Lesson 4 Honey Production Worksheet

Complete the following questions after you watch the *How Do Bees Make Honey* video. Or, answer the questions as you watch the video (you may need to hit "pause" between questions).

1. What percent of the fruits, vegetables, and nuts consumed by humans are produced because of the pollinating work of honeybees?

2. After a bee sucks up nectar from a flower, what organ in the bee's body does the nectar then enter?

3. How many flower visits does it take for a honey bee to fill that organ?

4. What special protein molecules in the bee's body turn the nectar into honey?

5. Describe the process of "regurgitation telephone" and why it is important.

6. As the nectar is turned into honey, what two simple sugar molecules are formed from the breakdown of complex carbohydrates in the nectar?

7. What are two reasons why honey has such a LONG shelf life?

8. If a honey bee has found a great source of nectar in a lush patch of flowers, how does she communicate the location of that food source to her sisters back at the hive? You may use a diagram in your answer.

9. What are three main classes of bees in a hive?

10. During mating season, the queen will fly to a different hive. What will she do there before returning to her home hive?

11. Back at the home hive, how many eggs will the queen lay each day?

12. What do the queen's unfertilized eggs develop into?

13. What to the fertilized eggs develop into?

14. As young, immature bee larvae develop, what are they fed?

15. What kind of food will cause bee larvae to develop into workers?

16. What makes a bee larva develop into a queen instead of a worker?

17. What is mutualism? (Suggestion: use a science textbook to find a description of the relationship in ecology known as mutualism.)

18. How do flowers "lure" bees to visit them?

19. When a bee visits a flower, how does the bee benefit?

20. When a bee visits a flower, how does the flower benefit?