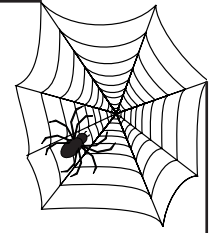


Comparing and Collecting Bugs



Content Area(s):

- reading and comprehension
- science
- research

Objectives:

In this section students:

- use resource materials to find required information.
- differentiate between insects and non-insects.
- identify insect homes.
- practice creating an image with bilateral symmetry.

Materials Required:

- library, computer, or other resource materials
- pencil or pen, old magazines, glue, scissors

Time:

- Approximately 30 minutes per lesson

Teaching Tips and Suggestions:

Which One is an Insect? (page 34)

- Review the attributes of insects (six legs, wings usually, and three body parts) before allowing students to do the activity. Have reference books, encyclopedias, or computers available for students to research creatures of which they are unsure.

Home Sweet Home (page 35)

- Take a nature walk and look for insect homes around the school or neighborhood.

The Same on Both Sides (page 36)

- Follow this with an art activity where you give each student a piece of paper with half of a butterfly shape printed in the middle. Have them fold it in half and cut. When they open it, both sides should be exactly the same shape. You may then assist children in putting drops of paint on one side. When the butterfly is folded over, pressed together, and opened up, both sides will be the same pattern, showing bilateral symmetry.

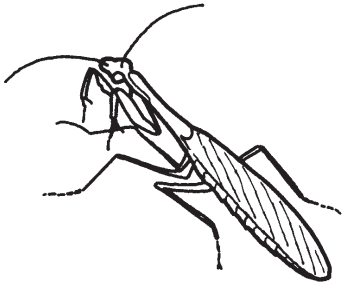
Bug Collection (page 37)

- Provide many magazines and reference books for children to use to find insect names.

Name _____

Which One is an Insect?

- * Use your library or other resources to help you complete this activity page.
- * Remember that all insects have three body parts (head, thorax, and abdomen) and three pairs of legs. Look at the list below. Decide which are insects and which are not insects.



earthworm
bee
lizard
aphid
crab
cockroach

butterfly
mouse
mosquito
housefly
spider
snail

earwig
scorpion
louse (lice)
hummingbird
cricket
centipede

INSECT

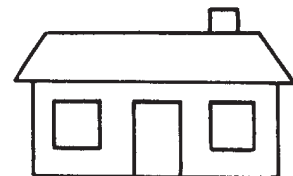
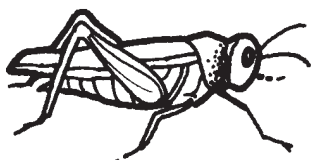
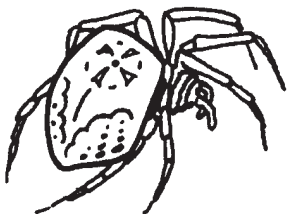
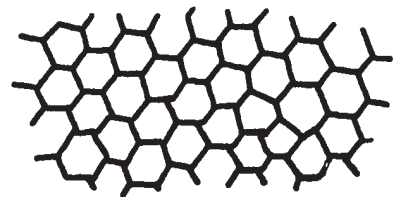
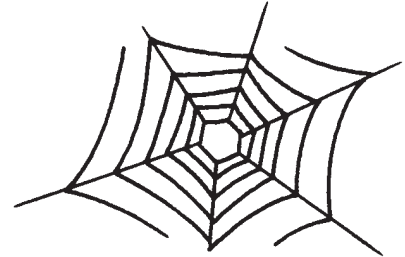
NOT AN INSECT

- * Now, write three of your own insects and three things that are not insects.

