

Unit 3, Semester 2 Test Review

Answer all questions to the best of your ability, using the lessons and notes from class. It is suggested that you print out this review so you can use it to help you get an A+ on your test! The review session will be held Tuesday 03/10/15 at 1pm.

You can find the recording for the review after it is held on the earth science website: www.mvcaearthscience.weebly.com

*Turn in the completed review to the Unit 3 Extra Credit Dropbox for 2 points Extra Credit!

Important Vocab from Unit 3: (Please be sure that you are familiar with all these terms!)

- | | | |
|------------------|---------------------|------------------|
| - Eutrophication | - Legume | - Condensation |
| - Biogeochemical | - Nitrogen Fixation | - Evaporation |
| - Producer | - Fossil Fuels | - Transpiration |
| - Consumer | - Decomposer | - Precipitation |
| - Photosynthesis | - Nutrients | - Infiltration |
| - Respiration | - Marine | - Carbon Dioxide |

1. What is eutrophication? Where have you seen it before in your life?
2. Which cycle can cause eutrophication of a local water supply?
 - a. Nitrogen Cycle
 - b. Carbon Cycle
 - c. Oxygen Cycle
 - d. Water Cycle
 - e. Unicycle
3. A farmer is concerned about the nitrogen levels in their soils being too low. What advice would you, the Earth Science student, give the farmer, to ensure that the nitrogen bacteria are replenished in the soil?
 - a. Plant more plants to increase transpiration
 - b. Clear cut the area surrounding the field.
 - c. Plant mushrooms to speed up decomposition.
 - d. Plant legumes, such as clover or alfalfa.
 - e. Sell the farm and go live in New York City. Who needs food anyway?
4. (Slide 5, Lesson 3.02) In Nitrogen Fixation, bacteria convert (change) nitrogen (N_2) into _____.
5. Why do we need legumes? Why is nitrogen fixation so important?
 - a. Plants can't use nitrogen in the form of N_2 .
 - b. Decomposers need NH_4^+
 - c. Bacteria convert fixed nitrogen back to N_2 .
 - d. Soil nitrogen is different.
 - e. Otherwise nitrogen would be unfashionable.
6. (Slide 6, Lesson 3.03) Where is the largest reservoir of carbon on earth located? How did the carbon get there?
7. Which of the following is NOT an example of how carbon dioxide enters the atmosphere:
 - a. Respiration
 - b. Burning Fossil Fuels
 - c. Volcanic Eruptions
 - d. Photosynthesis
8. Are humans considered producers or consumers?

9. Give an example of a producer and a consumer.
10. Consumers make carbon dioxide through _____.
11. Producers use carbon dioxide through _____.
12. (Slide 3, Lesson 3.03) The carbon cycle is closely related to the _____ cycle.
 - a. Oxygen
 - b. Nitrogen
 - c. Water
 - d. Make-believe
13. What do decomposers do?
14. Why do we need decomposers?
15. Burning fossil fuels releases which gas into the atmosphere?
 - a. Nitrate
 - b. Nitrogen
 - c. Oxygen
 - d. Carbon dioxide
 - e. Magic gas
16. Burning fossil fuels can lead to...?
 - a. Eutrophication
 - b. Increased Runoff
 - c. Global Warming
 - d. Polluted Water
 - e. Lifelong happiness
17. Marine organisms are made of carbon in the form of...
 - a. Carbon dioxide (CO_2)
 - b. Calcium carbonate (CaCO_3)
 - c. Pure Carbon (C)
18. (Slide 6, Lesson 3.03) Chemical Sedimentary Rocks can be found on the ocean floor. Where did the carbon come from originally that is found in chemical sedimentary rock?
19. (Slide 5, Lesson 3.07) What is the number one source of energy that drives the water cycle?
20. (Slide 6, Lesson 3.07) In transpiration, water evaporates from _____.
21. In condensation, water in the _____ state is changed to water in the _____ state.
22. Plants play a vital role and are important to the water cycle.
 - a. TRUE
 - b. FALSE
23. How is clean, freshwater renewed by the water cycle?

24. What does the word deforestation mean?

25. Predict: What can deforestation do to the amount of transpiration that occurs?