



Incredible Insects

Activity Book for All Ages

Protect Insects, Protect Birds

While some people may shriek at the sight of these tiny creatures (and rightfully so because our brains confuse fear with disgust, and some insects are actually harmful to us), they are an important delicacy for birds. For our dazzling hummingbirds, our captivating todies, swooping swifts and swallows, darting flycatchers, pewees and potoos, drilling woodpeckers, and many other birds—insects are an essential protein source. They keep up birds' energy and body mass, and are also critical for nurturing healthy baby birds.

Unfortunately insect populations are declining across the world. Loss of natural areas like forests and grasslands that have been converted or degraded by intensive agriculture as well as urban development and pesticide use have all contributed to this downward population trend.

In 2024 the Caribbean Endemic Bird Festival (CEBF) will focus on the importance of insects to Caribbean birds and people. The CEBF is an annual regional celebration of birds that are found only in the Caribbean. Participating islands host birding walks, bird fairs, presentations, habitat clean-ups and reforestation events to raise awareness of our endemic birds, and of actions their communities can take to be more bird friendly.

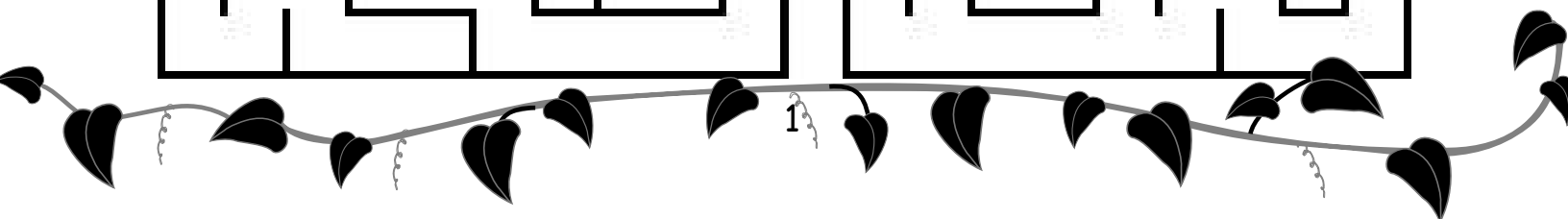
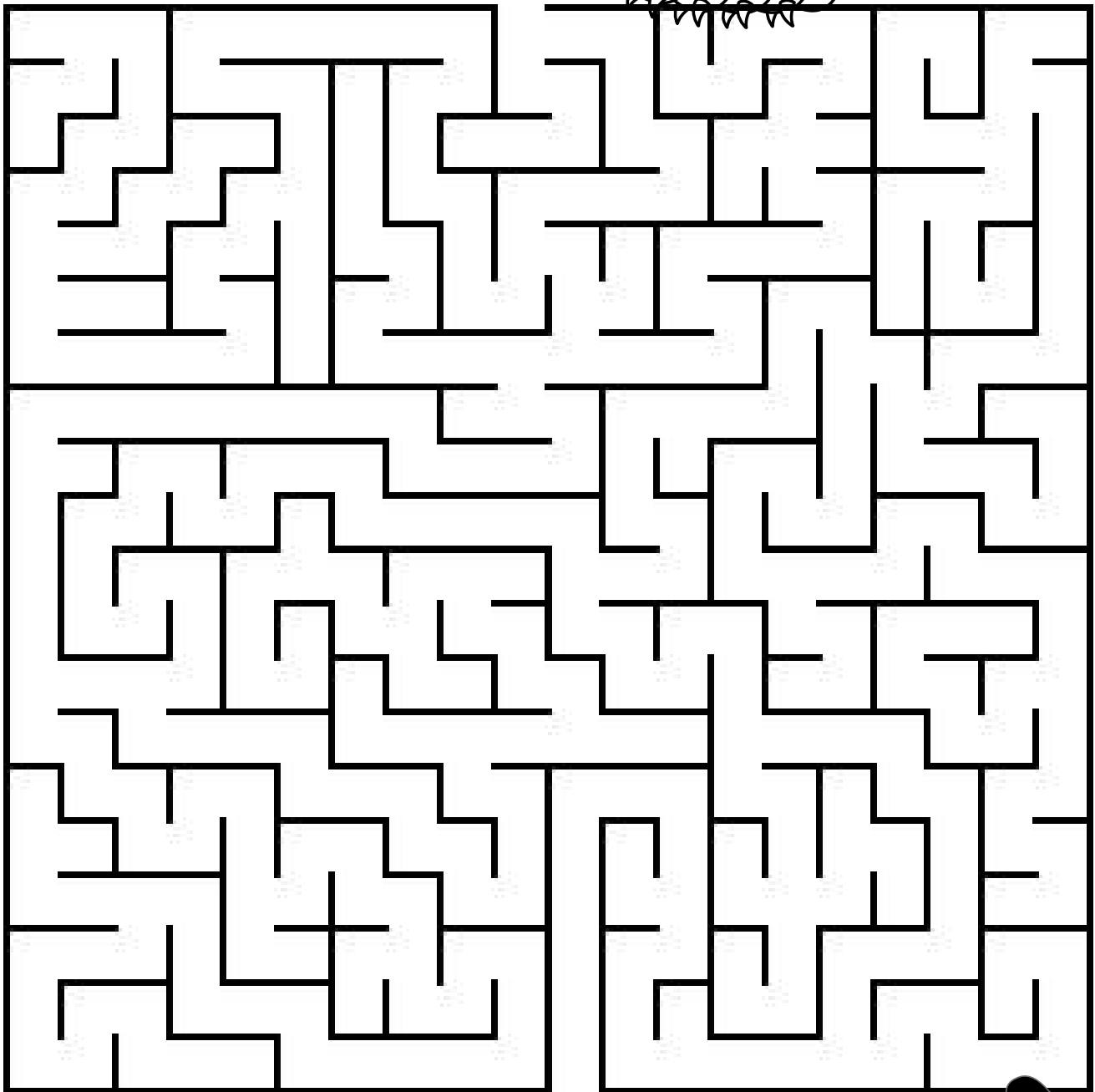
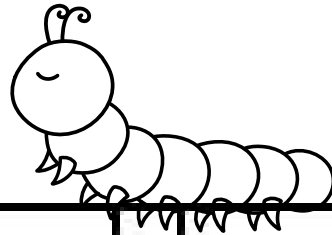
We hope you enjoy learning about the super cool bugs, insects, and spiders, right in your own backyard or school yard, through these activities!





