Name: _____ Date: _____

How Bees Make Honey

Circle group

A honey bee spends its days at flowers. It lands on a bloom and sips a sweet juice called nectar. The bee keeps the nectar in a honey stomach. This is not the stomach it uses for its own food.

The bee flies back to the hive. It gives the nectar to a second bee. That bee chews it for a while. Then it spreads it in a wax cell with six sides. The nectar is still thin and full of water.

Worker bees fan their wings over the cells. The moving air dries out the extra water. Bit by bit, the nectar gets thick. Now it is honey! The bees close the cell with a wax cap.

Honey is the bees' food for winter, when few flowers bloom. One bee makes only a twelfth of a teaspoon of honey in its whole life. It takes a huge team of bees to fill a hive.

Questions

1. What do honey bees get from flowers?

_____

_____

2. Where does a bee keep the nectar on the way to the hive?

_____

_____

3. How do bees make thin nectar thick?

_____

_____

4. Why do bees save honey?

_____

_____

5. One bee makes so little honey. What does that tell you about a hive?

_____

_____

Words to know

nectar: a sweet liquid inside flowers
hive: the home where a group of bees lives
cell: one small, six-sided room made of wax in a honeycomb
worker bee: a bee that does the daily jobs for the hive, like gathering food

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

How Bees Make Honey

Triangle group

A honey bee spends its days visiting flowers. It lands on a blossom and sips a sweet liquid called nectar. The bee stores the nectar in a special honey stomach, which is separate from the stomach it uses to digest food.

When the bee flies back to the hive, it passes the nectar to another bee. That bee chews it for a while and then spreads it into a six-sided wax cell. The nectar is still thin and watery at this point.

Worker bees then fan their wings over the cells. The moving air dries out the extra water. Slowly, the nectar thickens into honey. When the honey is ready, the bees seal the cell with a cap of wax.

Honey is the food the bees save for winter, when few flowers bloom. A single bee makes only about a twelfth of a teaspoon of honey in its whole life. It takes a huge team of bees to fill a hive.

Questions

1. What do honey bees collect from flowers?

_____

_____

2. Where does a bee carry the nectar on its way back to the hive?

_____

_____

3. How do worker bees turn watery nectar into thick honey?

_____

_____

4. Why do bees save honey?

_____

_____

5. What does the last paragraph suggest about how a hive works?

_____

_____

Words to know

nectar: a sweet liquid inside flowers
hive: the home where a group of bees lives
cell: one small, six-sided room made of wax in a honeycomb
worker bee: a bee that does the daily jobs for the hive, like gathering food
blossom: a flower

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

How Bees Make Honey

Square group

A honey bee devotes its days to visiting flowers. Landing on a blossom, it sips a sugary liquid called nectar and stores it in a specialized honey stomach, which is entirely separate from the stomach it uses to digest its own food.

Once the bee returns to the hive, it transfers the nectar to another bee. That bee chews the nectar for a while and then spreads it into a six-sided cell made of wax. At this stage, the nectar is still thin and watery.

Next, worker bees fan their wings rapidly over the cells, and the circulating air evaporates the extra water. Gradually, the nectar thickens into honey. When the honey is finally ready, the bees seal each cell with a protective cap of wax.

Honey is the food supply the colony saves for winter, a season when few flowers bloom. Remarkably, a single bee produces only about a twelfth of a teaspoon of honey during its entire lifetime. Filling a hive therefore requires the cooperation of an enormous team of bees.

Questions

1. What substance do honey bees collect from flowers?

_____

_____

2. Where does a bee store nectar while it travels back to the hive?

_____

_____

3. Describe how worker bees transform watery nectar into thick honey.

_____

_____

4. What purpose does stored honey serve for the colony?

_____

_____

5. What does the final paragraph suggest about how a hive functions?

_____

_____

Words to know

nectar: a sweet liquid inside flowers
hive: the home where a group of bees lives
cell: one small, six-sided room made of wax in a honeycomb
worker bee: a bee that does the daily jobs for the hive, like gathering food
blossom: a flower

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: How Bees Make Honey

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: How Bees Make Honey

Easier · 155 words · Flesch-Kincaid grade 1.8

1. Nectar, a sweet juice.
2. In its honey stomach. This is not the stomach it uses for its own food.
3. They fan their wings over the cells. The moving air dries out the extra water.
4. It is their food for winter, when few flowers bloom.
5. The bees must work as a big team to fill the hive.

Triangle: How Bees Make Honey

This passage · 162 words · Flesch-Kincaid grade 4.6

1. Nectar, a sweet liquid.
2. In its honey stomach, which is separate from the stomach it uses to digest food.
3. They fan their wings over the cells. The moving air dries out the extra water.
4. It is their food for winter, when few flowers bloom.
5. Because one bee makes so little honey, the bees must work together as a big team to fill the hive.

Square: How Bees Make Honey

Harder · 174 words · Flesch-Kincaid grade 8.6

1. Nectar, a sugary liquid.
2. In a specialized honey stomach, separate from the stomach it uses to digest its own food.
3. They fan their wings rapidly over the cells, and the circulating air evaporates the extra water.
4. It is the colony's food for winter, when few flowers bloom.
5. Since one bee produces so little honey, the bees must cooperate as an enormous team to fill the hive.