Name: _____ Date: _____

Inside the Hive with a Beekeeper

Circle group

On a warm morning, a beekeeper lights a small can called a smoker. The beekeeper puffs cool smoke at the hive door and lifts the lid. The smoke calms the bees. A veil and gloves guard against the few that still mind. Then the careful check begins.

A colony lives in a stack of wooden boxes with hanging frames. Each frame lifts out by itself, so the beekeeper can look at it without wrecking anything. The first goal is to find signs of the queen, the one bee that lays eggs. Often the beekeeper does not see the queen but finds fresh eggs. This shows she is at work. Next the beekeeper checks the brood, which are young bees growing in sealed cells. The beekeeper also checks the honey and pollen the colony needs to live.

Beekeepers watch for trouble. A crowded hive may swarm. That means part of the colony leaves with the old queen to find a new home. A beekeeper can add another box to give the bees more room. Signs of disease or pests, such as mites, must be found early.

At harvest, beekeepers take only the extra honey. They cut the wax caps off the full frames and spin them in a machine. The honey flies out, and the comb is not harmed, so the bees can use it again. Careful beekeepers leave enough honey to feed the colony in the cold months.

Questions

1. Why does a beekeeper puff smoke at the hive?

_____

_____

2. What is the queen's job in the colony?

_____

_____

3. What might a beekeeper find if the queen is not seen?

_____

_____

4. What does it mean when a hive swarms?

_____

_____

5. How can a beekeeper stop a crowded hive from swarming?

_____

_____

6. Why is it smart to spin honey out of the frames instead of cutting the comb away?

_____

_____

7. Why do careful beekeepers leave some honey in the hive?

_____

_____

Words to know

colony: a large group of insects living and working together
brood: young bees that are still growing in their cells
swarm: when part of a bee colony leaves to start a new home
comb: the wax cells where bees store honey and raise young

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: _____

Inside the Hive with a Beekeeper

Triangle group

On a warm morning, a beekeeper lights a small can called a smoker, puffs cool smoke at the entrance of a hive, and lifts the lid. The smoke calms the bees, and the veil and gloves the beekeeper wears protect against the few that still object. Then the careful inspection begins.

A typical colony lives in a stack of wooden boxes that hold hanging frames. Each frame can be lifted out on its own, so the beekeeper can study it without tearing anything apart. The first thing to look for is evidence of the queen, the single egg-laying bee in the colony. Often the beekeeper does not spot the queen herself but finds fresh eggs, which show she is at work. Next comes a check of the brood, the young bees growing in sealed cells, and of the stores of honey and pollen that the colony will need to survive.

Beekeepers also watch for problems. A crowded hive may prepare to swarm, which means that part of the colony would leave with the old queen to find a new home. To prevent this, a beekeeper can add another box so the bees have more room. Signs of disease or pests, such as mites, must be caught early.

When honey is harvested, beekeepers take only the extra. They uncap the wax from the full frames and spin them in a machine that flings the honey out, leaving the comb undamaged so the bees can use it again. Careful beekeepers always leave enough honey behind to feed the colony through the cold months.

Questions

1. Why does a beekeeper puff smoke at the hive?

_____

_____

2. What is the queen's job in the colony?

_____

_____

3. What might a beekeeper find if the queen herself is not seen?

_____

_____

4. What does it mean when a hive swarms?

_____

_____

5. How can a beekeeper keep a crowded hive from swarming?

_____

_____

6. Why is it smart to spin honey out of the frames instead of cutting the comb away?

_____

_____

7. Why do careful beekeepers leave some honey in the hive?

_____

_____

Words to know

inspection: a careful look to check that everything is fine
colony: a large group of insects living and working together
brood: young bees that are still growing in their cells
swarm: when part of a bee colony leaves to start a new home
comb: the wax cells where bees store honey and raise young

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: _____

Inside the Hive with a Beekeeper

Square group

On a warm morning, a beekeeper lights a small can called a smoker, puffs a stream of cool smoke at the entrance of the hive, and lifts the lid. The smoke calms the bees, while the veil and gloves that the beekeeper wears offer protection against the few that still object to the intrusion. Only then does the careful inspection begin.

A typical colony lives in a tall stack of wooden boxes that hold hanging frames. Each frame can be lifted out individually, which allows the beekeeper to examine it thoroughly without tearing anything apart. The first priority is to look for evidence of the queen, the single egg-laying bee in the entire colony. Frequently the beekeeper never spots the queen herself but instead discovers fresh eggs, which prove that she is hard at work. Next comes a check of the brood, the young bees growing in sealed cells, and of the stores of honey and pollen that the colony will require in order to survive.

Beekeepers also remain alert for problems. A crowded hive may prepare to swarm, which means that part of the colony would depart with the old queen in search of a new home. To discourage this, a beekeeper can add another box so that the bees have more room. Signs of disease or pests, such as mites, must be caught early before they spread.

When honey is harvested, beekeepers take only the surplus. They slice the wax caps from the full frames and spin them in a machine that flings the honey outward, leaving the comb undamaged so that the bees can use it again. Responsible beekeepers always leave enough honey behind to feed the colony through the cold months of winter.

Questions

1. Why does a beekeeper puff smoke at the entrance of the hive?

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_____

2. What is the queen's job in the colony?

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_____

3. What might a beekeeper discover if the queen herself is never spotted?

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_____

4. What does it mean when a hive swarms?

_____

_____

5. How can a beekeeper discourage a crowded hive from swarming?

_____

_____

6. Why is it wise to spin honey out of the frames rather than cut the comb away?

_____

_____

7. Why do responsible beekeepers leave some honey behind?

_____

_____

Words to know

inspection: a careful look to check that everything is fine
colony: a large group of insects living and working together
brood: young bees that are still growing in their cells
swarm: when part of a bee colony leaves to start a new home
comb: the wax cells where bees store honey and raise young

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: Inside the Hive with a Beekeeper

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

Circle: Inside the Hive with a Beekeeper

Easier · 238 words · Flesch-Kincaid grade 3.9

1. The smoke calms the bees.
2. She is the one bee that lays eggs.
3. Fresh eggs, which show she is at work.
4. Part of the colony leaves with the old queen to find a new home.
5. Add another box to give the bees more room.
6. The comb is not harmed, so the bees can use it again.
7. The colony needs it for food in the cold months.

Triangle: Inside the Hive with a Beekeeper

This passage · 262 words · Flesch-Kincaid grade 6.9

1. The smoke calms the bees.
2. She is the single bee that lays eggs.
3. Fresh eggs, which show she is at work.
4. Part of the colony leaves with the old queen to find a new home.
5. Add another box so the bees have more room.
6. The comb stays undamaged, so the bees can use it again.
7. The colony needs it for food through the cold months.

Square: Inside the Hive with a Beekeeper

Harder · 288 words · Flesch-Kincaid grade 8.5

1. The smoke calms the bees.
2. She is the single bee in the colony that lays eggs.
3. Fresh eggs, which prove she is hard at work.
4. Part of the colony departs with the old queen in search of a new home.
5. By adding another box so that the bees have more room.
6. The comb stays undamaged, so the bees can use it again.
7. The colony needs it for food through the cold months of winter.