

Incorporating Livestock Quiz

Name _____

Date _____

1. List two benefits to manure.

Increases soil productivity
Increase soil organic matter and microorganisms
Increase phosphorus, potassium, calcium, magnesium in topsoil
Increase nitrate nitrogen, calcium and magnesium in subsoils
Alternative to purchasing additional chemical fertilizers

2. List two benefits from having livestock.

Manure source
Additional income for meat or agrotourism
Can solve nuisance problems
Reduce farm waste
Graze fields down instead of having to till them

3. Define resting time on grazed lands.

Taking the land out of grazing to allow for plants to grow back with no animals eating off of them

4. What happens when you over-graze?

The soil is not covered properly
You lose carbon and moisture from the soil
More susceptible to wind and water erosion
You haven't let the area rest from grazing to recover and becomes thin and more at risk

5. Define Stocking Rate.

The number of specific kinds and classes of animals grazing a piece of land together for a specific time.

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1. List two benefits to manure.
2. List two benefits from having livestock.
3. Define resting time on grazed lands.
4. What happens when you over-graze?
5. Define Stocking Rate.

Increasing Biodiversity Quiz

Name _____

Date _____

1. List the three main trophic levels.

Producers, consumers, decomposers

2. What trophic level is comprised of organisms that eat nonliving plant and animal remains?

Decomposers/detritivores

3. What is considered the foundation of the food web?

Soil

4. What is the current US value of pollination for agriculture?

10 billion annually

5. How many food crops in the US depend on pollination?

150

Increasing Biodiversity Quiz

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Date _____

1. List the three main trophic levels.
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3. What is considered the foundation of the food web?
4. What is the current US value of pollination for agriculture?
5. How many food crops in the US depend on pollination?

Living Roots Quiz

Name _____

Date _____

1. Describe the differences between a tap root and a fibrous root.

Fibrous: thin, branchlike, spread in many directions from the base of the plant.
Examples include wheat, corn, grasses

Taproot: straight and tapering growing vertically down, forms at the center with small rootlets form off of it. Examples include carrots, beets, radish

2. Define cover crop.

A crop planted to cover the soil, not typically harvested or sold for additional profit. Used primarily to keep the soil covered and keep roots in the soil during off planting times.

3. List three benefits cover crops can provide.

Symbiotic relationships between soil and microorganisms, prevent nutrient loss, increase soil organic matter, hold the soil in place, suppress weeds, provide secretions to soil biology

4. True or false, cool season plants germinate when the soil temperature reaches 40 degrees.

True

5. What are the two key nutrients that must be considered for cover crops.

Carbon and Nitrogen

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2. Define cover crop.
3. List three benefits cover crops can provide.
4. True or false, cool season plants germinate when the soil temperature reaches 40 degrees.
5. What are the two key nutrients that must be considered for cover crops.

Maximizing Cover Quiz

Name _____

Date _____

1. List two threats to uncovered soil.
Loss of water through evaporation
Crop competition from weed species
Erosion due to wind or rain
Crusting of the soil toplayer
2. Name the two categories of cover.
Living cover: cover crops
Dead cover: mulch or residue
3. True or False, both mulch and residue can protect from wind AND water erosion.
true
4. After the rainfall simulation, which soil will leave the water cloudier? Well covered and managed soils or poor managed and uncovered soils?
Poor managed and uncovered soils
5. True or False, soil microbial and nutrient activity is impacted by soil temperature and soil water holding capacity.
true

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Minimizing Disturbance Quiz

Name _____

Date _____

1. Define Aggregate.

Clumps of soil made from sand silt and clay

2. True or False, well-structured soils have increased water holding capacity?

true

3. List the three types of disturbance.

Physical, chemical, biological

4. Describe an agricultural disturbance and label the type of disturbance.

Tillage-physical

Adding nutrients to the soil – chemical

Overgrazing -biological

5. True or False, Gully erosion is the shallow drainage lines where water begins to collect in the form of depressions and erodes the soil?

False this is rill erosion

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4. Describe an agricultural disturbance and label the type of disturbance.
5. True or False, Gully erosion is the shallow drainage lines where water begins to collect in the form of depressions and erodes the soil?

Intro to Soils Quiz

Name _____

Date _____

What are the main components of soil?

Sand, silt, clay

What comprises soil texture?

