

Hive Heat Helpers

Read closely to track how details build a central idea.

5.DSR.B "Proficiently read and comprehend a variety of literary and informational texts that exhibit complexity at the higher range of the grades 4-5 band (See the Quantitative and Qualitative Analysis charts for determining complexity in the...)"

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline three details that explain how bees keep a hive cool. Circle the sentence that explains why the bees must work as a group.

Cooling a Hive

- ① On a hot summer day, a honey bee colony can keep the inside of its hive near 95 degrees Fahrenheit, even when the air outside is much warmer. This matters because developing bees grow best within a narrow temperature range. Thousands of workers share the job, responding to heat before wax combs soften or young bees are harmed.
- ② Some workers stand near the hive entrance and beat their wings rapidly. The moving air carries heat away, much as a fan can cool a person. Other workers collect water and spread tiny drops inside the hive. As the water evaporates, it takes in heat from nearby surfaces, lowering the temperature. Bees may also move crowded groups away from the warmest areas.
- ③ These actions work because a colony behaves like a coordinated group rather than a collection of separate insects. No single bee controls the whole effort. Instead, workers react to cues such as rising heat and changes in the air. If a heat wave lasts for many days, however, bees must use extra energy and water, which can make the colony's task harder.

2 ANSWER WITH EVIDENCE Use the passage

1 What central idea does the passage develop about honey bee colonies?

2 How do the details in paragraph 2 support the idea that bees work as a coordinated group?

3 What does the phrase "a narrow temperature range" mean in paragraph 1?

4 Why can a heat wave that lasts many days make cooling the hive harder for a colony?

3 YOUR TURN Your own words

Write exactly three sentences, using 40 to 60 words. State the central idea, include two details from the passage, and explain how the details are connected.

PART 1 • READ AND MARK

Underline three details that explain how bees keep a hive cool. Circle the sentence that explains why the bees must work as a group. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What central idea does the passage develop about honey bee colonies?	Honey bee colonies keep their hives cool by working together in several ways.
2	How do the details in paragraph 2 support the idea that bees work as a coordinated group?	Different workers fan, collect and spread water, and move bees away from warmer areas to lower the hive's temperature.
3	What does the phrase "a narrow temperature range" mean in paragraph 1?	It means a small span of temperatures that is best for developing bees.
4	Why can a heat wave that lasts many days make cooling the hive harder for a colony?	The bees must use extra energy and water for a longer time.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Honey bee colonies control hive temperature by working together in several ways. Workers fan at the entrance to move heat away, while other workers spread water whose evaporation removes heat. These methods show that the colony depends on different bees responding to the same problem rather than on one leader.

Accept equivalent statements of the central idea that include cooperation and cooling the hive. For the open response, accept any accurate two details and a clear explanation of how the details support the central idea.