

STEM ACTIVITIES

The background is a solid dark blue. Scattered around the text are various white and light-colored icons representing STEM fields: a microscope on the left, a yellow beaker with bubbles on the right, a blue pencil on the right, a green test tube rack with three test tubes at the bottom, a yellow clipboard at the bottom, and an orange calculator at the bottom left. There are also several small orange and yellow circles floating around the icons.

(Mosquito Project)

Resources for Learning at Home for K - 10

By: Rachel Cotton, Dr. Usha Rajdev, Sarah Roegner
Marymount University (Faculty and Alumni)

Remember... Safety First!

Before attempting any experiments or hands on activities, make sure you have parent permission and are following all safety instructions! Remember science is not fun if you get hurt because you are not being safe!



Parents

Dear Parents and/or Family members:

In an effort to continue teaching and learning under the current COVID19 circumstances, we recognize the needs for parents, families, and students to conduct a variation of activities to enhance and motivate students learning from the homefront. **Please note some will require adult supervision. We leave this to your discretion.** Do try other grade levels for challenges.

This particular packet focuses on the Smithsonian's [Mosquito! Project](#). The focal point of this project is to have students learn about mosquito borne diseases as well as come up with a solution to help prevent the spread of those diseases.

Stay tuned for more activities and projects to follow.



RESOURCES BY GRADE

Click on the box with your child's grade to go to resources for that grade level.

K

1-2

3-4

5-6

7-8

9-10



Kindergarten

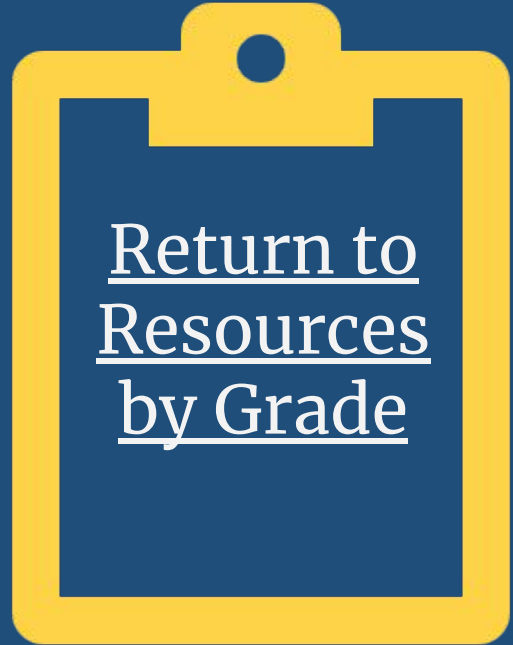
Websites

- Use [BUG BUILDER](#) to make your own bug! You can pick from different types of bugs or create your own.
- Songs about mosquitoes:
 - <https://www.youtube.com/watch?v=7GMICoXPAeE>
 - <https://www.youtube.com/watch?v=MysjjWYhfg4>
- Video about mosquitoes:
 - <https://www.youtube.com/watch?v=yhxWB3e3lKA>

Activity

Watch this video about a [bug hunt](#)

- Go on your own bug hunt
- Collect the bugs you find in a jar if parents say it's alright!
- What bugs did you find on your hunt?
- What was your favorite bug?
 - Draw a picture of your favorite bug you found and share it with a family member.
 - find a video to learn more about the bug you drew.



[Return to Resources by Grade](#)

First-Second

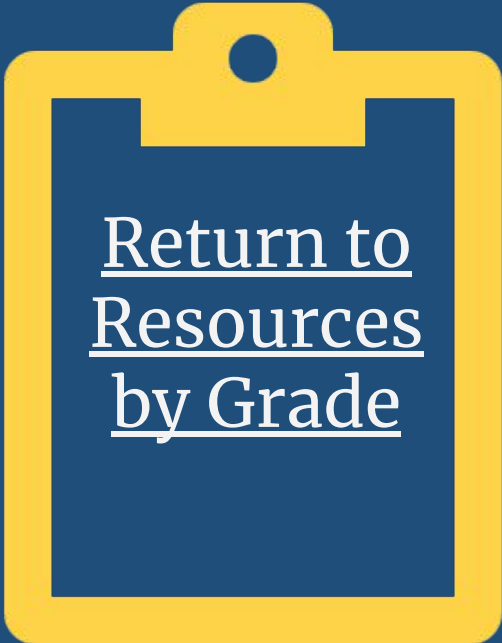
Websites

- Watch [this video](#) for some basic information about mosquitoes:
- Read about mosquitoes on this [cool website](#).
- This [resource](#) from Mystery science asks students to look at ways to prevent mosquitoes in 3 different areas.
- How to [draw a cartoon mosquito](#)

Activity

Mosquitoes are very annoying creatures and can cause people to get sick or even just really itchy!