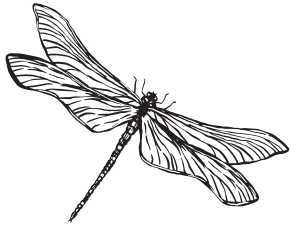
Insect Maze

This caterpillar is very hungry. Can you help it crawl through the maze so that it can munch on some plants? (Maze solution on page 14)

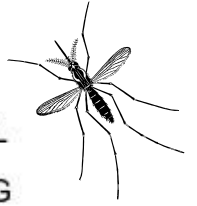




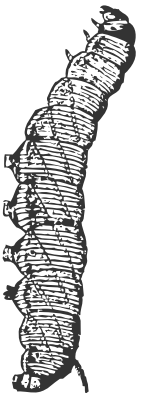
Insect Word Search



Circle the 15 words below. Words appear straight across, forward and backward, up and down, and diagonally. (Solution on page 15)



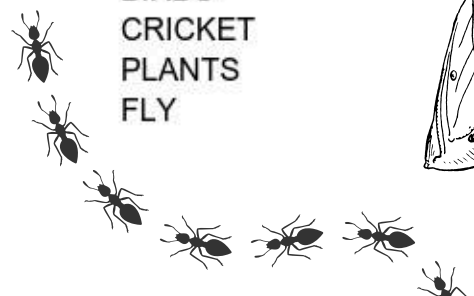
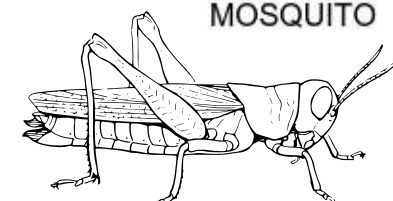
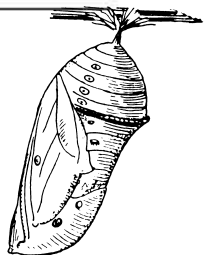
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ANT
 MOTH
 INSECTIVORES
 DRAGONFLY
 MOSQUITO


