



\_\_\_\_\_  
Pathfinder's Name

## Agriculture

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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.

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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.