

2020 York County Master Gardener
Open Book Review # 1



Due by Class on March 18

This review is open book take home – use any and all resources, including consulting/working together with fellow MGs if you wish.

Please write **CLEARLY** or type your answers on the computer. You may submit your review as an email attachment or if you choose, print it and bring it to class completed.

Name: _____

Orientation

1. Your neighbor hears you are a new trained York County Master Gardener Volunteer. They ask, “what herbicide can I use to kill these weeds taking over my lawn?” Your response is:

2. What are the names of the three organizations (federal, state, and county) responsible for the partnership of University of Maine Cooperative Extension?

3. What is required of the new Master Gardener class to receive their certification?

By what date do you need to complete these requirements?

Seed Starting

4. What is the major limiting factor a home gardener might encounter in raising transplants from seed in a sunny window in their home?

Without building and heating a greenhouse what is the best way to overcome the limiting factor you described above?

5. Describe the steps/procedures, including a timeline, for producing homegrown tomato seedlings to be transplanted into the garden by Memorial Day:
6. What is the purpose of providing “bottom heat” for seed starting and when would you begin using it and when would you stop?
7. What is meant by “hardening off” in the seed starting process?

Basic Soils

8. Define Soil Texture:
9. Define Soil Structure:
10. What are the benefits of raw soil organic matter (living and dead such as cover crops or fall leaves)?
11. What are the benefits of adding humus/compost soil organic matter (fully decomposed - very dead)?
12. In your words, what is Cation Exchange Capacity?
13. What pH range is optimum for most vegetable garden crops?
14. What product would you add, per your soil test results, if you wish to lower your soil’s pH as you might when growing highbush blueberries?

15. What are plant micronutrients, and what strategy might you adopt to make sure your plants receive an adequate supply?
16. A 50-pound bag of Jolly Farmer organic fertilizer is listed as 5-3-5. How many pounds of Phosphorus are in the bag?
17. CEC is (higher/lower) in a soil Sandy Soil with low Organic Matter, as compared to a Clay Soil with high Organic Matter?

Home Composting

18. What factors are necessary to build a "hot" compost pile?
19. Describe what is meant by "C:N Ratio" in building a compost pile and what should you aim for?
20. What C:N ratios might you find in the following the raw materials?
- Straw
 - Cow Manure
 - Grass Clippings
 - Fall Leaves
 - Kitchen scraps

Worm Composting

21. What kind of worms are used in vermicomposting?
22. Describe the basics of setting up and managing a worm composting:

Botany for Gardeners

23. Describe 4 differences between monocots and dicots:

24. A plant which lives three or more years, and in which the top part of the plant survives the winter and continues to grow the following season would be classified as a: (two words)

_____.

25. Circle the correct answer: Plants such as Begonia, Holly and Hardy Kiwi is are considered (monoecious, dioecious, trioecious) plants.

26. Describe the basic life cycles of

Annuals:

Biennials:

Perennials:

27. When you eat a potato are you consuming a leaf, stem or root (hint – does it have nodes?)?

28. Transpiration:

Please Describe the process by which water:

a. enters a plant's roots:

b. rises in the plants vascular system through it:

c. water vapor exits the plants via stomates:

29. How do the following environmental factors either **increase or decrease**, evaporation/transpiration in plants?

a) High Humidity

b) Windy conditions

c) Cloudy day

d) Cold Temperatures

30. Diagram a flower and label the 4 major parts: Petals, Sepals, Stamens and Pistil:

31. What resources are moved through a plant's xylem tissue?

32. What resources are moved through a plant's phloem tissue?

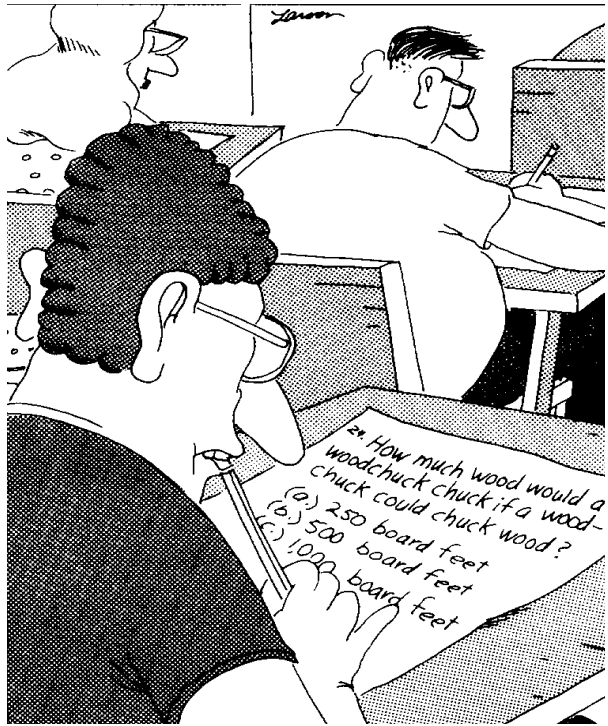
33. What are the three inputs necessary photosynthesis to occur?

Where in the plant does photosynthesis take place?

34. What is respiration and where does it take place in the plant?

See Extra Credit on Next Page:

Extra Credit:
points for
making Frank
laugh



Thank You!