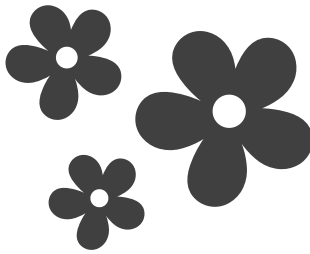
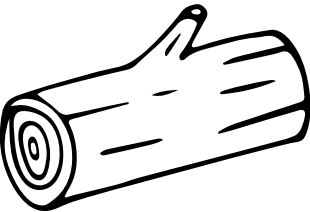

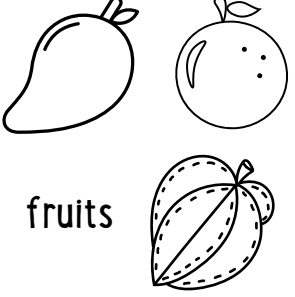
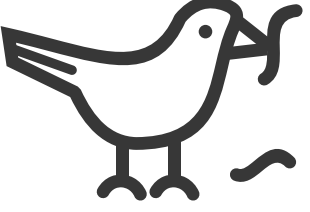

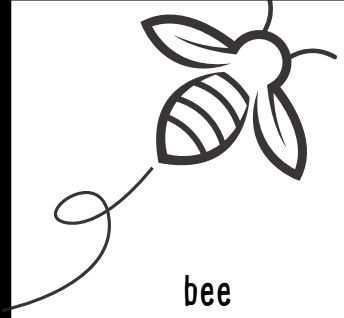

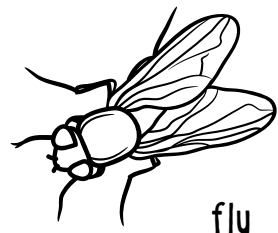

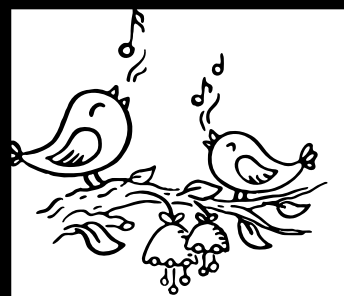
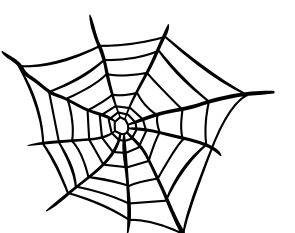



BEE
 INSECTS
 BEETLE
 SOIL
 GRASSHOPPER

BUTTERFLY
 BIRDS
 CRICKET
 PLANTS
 FLY

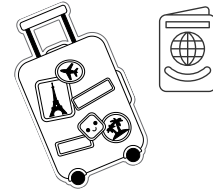
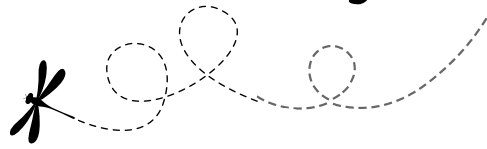


Bird & Bug Bingo

Go outside for a nature walk. As you walk outside search for the items listed below. Spot four (4) in a row and you've got BINGO!

 <p>bird flying</p>	 <p>flower</p>	 <p>log</p>	 <p>bird walking</p>
 <p>fruits</p>	 <p>bird eating</p>	 <p>butterfly</p>	 <p>bee</p>
 <p>ants walking in a line</p>	 <p>fly</p>	 <p>y-shaped branch</p>	 <p>birds calling</p>
 <p>spider web</p>	 <p>grasshopper</p>	 <p>caterpillar eating a leaf</p>	 <p>bird nest</p>

Build a Bug Hotel



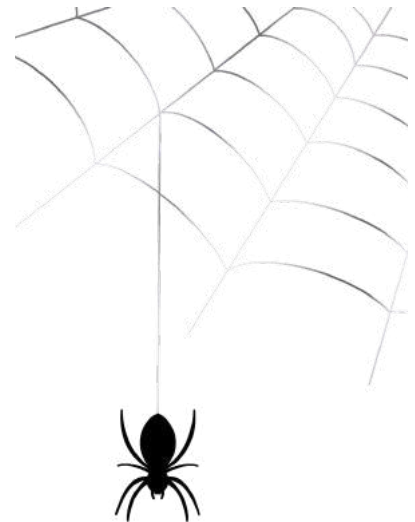
You will need a parent or trusted adult to help you with this activity !