Name _____

Home Sweet Home

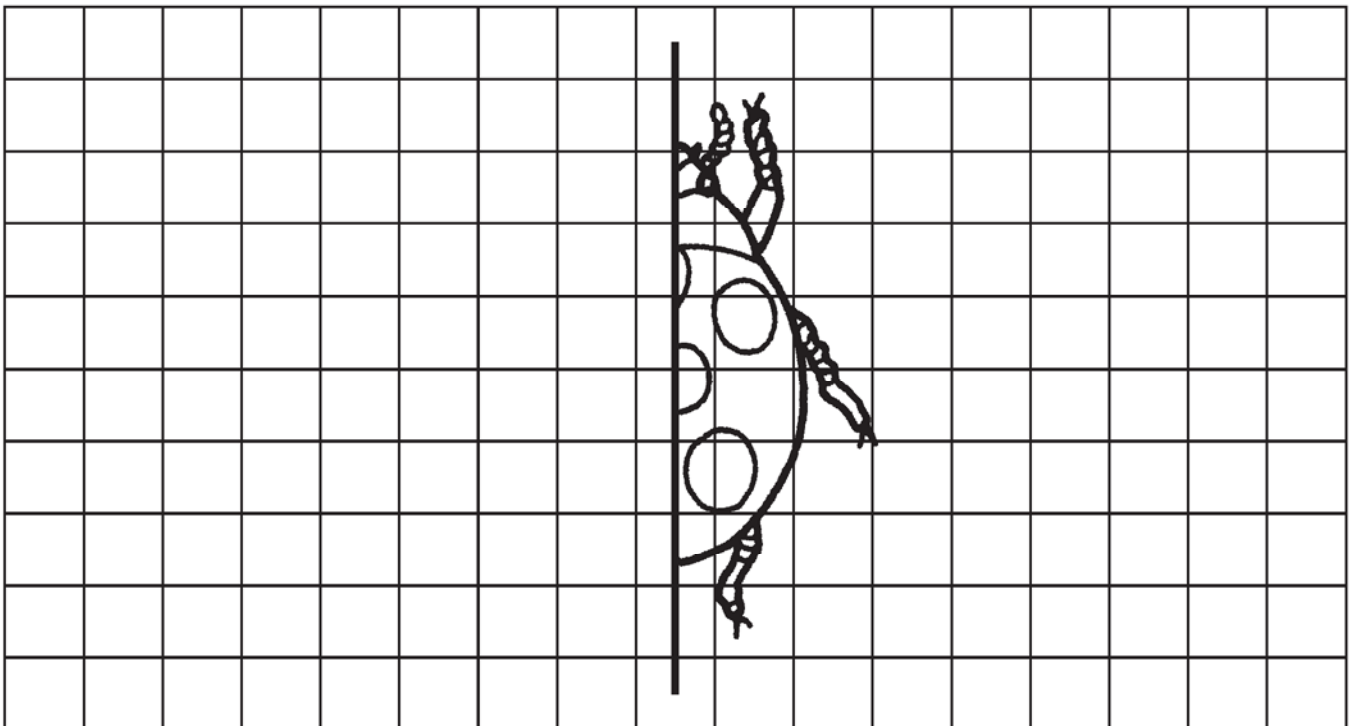
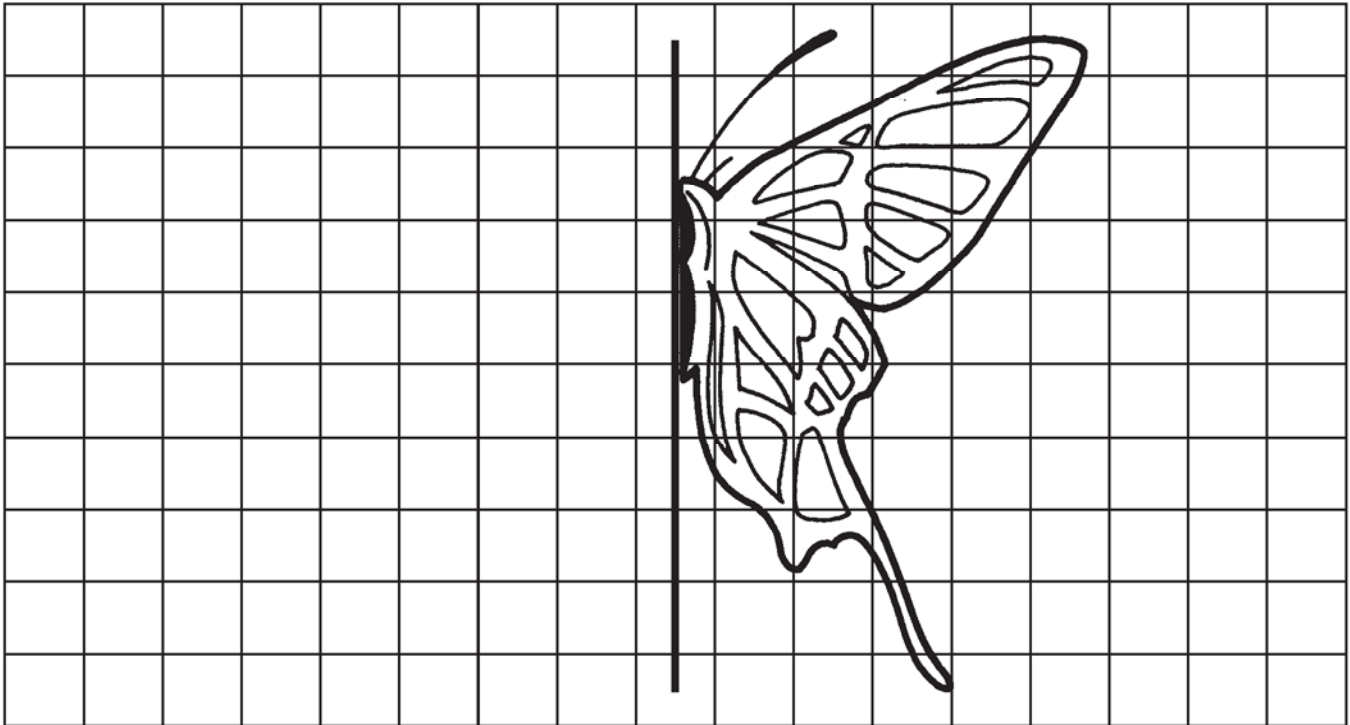
* Insects live in different types of homes. Find out what type of home each of these insects lives in. Draw a line from the insect to its home.



