Plant Sciences

Pre/Post Test

1. An example of organic matter in the soil is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (Soil Sciences)
   1. Water
   2. Footprints
   3. Dead leaves
   4. Layers
2. When a plant is at wilting point, there is no soil moisture. (Soil Sciences)
   1. True
   2. False
3. Mottling in the soil is a key indicator of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the soil? (Soil Sciences)
   1. Wetness
   2. Dryness
   3. Organic Matter
   4. High Nutrient Content
4. Name the three soil particles from smallest to largest. (Soil Sciences)

1. Hydroponics is the process of growing plants without \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (Hydroponics)
   1. Nutrients
   2. Sun
   3. Water
   4. Plants
2. In a hydroponics system, what is not important to test? (Hydroponics)
   1. pH
   2. Nitrogen level
   3. Phosphorus level
   4. Cobolt level
3. What plant part anchors the plant as well as absorbs water for plant? (Anatomy)
   1. Leaves
   2. Stems
   3. Roots
   4. Flower
4. What part of the plant is responsible for the new growth of a plant? (Anatomy)
   1. Cambium
   2. Mesophyll
   3. Epidermis
   4. Bark
5. One bushel of corn = \_\_\_\_\_ pounds (Anatomy)
   1. 64
   2. 52
   3. 56
   4. 78
6. One bushel of beans = \_\_\_\_\_ pounds (Anatomy)
   1. 52
   2. 60
   3. 64
   4. 78
7. IN detail, please describe the path that pollen takes in order to produce a seed. To receive full points, you must use vocabulary words associated with parts of the plant. You may use pictures or diagrams to help explain. (Anatomy)
8. A potato is a stem. (Anatomy)
   1. True
   2. False
9. Deciduous plants lose their leaves (Taxonomy)
   1. True
   2. False
10. Please list two differences between monocots and dicots. (Taxonomy)
11. An example of a monocot is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (Taxonomy)
    1. Corn
    2. Soybeans
    3. Sunflowers
    4. None of the above
12. The three top macronutrients needed by plants are…. (Growing)
    1. Nitrogen, Magnesium, and phosphorus
    2. Potassium, colbolt, and oxygen
    3. Nitrogen, potassium, magnesium
    4. Nitrogen, potassium, phosphorus
13. The pH scale ranges from \_\_\_\_-\_\_\_\_\_. (Growing)
    1. 0-20
    2. 1-5
    3. 10-20
    4. 0-14
14. Most plants prefer a pH balance of \_\_\_\_. (Growing)
    1. 1
    2. 5
    3. 7
    4. 16
15. A fertilizer label that has 20-15-0 marked on the side has what percentage of nitrogen? (Growing)
    1. 20%
    2. 15%
    3. 0%
    4. You can’t tell from the label
16. Plant reproduce \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (Reproduction)
    1. Sexually
    2. Assexually
    3. Neither a or b
    4. Both a and b
17. The female part of a plant is called a \_\_\_\_\_\_\_\_\_\_\_\_ and a male part is called a \_\_\_\_\_\_\_\_\_\_\_\_\_. (Reproduction)
    1. Pistil, stamen
    2. Stamen, pistil
    3. Ovary, style
    4. Flower, stem
18. Please list three abiotic factors that affect plant growth and reproduction. (Reproduction)

[](http://www.google.com/url?sa=i&rct=j&q=mexian%20bean%20beetle&source=images&cd=&cad=rja&docid=oCdolU2KyvhOwM&tbnid=Co_BUmT3t4sZoM:&ved=0CAUQjRw&url=http://bugguide.net/node/view/14045&ei=S4obUqjNGJLkqAHKxIH4CA&bvm=bv.51156542,d.aWc&psig=AFQjCNEzYd9n3h2lHhvqq1-7uXI_ZmPx7Q&ust=1377622963893502)

1. What is this pest? (Pest Management)
   1. Ladybug
   2. Aphid
   3. Armyworm
   4. Mexican Bean Beetle
2. [](http://www.google.com/url?sa=i&rct=j&q=soybean%20plant&source=images&cd=&cad=rja&docid=90FZMXr2lOhBbM&tbnid=59GKnVQ1Q_d7jM:&ved=0CAUQjRw&url=http://www.griggsdakota.com/2009/08/farmer-fred-is-outstanding-in-his-field.html&ei=j6sXUtSrMIaKrgGI9oHgDQ&bvm=bv.51156542,d.aWc&psig=AFQjCNF6qJeBbW6TqQoqH_TIDSOnsXnd_g&ust=1377369347028699)What is this plant? (Pest Management)
   1. Beans
   2. Alfalfa
   3. Barley
   4. Beans

[](http://www.google.com/url?sa=i&rct=j&q=smartweed&source=images&cd=&cad=rja&docid=tORbB7DdwjicBM&tbnid=2RMC_Kk83d-uDM:&ved=0CAUQjRw&url=http://www.bio.brandeis.edu/fieldbio/Survival/Pages/smartweed.html&ei=JKwXUoykHYq5qAGKiID4Cw&bvm=bv.51156542,d.aWc&psig=AFQjCNH1pEZjpvVSixFTRSCaDZguC2QX5A&ust=1377369487780244)

1. What is this weed? (Pest Management)
   1. Giant Ragweed
   2. Tall Fescue
   3. Smartweed
   4. Nightshade
2. Which weed is in the potato family and is poisonous? (Pest Management)
   1. Giant Ragweed
   2. Tall Fescue
   3. Smartweed
   4. Nightshade
3. Please list the four strokes of a four stroke engine.
4. In a four stroke engine, during the combustion stroke, both valves are closed.
5. PTO stands are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ take \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. How many rotations does it take the camshaft to turn in order to complete all four strokes?
   1. 180 degrees
   2. 360 degrees
   3. 420 degrees
   4. 720 degrees