Agriculture

1. List the components of soil.

_________________________________________________________

_________________________________________________________

Why is soil important to plants?

_________________________________________________________

_________________________________________________________

2. Explain the difference between clay, sand, and loam soils. List three crops that grow well in each.

Clay ______________________________________________________

1. __________________ 2. ___________________ 3. ________________

Sand ______________________________________________________

1. __________________ 2. ___________________ 3. ________________

Loam _____________________________________________________

1. __________________ 2. ___________________ 3. ________________

3. Test the germination of three varieties of seeds, 100 seeds in each variety. Record germination percentage after three, four, and five days.

<table>
<thead>
<tr>
<th></th>
<th>Variety #1</th>
<th>Variety #2</th>
<th>Variety #3</th>
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</thead>
<tbody>
<tr>
<td>Type:</td>
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<tr>
<td>Day 3</td>
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<td>Day 4</td>
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<td>Day 5</td>
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</table>
4. Explain how plants obtain nutrients and convert them to food.

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

Explain the differences between primary, secondary, and micronutrients.
Primary ___________________________________________________
   __________________________________________________________
Secondary _________________________________________________
   __________________________________________________________
Micronutrients______________________________________________
   __________________________________________________________

5. Name and identify ten common weeds of your community and tell how to best eliminate them, using cultural or chemical methods.

   Weeds                        Elimination
   1. ____________________________ _______________________________
   2. ____________________________ _______________________________
   3. ____________________________ _______________________________
   4. ____________________________ _______________________________
   5. ____________________________ _______________________________
   6. ____________________________ _______________________________
   7. ____________________________ _______________________________
   8. ____________________________ _______________________________
   9. ____________________________ _______________________________
  10. ____________________________ _______________________________
6. Identify six common insect pests or diseases. Tell what plants they usually affect and how to eliminate or prevent their occurrence.

<table>
<thead>
<tr>
<th>Pest/Disease</th>
<th>Plants affected</th>
<th>Eliminated</th>
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<tbody>
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<td>6.</td>
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7. Locate two sources of agricultural weather information.

1. __________________________
2. __________________________

How is this information helpful to the farmer?

_________________________________________________________
_________________________________________________________

8. Assist in planting, cultivating, and harvesting at least four different crops. Maintain a log of work done and problems encountered from seeding to harvest.

9. Know the purpose of the following:

   Plowing ___________________________________________________
   _________________________________________________________

   Disking __________________________________________________
   _________________________________________________________

   Cultivating ______________________________________________
   _________________________________________________________

   Irrigation _______________________________________________
   _________________________________________________________

   Harvesting ______________________________________________
   _________________________________________________________
10. Name and identify ten common birds of your locality, and state their value to the farmer.

<table>
<thead>
<tr>
<th>Birds</th>
<th>Value</th>
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<tbody>
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</table>

11. What is erosion? ____________________________________________

How can it be prevented? ______________________________________

12. Visit your local cooperative extension service and find out how the organization helps the farmer. Write a one-page report of your visit.