



Pathfinder's Name

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.

| | Variety #1 Type: _____ | Variety #2 Type: _____ | Variety #3 Type: _____ |
|-------|---------------------------|---------------------------|---------------------------|
| Day 3 | | | |
| Day 4 | | | |
| Day 5 | | | |

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.

| Pest/Disease | Plants affected | Eliminated |
|--------------|-----------------|------------|
| 1. _____ | _____ | _____ |
| 2. _____ | _____ | _____ |
| 3. _____ | _____ | _____ |
| 4. _____ | _____ | _____ |
| 5. _____ | _____ | _____ |
| 6. _____ | _____ | _____ |

- 7. Locate two sources of agricultural weather information.

1. _____ 3. _____

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.

| | Birds | Value |
|-----|-------|-------|
| 1. | _____ | _____ |
| 2. | _____ | _____ |
| 3. | _____ | _____ |
| 4. | _____ | _____ |
| 5. | _____ | _____ |
| 6. | _____ | _____ |
| 7. | _____ | _____ |
| 8. | _____ | _____ |
| 9. | _____ | _____ |
| 10. | _____ | _____ |

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.