A bug hotel, also called an insect hotel, is a wooden structure designed to provide a safe and cozy shelter for insects.

Bug hotels are a great addition to your garden. They attract and protect bugs that keep your plants healthy. They also provide a fun way to increase biodiversity right in your backyard or community garden!

Here's what you'll need:

- Toilet paper rolls
- Shoe box (without lid) or milk carton
- Paint brushes
- Acrylic paint- insects are attracted to white, yellow and orange
- Waterproof sealer
- Black dot stickers or black paint
- Large paper straws or rolled-up pieces of paper
- Moss
- Dried grass
- Twigs
- Leaves
- Stones
- Rolled paper
- Natural pine cones (optional)
- Craft knife (optional)



Let's Start Building!

1. Paint the outside of the shoe box white, yellow, or orange, or you can totally get creative and use all the colors. Set aside to dry. If you are using a milk carton, cut a large opening on one side using the craft knife, then paint.
2. Decorate with black dot stickers or paint with black paint so that it looks like a ladybug.
3. Seal the paint with waterproof sealer, especially if your bug hotel will be placed outside where it can get wet.
4. Place toilet paper rolls into shoe box (as shown in the picture on the next page)
5. Start by adding some dried grass or moss around the sides of the rolls and in the back of the shoe box.



6. Continue to fill in the spaces around the rolls with rocks, dried grass, sticks, and pine cones or moss so that the rolls won't fall out of the box.

7. Then start to fill each toilet paper roll. Fill one with moss, another with sticks, another with rolled up pieces of paper, another with more moss, another with pine cones, and another with cut paper straws. Fill another with twigs. Fill another with pebbles.

8. Your hotel will need a sign. You can make a sign out of cardboard reading BUG HOTEL! or BUGS WELCOME! or [Add your name]'s BUG HOTEL!

9. Place it outside and watch ants, ladybugs and spiders move in !



Completed Bug Hotel. www.happytoddlerplaytime.com

What do ants like to eat?

You will need a parent or trusted adult to help you with this activity !

Ants are **omnivores**, meaning they eat both plants and animals. They eat fruits, leaves, vegetables, dead insects (like worms and spiders), parts of dead animals, nectar, and even seeds. But different kinds of ants like different kinds of food.

When you are hungry what do you like to eat? Pizza, hot dogs, fruits?

Write your answer here: _____

Now that you've answered this question. What do you think ants prefer to eat? In this experiment you're going to find out which foods the ants in your backyard or school yard love best.



Materials:

- five small paper plates
- orange (or other fruit like pineapple or watermelon)
- carrot
- bread crumbs
- cheese
- cookie
- printed results table on page
- pencil
- clock
- knife

