (Name at least 3 specific things you see in the soil sample and give their percentages) | <u>SOIL COLOR</u> (A) -Describe the color -use a colored pencil to show the color in a block -give one reason for its color | <u>TEXTURE</u> (C) Wet two fingers. Squeeze each soil in-between your fingers. Describe how it feels when a pinch of the soil is wet. |
|--|--|---|--|
| STORE BOUGHT POTTING SOIL (High in nutrients) | <ul style="list-style-type: none"> 90% Organic Matter (decaying bark, plants) 5% mica (shiny mineral) 5% fertilizer |  - brown, black - mostly organic matter | - feels gritty and rough - NO stickyness (no clay) |
| LIMESTONE FROM AURORA, NC weathers easily | <ul style="list-style-type: none"> 50% dark rock (basalt) 20% seashells 20% marine fossils 10% Coral fragments |  - light gray - made of seashells and marine fossils | - Feels rocky |
| WRIGHTSVILLE BEACH SAND medium drainage | <ul style="list-style-type: none"> 90% Quartz Crystals 5% Sea Shells 5% Basalt Rock Fragments |  - tan (ish) - made of tiny shells and rocks | - Feels gritty and grainy |
| WEST LAKE MIDDLE SCHOOL SOIL does not drain well | <ul style="list-style-type: none"> 100% clay (oxidized iron) smallest soil particle |  - red, brown - contains alot of rusted iron (Fe) | - Feels sticky when wet / starts to harden when dry |
| IOWA CITY, IOWA SOIL high in nutrients | <ul style="list-style-type: none"> 5% sand 5% silt 90% organic matter |  - dark brown - mostly organic matter | - Feels sticky and soft when wet - feels powdery when dry |
| MRS. EARLS' FRONT YARD high in nutrients | <ul style="list-style-type: none"> 30% pine straw 30% twigs 30% tree bark 10% decaying leaves |  - dark brown - made of bark, acorns, snail shells, etc. | - Feels clumpy, crusty, sticky, and grainy too |
| GRAVEL drains very well | <ul style="list-style-type: none"> 100% Rock Fragments (looks like marble pieces) |  - white, tan - many little rocks put together | - Feels rocky and clumpy |
| LOAM Equal parts Sand, silt and clay perfect drainage | <ul style="list-style-type: none"> 33% Sand Particles 33% silt particles 33% Clay particles 1% organic particles |  - light brown - made of equal parts of clay, sand, and silt. | - Felt sticky, smooth, grainy when wet - Dry: smooth, slippery, like baby powder |