- Create a [Venn Diagram](#) using the template or paper/yarn/string from your home comparing the life cycle of mosquitoes to the life cycle of something you have learned about in school
- Go outside and walk around your yard or your building
- Draw a picture of this place
- Are there places with stagnant(sitting) water?
- What could you do to make your house safe from mosquitoes?



[Return to Resources by Grade](#)

Third-Fourth

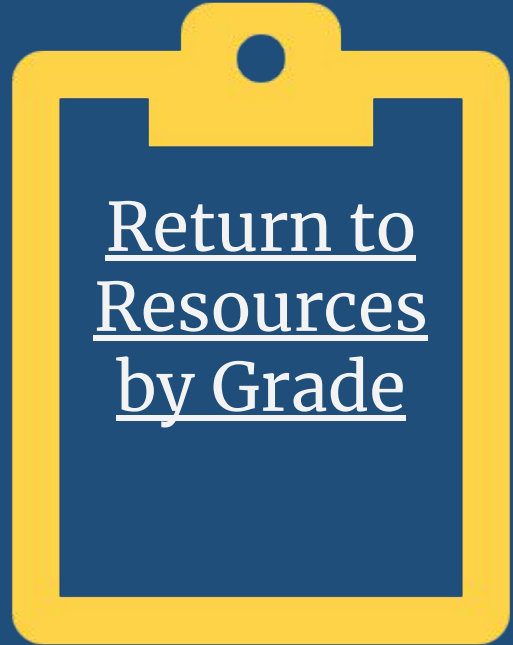
Websites

- Read the [article](#) to become more familiar with the mosquito and how to prevent the spread.
- Watch a [video](#) to learn about how a mosquito bites humans and the effect it can have on our bodies.
- Play a game called [Sort the Bugs](#) to help you see the differences between insects.
- The [Comparing Mosquitos](#) activity has the students compare the physical and behavioral characteristics of mosquitos.

Activity

After learning about mosquitoes and how they spread diseases, create a video or poster to share with others in your community on the dangers.

- Read about mosquitoes from [National Geographic Kids!](#)
- Do a little research using the websites on the left to build your knowledge of mosquitos.
- Create a video or poster to share what a mosquito is as well as how to prevent the spread of diseases they carry.



[Return to
Resources
by Grade](#)

Fifth-Sixth

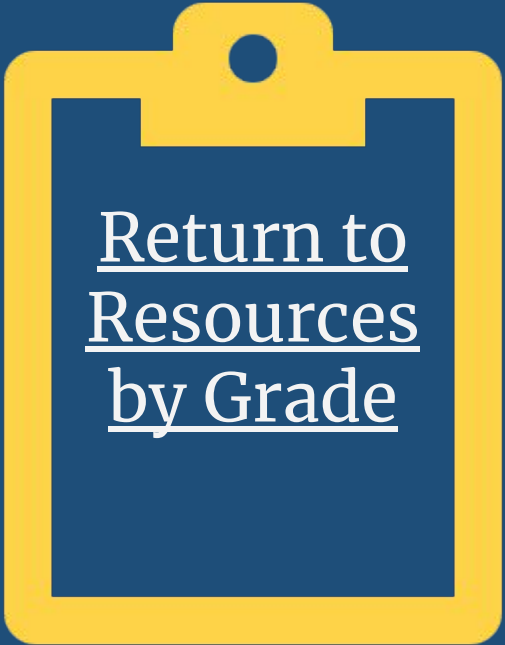
Websites

- Read about the [Top 15 Deadliest Animals](#) to understand how much impact the mosquito has on humans.
- Watch this [video](#) that will give more insight into mosquitos and the spread of diseases.
- Help identify and map the spread of mosquitoes using the [Mosquito Habitat Mapper](#) overview.