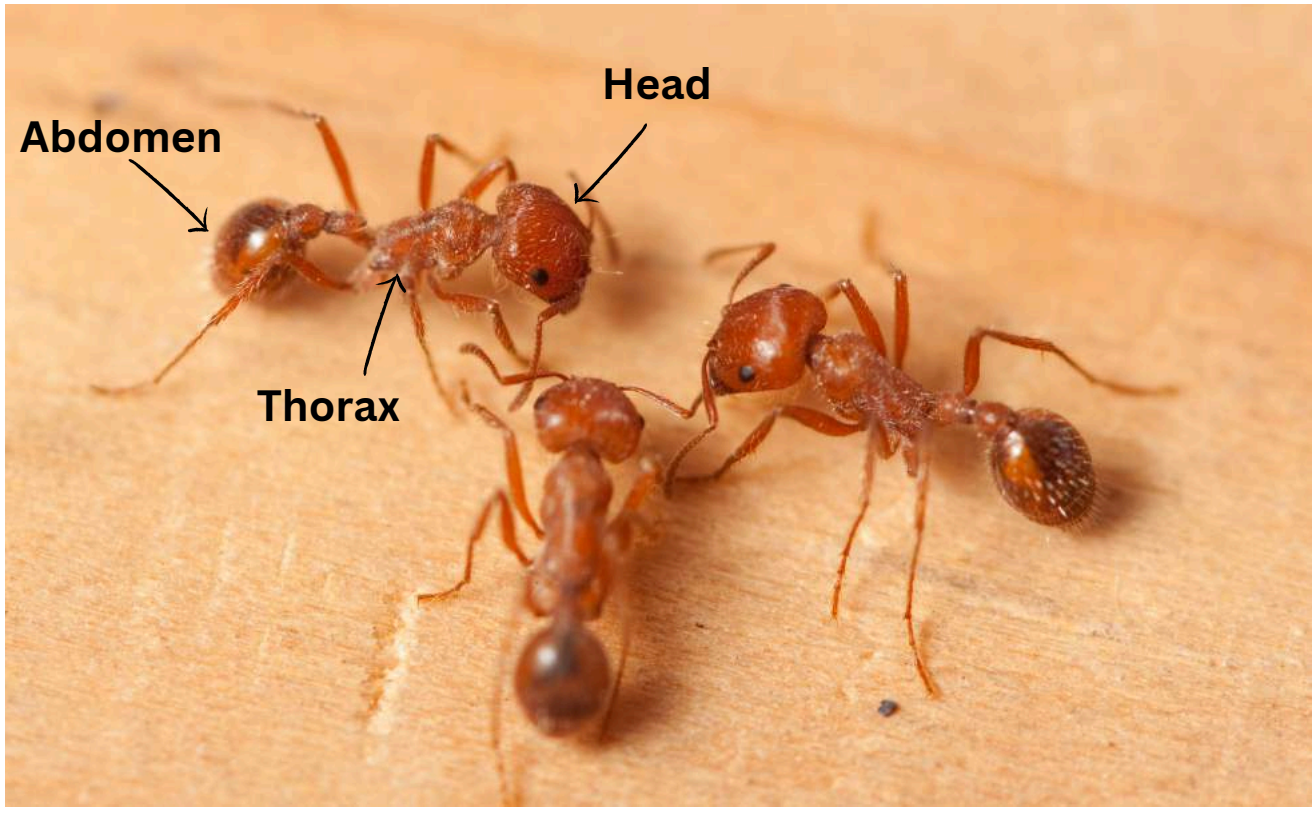


Procedure:

1. Set out five small paper plates.
2. Put a cookie on one plate, a slice of orange (or other fruit) on the second, a piece of bread on the third, a carrot on a fourth, and a piece of cheese on a fifth. Try to make sure that the pieces of food are about the same size.
3. Find an anthill that seems to contain many ants. Make sure that the anthill does not contain fire ants or leaf cutter ants. Their sting/bite can hurt a lot! Fire ants have a reddish-brown head and thorax and dark abdomen. Leaf cutter ants are reddish-brown with 'spines' on their thorax which they use to transport pieces of leaves on their backs (see page 3).






4. Place the five plates near the anthill.
5. Leave the area for about an hour.
6. When you come back, count the number of ants on each plate - DO NOT TOUCH THE ANTS, and write in the results into the printed results table.
7. Repeat the previous step after 2 hours.
8. Calculate the averages of each row and insert them into the table.
9. Examine your data. Which foods did the ants like the best? The least? Why do you think that was so?

Fire ants.



Leaf cutter ant.



FOOD TYPE	NUMBER OF ANTS			
	1 HOUR	2 HOURS	TOTAL	AVERAGE
FRUIT 				
BREAD 				
CARROT 				
COOKIE 				
CHEESE 				

Which foods did the ants like

the best?

the least?

Why do you think that was so?

Meet the Insects

You will need a parent or trusted adult to help you with this activity !

A lot of birds eat fruits, seeds and even insects to survive. In this activity you will be introduced to some of the insects that are crawling, flying, and even munching on leaves in your own backyard!

Here's what you'll need:

- an old light colored bed sheet or towel
- a magnifying glass or mirror box (see page 12)
- garden gloves (optional)
- camera
- sheet of paper and pencil

Once you've got your sheet and magnifying glass/ mirror box, it's time to meet the insects!

