

## Hydroponic Science - Supplying Nutrients to Crops

Name:

1. How many essential nutrients are there for plants?
2. What are the three elements (nutrients) that comprise 89 percent of a plant's tissue by dry weight **and** why are they considered to be non-fertilizers? (2 marks)
3. Nitrogen, phosphorus, and potassium are considered primary macronutrients because t they are used in complete fertilizers. What is the job of each nutrient for the plants?
4. What micronutrient is not added in the nutrient solution **and** why? (2 marks)
5. What is the little phrase that can be used to help memorize the 16 essential elements for plant growth?
6. What is the term for plants lacking nutrients and how do we know if a plant is lacking phosphorus? (2 marks)
7. Abnormal yellowing of plant leaves is a condition called \_\_\_\_\_

8. The \_\_\_\_\_ states the percentage of what primary nutrients present?

9. The nutrient analysis is written as \_\_\_\_\_.

Are the order of nutrients always listed the same?

10. What are the symbols on the periodic chart for Nitrogen, Phosphorus, and Potassium?  
(3 marks)

11. What are complete fertilizers and incomplete fertilizers?  
(2 marks)

12. What is meant by water-soluble fertilizers?  
(2 marks)