Activity

Help prevent the spread of mosquitoes by creating your own mosquito trap for your area.

- Watch this [video](#) on common ways to get rid of mosquitoes.
- Research the way [others](#) have tried to collect mosquito.
- Create your own “trap” to help track the mosquitoes.
- Test your device in your community. Improve your design to get the best results.



[Return to
Resources
by Grade](#)

Seventh-Eighth

Activity

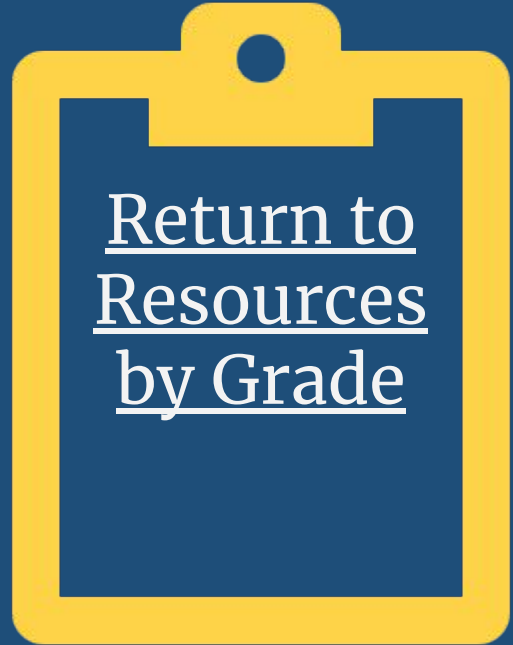
Research the two mosquito borne diseases: [Malaria](#) and [Zika Virus](#). As you research, ask yourself:

- What is the difference between the two?
- What part of the world gets infected by the virus?
- Is one more dangerous than the other?
- Where do mosquitoes live and breed?

Watch the video: [Why Are Mosquitoes Attracted To You?](#) Find out if genetics could impact how much mosquitoes bite a particular person.

Use this step-by-step [tutorial](#) to draw and label the parts of a mosquito.

Play [Zika Bingo](#) online with a friend.



[Return to
Resources
by Grade](#)

Ninth-Tenth

Activity

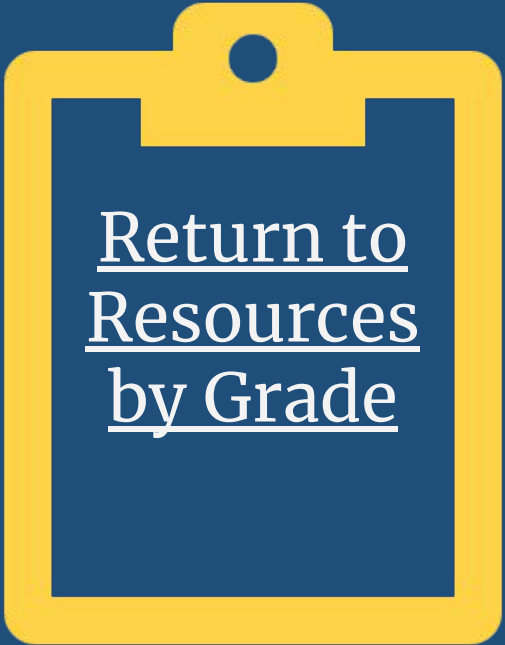
Learn about the two mosquito borne diseases: [Dengue](#) and [West Nile Virus](#). As you research, ask yourself:

- What is the difference between the two?
- What part of the world gets infected with these two viruses?
- Is one more dangerous than the other? If so, how?

Watch the video on [How Mosquitoes Spread Viruses](#). How is this different from COVID19? Compare Covid19 v Mosquito borne diseases.

- Research your surroundings and find possible areas vulnerable to breeding mosquitoes [Task 2-1](#). Ensure you stay within the limits of allowance for COVID19
- Build a mosquito trap and capture the larvae using [Task 3-1](#).
- How would you get rid of the collected larvae?

VA Standard of Learning Connection: Biology 5 (e) human health issues, human anatomy, body systems, and life functions; and (f) how viruses compare with organisms.



[Return to
Resources
by Grade](#)