Here's what you'll do:

1. Lay the sheet under a tree or plant and spread it out.
2. On your paper, write down the name of the tree.
3. Ask your parent or adult to shake the tree and the branches. They will have to give it a good vigorous shake!
4. Use the magnifying glass or mirror box* to take a closer look at whatever falls onto the sheet.

*You do not need to put the insect into the mirror box, just place the box next to it and let it crawl (or wiggle) in.

5. You can also take photos and upload them to an app like iNaturalist or the internet to help you identify the insects.

You don't need to touch or hold the insects.



6. Next, write down the names of the insects you have identified. It's okay if you are not able to identify all. Record the number of each insect seen on your paper.

7. Then, put the sheet under a different tree or plant and repeat steps 2-6.

8. When you're done, think about why one tree may have more or less insects than another.

For example:

Did native plants have more insects than non-native plants?

Were any of the plants treated for insects?

Were there any insects that didn't fall onto the sheet and why?



DIY- Mirror Box

You will need a parent or trusted adult to help you with this activity !

A magnifying glass is a good tool to use to look at insects. But a mirror box helps you to see insects from every angle. It's small, light and easy to take along with you on a walk to explore any interesting finds. The instructions below were taken from sunhatsandwellieboots.com.

Remember, you don't need to pick up the insect - let them crawl into the mirror box!

Here's what you'll need:

- an empty and clean small juice box (any small box would also work well)
- double-sided tape
- self adhesive mirror roll or sheets
- scissors
- silver gift paper

1. Open the box out flat and cut it in half. Keep the other half for later.
2. Cut a section of mirror roll and attach it to one side of the flattened box.
3. Once covered, cut around the previous folds at the bottom of the juice box to create the flaps (these will form the base of the box).
4. To recreate the box shape add double-sided tape to three of the flaps and to one side of the outer sides of the box.
5. Use the other half of the juice box to create the base by cutting a square the same size as the base of the box.
6. Cover it with self adhesive mirror and attach to the base of the box using the double-sided tape.
7. Cover the outside of the box with the silver gift paper.

