

1. Where are stomata located?

a. the underside of leaves

b. the cordon

c. the top of leaves

d. the roots

2. Where is sugar produced via photosynthesis?

a. the grapes

b. the leaves

c. the roots

d. the tendrils

3. Which of the following parts of the grapevine possess lobes & teeth?

a. the grapes

b. the leaves

c. the roots

d. the tendrils

4. Leaf color is responsive to which of the following:

1. vine nutrition

2. herbicide contamination

3. viral infections

a. 1

b. 1 & 3

c. 2 & 3

d. 1, 2 & 3

5. Where is zinc deficiency most likely to occur?

a. limestone soil

b. gravel soil

c. sandy soil

d. clay soil

6. Which of the following grape species is of Asian origin?

a. *Vitis amurensis*

b. *Vitis aestivalis*

c. *Vitis rupestris*

d. *Vitis berlandieri*

7. What is the current scientific name for Phylloxera vastatrix?

- a. Phylloxera vitifoliae
- b. Plasmopara viticola
- c. *Dactylasphaera vitifoliae***
- d. Oidium tuckerii

8. Which of the following are forms of frost protection?

- 1. vineyard site selection
- 2. 'aspersion' sprinkler method
- 3. smudge pots
- 4. wind machines

- a. 2 & 3
- b. 1, 2 & 3
- c. 2, 3 & 4
- d. 1, 2, 3 & 4**

9. What unit is used to express the specific gravity of a wine?

- a. g/l
- b. mg
- c. hl/ha
- d. none of the above**

10. What does the unit ha/hl describe?

- a. *vine yields***
- b. vine density
- c. liquid density
- d. the size of the vineyard

11. Which of the following statements is true?

- a. leafroll virus increases wine quality by reducing yields
- b. leafroll virus is spread chiefly by spores
- c. *there is no control of leafroll virus once a vine has become infected***
- d. all vine varieties exhibit the same symptoms of leafroll virus

12. Blue fining helps prevent which of the following wine faults?

- a. TCA
- b. *iron casse***
- c. volatile acidity
- d. brettanomyces

13. Which of the following are asexual means of propagating a vine variety?

1. layering
2. seeds
3. cuttings
4. micropropagation

- a. 1
- b. 2
- c. 1, 2 & 3
- d. 1, 3 & 4**

14. Dijon clones of Pinot Noir belong to the same what?

- a. species
- b. variety
- c. genus
- d. all of the above**

15. What does a hydrometer measure?

- a. the sugar levels of the must
- b. the phenol
- c. the specific gravity of a liquid
- d. the density of a liquid**

16. What are the two types of polyphenols?

- a. colloids & tannins
- b. tannins & anthocyanins**
- c. tannins & esters
- d. flavonoids & anthocynins

17. Vine density affects which of a vineyard's following aspects?

1. yield
2. vine vigour
3. harvesting methods
4. quality

- a. 4
- b. 2 & 4
- c. 1, 2 & 3
- d. 1, 3 & 4**

18. What is ascorbic acid also known as?

- a. Vitamin A
- b. Vitamin C**
- c. Lysozyme
- d. Copper Sulfate

19. Which of the following best describes the Scott Henry method of training?

- a. Canopy is divided vertically and the shoots are separated and trained into two curtains, upwards and downwards**
- b. Canopy is trained horizontally on a pergola
- c. Canopy is divided horizontally into two curtains of upward-pointing shoots
- d. Spurs arranged in short arm in a circle at the top of a short trunk

20. What has Lenz Moser training been found to decrease?

- 1. Canopy management
- 2. Labor costs
- 3. Ripening time
- 4. Fruit quality

- a. 4
- b. 2 & 4**
- c. 3 & 4
- d. 2, 3 & 4

21. Which of the following is not a fining agent?

- a. Gelatine
- b. PVPP
- c. PVC**
- d. Isinglass

22. What is Odium also known as?

- a. Downy mildew
- b. Cork taint
- c. Phylloxera
- d. Powdery mildew**

23. What is the purpose of fining?

1. haze prevention
2. oxidation prevention
3. removal of some tannin
4. removal of some residual sugar

- a. 1
- b. 1 & 2
- c. 1 & 3**
- d. 2, 3 & 4

24. What is veraison?

- a. A form of asexual reproduction for the vine
- b. The stage in vine development that marks the beginning of grape ripening**
- c. The French word for harvest
- d. The stage in vine development that signals that the grapes are overripe

25. How many grams of sugar would be needed to raise to potential alcohol of 2 liters of grape must by 1%?

- a. 14g
- b. 17g
- c. 20g
- d. 34g**

15. Methoxy pyrazin – Cab & Sauvignn

17. Rain

18. Muscat (3 types)

21. Hybrids

22. Crossing

23. Soil Nutrients

24. Clonal Selection

25. Climate

26. Chardonnay

27. Soil/SubSoil/Bedrock

28. Chenin Blanc

29. Irrigation

30. Pinot Blanc

31. Pinot Gris

32. Sauvignon Blanc

33. Rootstocks

34. Aspect

35. How is zinc deficiency treated?

1. spraying leaves in the summer

2. injecting zinc into the soil before planting vines

3. daubing pruning wounds with pastes containing zinc

4. weekly fertilization

a. 1

b. 1 & 3

c. 1 & 2

d. 1, 2, 3 & 4

36. Viognier

37.

38. Ugni Blanc

39. Weather

40. Sémillon

41.

42.

43.

44. Chardonnay

45.

46.

47.

48. Gewürztraminer

RED Grape Varieties