

The WorldStrides Curriculum and Academics Team wants to share several of their favorite Smithsonian science resources, taken straight from the Smithsonian Learning Lab ([learninglab.si.edu](https://learninglab.si.edu)). These resources are perfect to supplement your at-home instruction and will allow your students to connect with some of the most interesting artifacts and exhibits found at the Smithsonian Museums.

### How Things Fly

What makes an airplane fly? How does a spacecraft stay in orbit? Why does a balloon float in the air? Check out the, "How Things Fly" pages from the Smithsonian National Air and Space Museum! This interactive site discusses forces, air, aerodynamics, propulsion, design, and flight dynamics. You can even test your knowledge with quizzes and easy experiments. Now is a great time to get outside and try out your paper airplane skills!



**Check it out!**

WEBSITE: [howthingsfly.si.edu](https://howthingsfly.si.edu)

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### Gravity Illustrated Through Free Fall

Want to learn more about the force of gravity? Check out these fun experiments that can be completed at home! What other activities could you do to illustrate the effects of gravity? Take some photos or videos and share how gravity is at work with each experiment. What factors are influencing the free fall?

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### STEM in 30

Have you ever been curious about why earthquakes rumble and what really happens when a volcano erupts? Want to learn more about the amazing women in aerospace? The Smithsonian Air and Space Museum has created some amazing videos that answer those questions and many more. Watch each 30 minute video to learn insider knowledge and experience that only the Smithsonian museums have access to. These videos are ideal for a middle school audience.



**Check it out!**

WEBSITE: [airandspace.si.edu/connect/stem-30](https://airandspace.si.edu/connect/stem-30)

**Lets 3-2-1! After watching each video, share:**

- Three things you learned
- Two things you found interesting and would like to learn more about
- One question you still have about the topic

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### Smithsonian Behind-The Scenes

Ever wonder how do astronomers see the invisible parts of the universe? Or, how do scientists track the movement of an invasive species of fish? Take a look at the science and research that occurs within the Smithsonian Institution! Watch scientists in action as they investigate and learn about the process of science. Each video is driven by one essential question that will guide your students in the discovery process.

Assign each video to a student or allow them to choose based on their interests. Ask each student to share the answer to the video's essential question, along with some other interesting facts that they learned. You will be amazed at just how much information your students will share!



**Check it out!**

WEBSITE: [ssec.si.edu/explore-smithsonian](https://ssec.si.edu/explore-smithsonian)

## I Want to Work at a Zoo!

Meet Jen, Craig, Sarah, and Kenton. They work at the Smithsonian National Zoo in some interesting ways. Watch the below videos to see what life is like for a biologist, an endocrinologist, a landscape architect, and a zoo curator.



**Check it out!**

WEBSITE: [nationalzoo.si.edu/education/wildlife-careers#video](http://nationalzoo.si.edu/education/wildlife-careers#video)

Do you have an unusual career interest? Could you see yourself designing video games, restoring ancient artifacts, or doing research at the mouth of a volcano? Now is your time to learn more! Do some quick searches about topics that interest you and what professionals working in that field do. Share four profiles of careers related to your field of interest. Write summaries, create a photo collage, or create videos just like Jen, Craig, Sarah, and Kenton!

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## Take Action – With the Smithsonian Environmental Research Center

The Smithsonian Environmental Research Center's "Ecosystems on the Edge" site contains a wealth of information about ecosystems, climate change, invasive and at-risk species, and more! Visit the "Take Action" page to learn more about fighting climate change, stopping invasive species, and reducing pollution. Within each Take Action topic, students can take quizzes, read about recent Smithsonian research projects, and find interactive ways to make a difference from home.



**Check it out!**

WEBSITE: [ecosystemsontheedge.org/take-action/](http://ecosystemsontheedge.org/take-action/)

Reflecting on the Take Action initiative can be a fun project that students can work on from home. Ask your students to choose either to help fight climate change, stop invasive species, or reduce pollution. Students can use this website to research and generate action steps that can be completed from home.