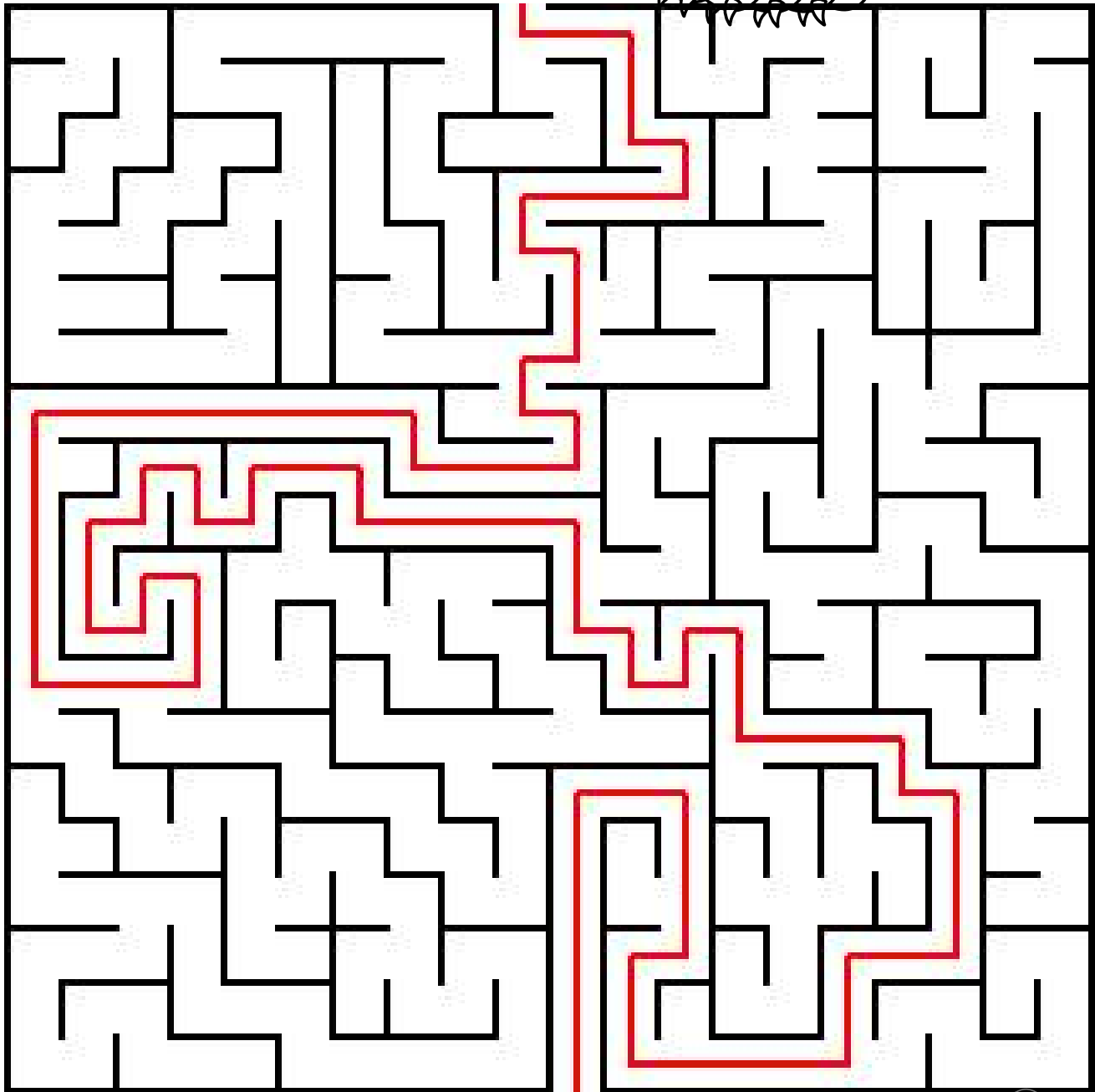
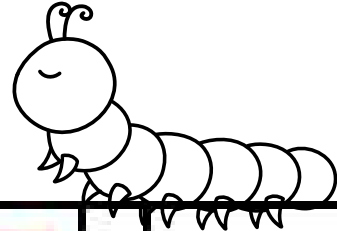


Using a mirror box to observe a ladybird. www.sunhatsandwellieboots.com



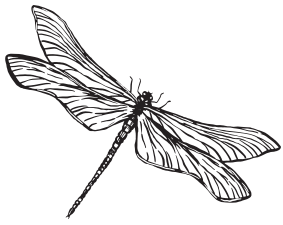
Insect Maze

This caterpillar is very hungry. Can you help it crawl through the maze so that it can munch on some plants?

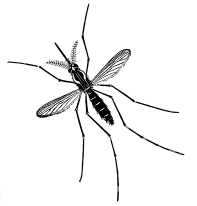




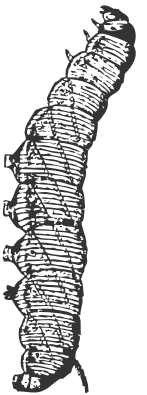
Insect Word Search



Circle the 15 words below. Words appear straight across, forward and backward, up and down, and diagonally.



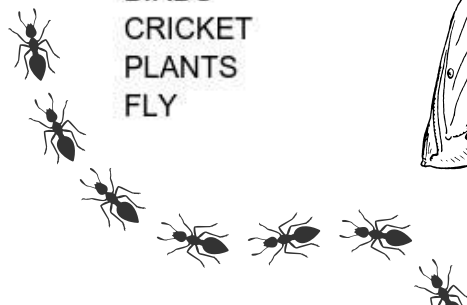
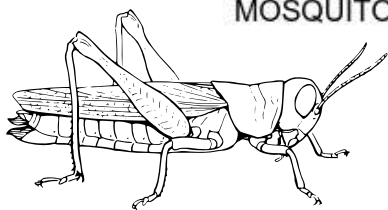
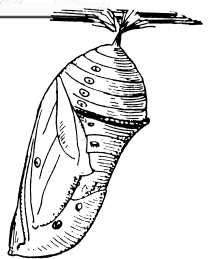
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ANT
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Birds Caribbean

Education • Conservation • Science • Action

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