

# Ultimate Bug-Opedia

## RIF EXTENSION ACTIVITIES FOR EDUCATORS

STEAM-THEMES: SCIENCE, TECHNOLOGY, ENGINEERING, ART, MATH



### SCIENCE

#### TAKE A BUG WALK

Materials: notebooks or clipboards, pencils

Take a walk outside to search for signs of bugs. Based on the information from the text, have students predict where they will find certain bugs. Once you see a bug or a habitat, have students make observations. What kind of bug is it? How big is it? How many legs does it have? Make a sketch. Have students record any observations. Be careful not to disturb the bugs in their natural habitat!



### TECHNOLOGY

#### BUG WATCH

Go to [www.neok12.com/video/Insects/zX5755657d7b020b785e710a.htm](http://www.neok12.com/video/Insects/zX5755657d7b020b785e710a.htm) to watch a leafcutter ant slice at leaves! Visit [www.neok12.com/video/Insects/zX415260057d4271777d000a.htm](http://www.neok12.com/video/Insects/zX415260057d4271777d000a.htm) to learn about the appetite of a mosquito! Or watch [www.neok12.com/video/Insects/zX5e7d1b0d66477a725e5c45.htm](http://www.neok12.com/video/Insects/zX5e7d1b0d66477a725e5c45.htm) to travel inside a beehive!

### ENGINEERING, WRITING

#### BUILD-A-BUG HABITAT

*Have students build a bug habitat to watch and learn about bugs! Once it's built, have them write down their observations. Have students share observations with a partner, then compare their observations to related facts in the Bug-Opedia.*

Materials: large empty plastic juice bottle (with a flat side); scissors; hot glue; scrap piece of window screen or tulle; small rocks, twigs, grass, etc.



Remove labels and wash juice bottle. Place bottle on its flat side and use scissors to create a small opening on the side facing up. Cut a piece of screen to overlap the opening by about ¼" around each edge. Use hot glue to secure the screen window to one side of the opening on the bottle. (DO NOT let students use hot glue unattended.) Place rocks and other natural materials inside bottle. Catch bugs in your bottle by putting it on the ground where the insects can climb in.

### ART

#### BUGGY ART

Materials: empty 16 oz. plastic bottles, paint, glue, construction paper, eyes, pipe cleaners, paper cups, paper plates, paint sponges, tissue paper, scrap paper, etc.

Have students sketch their very own insect. Provide them with a box of materials from which to choose to build their bugs!



### MATH

#### CREEPY CRAWLY MATH PROBLEMS

Use facts from the book to create word problems about bugs found within the text. Examples include:

- ◆ A few arachnids built their webs in a tree. If there are 40 legs, how many spiders are in the tree?
- ◆ Three caterpillars were in a tree eating leaves. If they ate 12 leaves, then how many leaves did each caterpillar eat?

After students solve your problems, have them use facts from the book to create at least 5 of their own problems. Let them trade problems with a partner and solve!