Name _____

The Same on Both Sides

* Insects have what we call bilateral symmetry. That means that they are exactly the same on both sides of their bodies. Draw the other half of each insect below to show the bilateral symmetry.



Name _____

Bug Collection



- * You will need old magazines, scissors, glue, and insect guides to complete this activity.
- * Cut out pictures of insects and glue them on this page. Then, label the insects. If you do not know what type of insect it is, use an insect guide to help you find out.

Answer Key (cont.)

Page 28—Hoppy to Know You

1. 100 feet; 2. lubber grasshoppers and locusts; 3. antennae; 4. katydids and mormon crickets; 5. green = trees and leaves, brown = grass and ground, sandy = beach; 6. five; 7. 40-60 days; 8. molting; 9. by rubbing their legs together.

Page 30—The Good, The Bad, and The Creepy

Ladybug = helpful: eats pests such as aphids; Bee = helpful: pollinates plants, harmful: stings; Termite = harmful: attacks furniture and wood; Fly = harmful: spreads germs; Butterfly = helpful: pollinates plants; Spider = helpful: eats other insect pests, harmful: bites.

Page 31—Yummy Bugs

Australia; boiled wasp larvae; Zaza-mushi; fried grasshopper; Bali; Answers will vary.

Page 32—Interesting Insects

1. Meganeura; 2. cockroaches; 3. 6,000–7,000; 4. one week; 5. back to back; 6. in a tent shape; 7. True; 8. True; 9. giant stick insect.

Page 34—Which One is an Insect?

Insect: aphid, butterfly, housefly, earwig, bee, cricket, cockroach, mosquito, louse; Not an Insect: earthworm, hummingbird, crab, mouse, spider, scorpion, lizard, snail, centipede.

Pages 35–37

Answers will vary

Page 39

M	O	S	Q	U	I	T	O	B	B	K
I	N	S	E	C	T	H	B	E	E	Q
P	U	P	A	B	D	O	M	E	N	E
H	W	I	N	G	S	R	A	T	N	W
E	A	R	W	I	G	A	F	L	E	A
A	N	T	J	S	I	X	L	E	G	S
D	R	A	G	O	N	F	L	Y	G	P
L	A	R	V	A	S	P	I	D	E	R
A	N	T	E	N	N	A	C	T	Z	X
L	A	D	Y	B	U	G	E	V	C	F
S	T	I	N	G	J	K	M	O	T	H

Page 40—Cross-Bug Puzzle

1. lice; 2. spider; 3. termite; 4. mosquito; 5. butterfly; 6. cricket; 7. flea; 8. moth; 9. ant; 10a. beetle; 10d. bee.

Page 42–46

Answers will vary.