The amounts/percentages of sand, silt, and clay in the sample

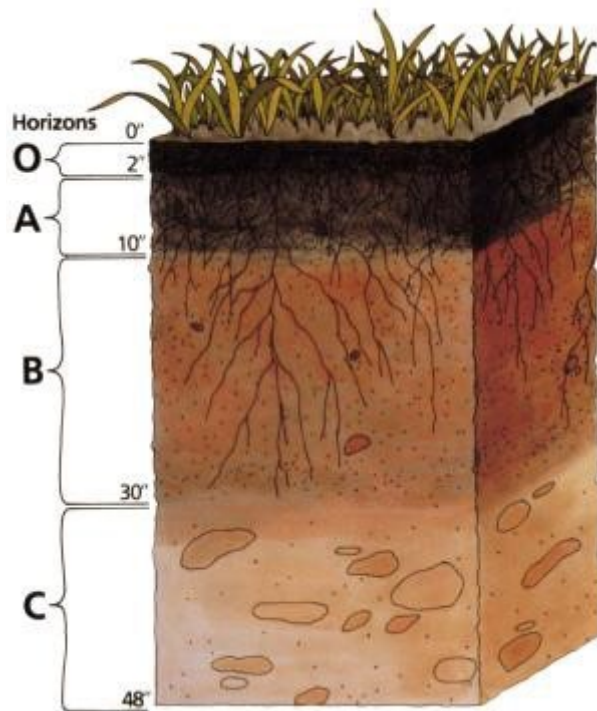
True or False, Porosity is the amount of connectivity between soil pores?

False

Define parent material.

The type of rock or mineral from which the soil was formed

Label the soil horizons: O, A, B, C



Label the soil structures: Blocklike, platelike, prism like, spheroidal.



Blocklike



Platelike



Prismlike



Spheroidal

Intro to Soils Quiz

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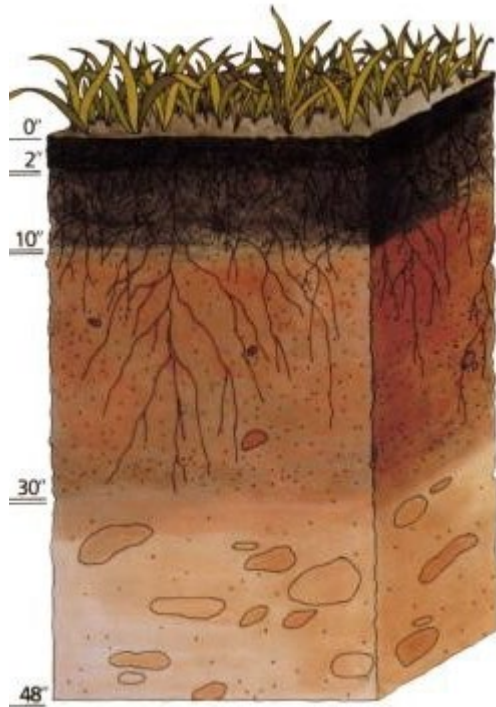
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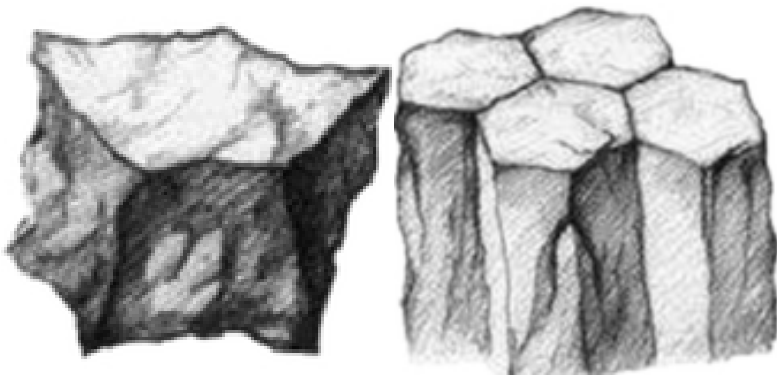
Define parent material.

Label the soil horizons: O, A, B, C



Label the soil structures: Blocklike, platelike, prism like, spheroidal.





Urban Agriculture Quiz

Name _____

Date _____

1. Name a benefit of Urban Agriculture.

Education and environmental benefits

Community benefits

Support physical and mental health

Support food security

Supplemental income

Increase property value

Provides habitats for pollinators

2. List two properties of urban soils.

Physical Properties: parent material, coarse fragments, spatial variability

Chemical Properties: heavy metals and organic compounds, nutrient content, soil pH

Biological Properties: organic matter and carbon

3. List two resource concerns of urban soils.

Compaction

Concentration of salts or chemicals

Organic matter depletion

Soil organism habitat loss or degradation

Unsuitable material and soil sealing

4. List two urban livestock limitations.

Size and space restrictions

Zoning regulations

Nuisance complaints

Feed supply

Processing facilities

5. What is the technical term for keeping bees?

Apiculture

Urban Agriculture Quiz

Name _____

Date _____

1. Name one benefit of Urban Agriculture.
2. List two properties of urban soils.
3. List two resource concerns of urban soils.
4. List two urban livestock limitations.
5. What is the technical term for keeping bees?