## Home Education

## All About Bees

## Activity Booklet



## The Life Cycle of the Bee

## Instructions

1. Cut around the circle below with scissors. Carefully cut out the two white sections labelled "Cut Out."
2. Carefully make a hole in the centre of the circle. You might like to gently press a pencil through the paper to make this hole.


## Instructions

1. Carefully cut around the outside of the circle below with scissors.
2. Carefully make a hole in the centre of the circle. Thread a split or brad pin through the hole and secure. Spin the arrow to see each life-cycle stage.



## All About Bees

## Amazing Fact:

Bees communicate by dancing! Worker bees perform a waggle dance to tell other bees where to fly to find nectar and pollen.


| insects | avocados | colonies | invertebrates | queen | eggs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| drones | worker | stingers | pollen | abdomen | orange |

## Challenge:

Find the missing words to complete these sentences.
Bees are $\qquad$ . Like all insects, bees are
have six legs and three body parts. They have a head, thorax, and an —. While most people identify bees by their yellow and black abdomens, bees come in many colours. They can be black, white, red, —_ , green, blue, and even purple! Bees are social insects and they live in groups called $\qquad$ . Each bee has a job. The queen bee is the largest bee in the hive. Her job is to lay and she can lay up to 3000 eggs a day! Male bees are called
Drones rarely leave the hive and do not have Their job is to fertilize the eggs to make more bees! $\qquad$ bees are all female. They have many jobs including feeding, cleaning, and making wax, but their most important job is to find and collect nectar and pollen. Bees are important pollinators. They help plants to grow by carrying from one flower to another. Bees pollinate many fruits and vegetables including apples, bananas, $\qquad$ , and more!


## Build A Hexagon

Bee Honeycomb is hexagonal in shape. Use matchsticks to make these hexagon patterns:


## Challenge:

1. Build the next 2 patterns in the sequence.
2. Complete the table. Predict and test the number of sticks for 8 and 10 hexagons, then predict the number of sticks for 12 and 20 hexagons.

| Number of <br> hexagons | $\mathbf{1}$ | 2 | 3 | 4 | 5 | 8 | 10 | 12 | 20 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of <br> sticks |  |  |  |  |  |  |  |  |  |

## Extra Challenge

Can you write an algebraic expression for the number of sticks for $n$ hexagons?

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$n$ q $1 a \operatorname{a} j z a f a \operatorname{si}$ $t e r c r i c k e t c$ $x \quad c \quad z \quad i \quad q \quad r \quad u \quad w \quad t \quad z \quad n \quad y$ $i \quad c \quad d \quad b \quad u \quad t \quad t \quad e \quad r \quad f l y$ b $n \mathrm{~b} e \mathrm{e} \mathrm{t}$ lefje $q \quad b \quad e \quad b \quad y \quad m \quad y \quad n \quad b \quad a$ $l g r a s i s o p p e r$ s $p i d e r g h \quad p j w w$ 0 of $h$ h a $\mathrm{t} k \mathrm{~m}$ la i b i q j r o l j h q s g $g \quad z u d \quad m \quad h \quad z \quad h \quad o \quad p \quad p$
butter fly
earwig
bee
grasshopper
cricket
dragonfly
beetle
ant
wasp
moth cockroach spider

## How Honey Is Made

## Amazing Fact

Honey found in the tombs of Egyptian pharaohs has been tasted by archaeologists and found to be edible. If stored properly in a sealed jar, there is no reason why honey could not last forever.

## Challenge

Find out how honey is made and record your findings in the flow chart below.

Where does the process begin?
Where does the process finish?
What people, animals and equipment are required?


You could also try to find out:

- what makes honey so special;
- which other foods from history have been sampled without ill effects;
- how honey is made;
- which drinks have been kept unopened for the longest.



# Home Education 

 All About BeesActivity Booklet

Answers


## All About Bees: Answers

| insects | avocados | colonies | invertebrates | queen | eggs |
| :---: | :--- | :---: | :---: | :---: | :---: |
| drones | worker | stingers | pollen | abdomen | orange |

Bees are insects. Like all insects, bees are invertebrates and have six legs and three body parts. They have a head, thorax, and an abdomen. While most people identify bees by their yellow and black abdomens, bees come in many colours. They can be black, white, red, orange, green, blue, and even purple! Bees are social insects and they live in groups called colonies. Each bee has a job. The queen bee is the largest bee in the hive. Her job is to lay eggs and she can lay up to 3000 eggs a day! Male bees are called drones. Drones rarely leave the hive and do not have stingers. Their job is to fertilize the eggs to make more bees! Worker bees are all female. They have many jobs including feeding, cleaning, and making wax, but their most important job is to find and collect nectar and pollen. Bees are important pollinators. They help plants to grow by carrying pollen from one flower to another. Bees pollinate many fruits and vegetables including apples, bananas, avocados, and more!

## Build a Hexagon: Answers

| Number of <br> hexagons | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{8}$ | $\mathbf{1 0}$ | $\mathbf{1 2}$ | $\mathbf{2 0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> sticks | 6 | 11 | 16 | 21 | 26 | 41 | 51 | 61 | 101 |

## Challenge (Year 6)

Number of sticks $=5 n+1$

Minibeast Word Search Answers


