

Soil Ecology Study Guide:

Origins of materials:

Where do soils come from?

Where do soil nutrients come from?

How do they get into the soils?

How do trees get them?

What creates them?

Nutrient Cycle:

Once a tree uses the nutrients are the nutrients gone forever?

How are nutrients recycled?

What recycles them?

How many steps are there in the nutrient cycle?

If a centipede eats a leaf is its poop immediately available for trees to use?

Is soil entirely comprised of poop?

Once soil nutrients are in the soil are they always useable by plants?

Do soil nutrients get moved around?

If so what moves them around?

Bug poop grows trees

Does the size of nutrients play a role in their availability to plants?

What changes the size of nutrients?

What might cause a size of a particle to matter (if it does)?

Does the acidity of the soil or water play a factor in any of this?

Soil moisture content:

If I had a jar of slugs, and its mass before and after drying would you be able to calculate the mass of the water that was in the slugs before drying?

How about what percentage of the original mass that water content was?

What if I gave you a percentage and a dry mass?

For soils taken from a given area will the mass of the water content within them be the same?

How about the percentage of water mass?

These questions and their subsequent answers are the base knowledge we have covered in the unit. This is the information you will need to have to do the justification phase of the What If style questions.

For the questions on the test the base information will be manipulated. That means questions will have something that is true right now being changed. Such as, What if bug poop didn't grow trees. Then what would happen to the ecosystem of the forest. You would need to come up with an answer to the Then portion of that statement in the form of a hypothesis, and then justify it using the information covered in the class.

You will be allowed your handwritten notes on the test, and yes this means your spiral. Do your best to get this information into your spiral. Do some what if questions as well.