

Name _____ Date _____ Bell _____

Unit 3: Lesson 5- Homeostasis and Cell Processes

Vocabulary

1. Homeostasis (page 256)-

2. Photosynthesis (page 258)-

3. Cellular Respiration (page 258)-

4. Binary Fission (page 259)-

5. Mitosis (page 259)-

6. Passive Transport (page 260)-

7. Diffusion (page 260)-

8. Osmosis (page 260)-

9. Active Transport (page 261)-

10. Endocytosis (page 262)-

11. Exocytosis (page 262)-

What is Homeostasis? Pages 256-257

1. What is homeostasis?

2. What are four things all cells need in order to maintain homeostasis?

3. What are some examples of how our bodies maintain homeostasis?

4. How do unicellular organisms and multicellular organisms compare in meeting their needs to stay alive?

5. How does the Cardiovascular System work in our body?

6. What is xylem tissue?

7. What is phloem tissue?

8. Think about how this girl is feeling after she exercises. What things can you see that are helping to keep her body temperature stable (use picture on page 256 to help answer)

9. What are several things you do each morning to maintain homeostasis?

10. Why is homeostasis important for cells as well as for an entire organism?

How Do Cells get Energy? Page 258

11. How do cells in your body get energy?

12. Why do cells need energy?

13. What is Photosynthesis?

14. What organelle in plant cells does photosynthesis take place?

15. What is Cellular Respiration?

16. Why do photosynthesis and Cellular Respiration depend on each other?

17.

Synthesize Fill in the blanks with the materials that are involved in photosynthesis and cellular respiration.

Photosynthesis	_____ + carbon dioxide	sunlight	_____ + oxygen
Cellular respiration	sugar + _____		water + _____ + energy

Why Do Cells Divide? Page 259

18. Why do cells divide?

19. What has to happen right before a cell divides?

20. What are the two types of cell division?

21. How does binary fission work?

22. What happens during mitosis?

23. How would mitosis be important in helping the fox recover from a scratch wound?

How Do Cells Exchange Materials? Pages 260-262

24. What does it mean when it says the cell membrane is semi-permeable?

25. What is Diffusion?

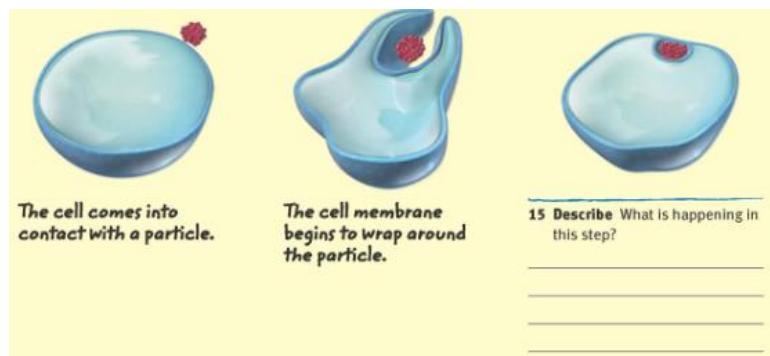
26. What is osmosis?

27. How is diffusion related to smelling the odor of a skunk that is far away?

28. Is Diffusion a type of Passive Transport or Active Transport? Explain.

29. What is the difference between passive transport and active transport?

30.



31. What are the similarities between endocytosis and exocytosis?

How Do Organisms Maintain Homeostasis? Page 263

32. What happens when some organisms become cold? How do they maintain homeostasis?

33. What is an example of an animal adapting their behavior to control their body temperature?

34. How do trees maintain homeostasis?

35. How is the boy's body responding to the cold weather in the picture on page 263?

36. How does a human obtain energy?

37. What process allows plants, animals, and humans to obtain energy from food?

38. How do eukaryotic cells make more cells?

39. Describe the ways materials can be moved across cell membranes.
