



# AMAZING MIGHTY MICRO MONSTERS EDUCATION GUIDE

## SUPERPOWERS ARE ALL AROUND US . . . AND IT'S ALL THANKS TO BUGS

Welcome to a world where truth is infinitely stranger than fiction. *Amazing Mighty Micro Monsters* is a thrilling exploration of a realm that's close to ours yet rarely noticed, often puzzling and sometimes disturbing to our human sensibilities—the strange, weird, and wonderful world of **arthropods**. Students' innate curiosity about these mini monsters make them an excellent gateway to **STEM topics** as well as numerous opportunities for **cross-curricular connections** from geography to literacy.

Students will get a close-up view of these incredible organisms and their amazing adaptations and physical abilities. An Educator Guide is provided to support student learning and deepen content engagement.

Standards-based activities designed for use with students grades 3-5 before and after the film, with adaptations for younger and older students, will deepen student engagement with film topics. Additional activity ideas, organized by subject, can be used in museum, classroom, and home settings.

The Educator Guide activities address the following U.S. education standards and skills:

### National Standards

- National Science Education Standards
- Next Generation Science Standards
- Common Core State Standards for Mathematics
- Common Core State Standards for English Language Arts
- National Geography Standards

### Key Skills

- 21st Century Student Outcomes
- 21st Century Themes
- Critical Thinking Skills
- Science and Engineering Practices
- Geographic Skills



# ACTIVITY PREVIEWS

## WHAT IS AN ARTHROPOD?

Students act as entomologists to discover the difference between invertebrates and vertebrates, identify five key distinguishing features of insects, and apply what they learn to other arthropod groups.

## ECOSYSTEM

Students play a collaborative game to model predator-prey relationships. Afterward, students discuss why some organisms were more successful in the game than others, and develop their own “ecosystem” game models.

## INSECT INVENTORY

Students conduct a species inventory, using the scientific skills of observation and recording data, to identify arthropods that live in their local environment and draw a map of the study area. They also make and confirm predictions about biodiversity in their community.

## MIGHTY MICRO MONSTER MATH

Students calculate and graph the physical feats they would be able to perform if they were some of the insects featured in the film.

## The film features the following organisms:

aphid  
assassin bug  
bombardier beetle  
caterpillar/butterfly  
centipede  
goliath beetle  
green ant  
ogre-faced spider  
*Portia* spider  
praying mantis  
redback spider  
red claw scorpion  
trapdoor spider  
whirligig beetle

Activity adaptations for younger and older students address additional topics in science, technology, engineering, math, geography, and literacy.

