

# Science Monthly

**District NGSS and Science News** 

END OF THE YEAR EDITION

MAY 2019

Website of the Month: STEM Jobs Free App Of the Month: ISS HD Live

**Bioblitz:** Campus Biodiversity



## Website of the Month: STEM Jobs

### https://www.stemjobs.com/

STEM Career and Education Advice

How Can I Do What I Love?



5 Top STEM Transportation Careers Many important transportation careers are in demand to meet the

challenge of getting

everyone where they want to go and everything where it needs to be, efficiently and on time. Students interested in transportation careers [...] When Will I Ever Use This?



8 Top Skills STEM Classrooms Teach for the 21st Century STEM classes are much more than a graduation requirement—they teach many of the top skills

employers are looking for in their future workforce. There is much more to learn when returning to school this September. [...]



How Do I Get There?



Job Spotlight: Railroad Conductor

Freight and passenger trains are an important part of the transportation industry where a career as railroad

conductor is available to high school graduates. AmTrak has set passenger records in the past 11 years, according  $[\ldots]$ 

When will I ever have to use this? The proverbial thorn in a teacher's side is this question asking when students will need to use and apply the content they are learning in class. Luckily some of our kids have an interest in STEM and want to pursue careers in those fields. One way to help students research those careers and some of the training and college pathways to those careers is to explore the STEM Jobs website.

Students can take a survey to find out their "STEM Type" and what jobs might be of interest to someone in that category. Even students who are not readily interested in STEM-related careers may find that their interests align with

careers they had never heard or thought about. With the help of this simple quiz, students rank their personal interests and are matched up with STEM jobs. I happen to fall into the "Explorer" category but some other options could include Designer, Maker, or Investigator. Based off my test results, some suggested careers for me are teacher (surprise!), archeologist, market research analyst, and film & video editor.

Along with salary and job requirement information, STEM Jobs also regularly posts articles for students on science, technology, engineering, and math. Students can use the student portal to access articles for research assignments as well as for more personal information. Consider taking a moment of your day to let students participate in some self discovery and imagine themselves as our STEM leaders of tomorrow!

#### About Explorers

Explorers have deep knowledge of their area of specialty, and are skilled in performing scientific research to expand their knowledge and communicate their findings to others.

Explorers often work in educational settings as teachers and professors, as well as in the public and private organizations where they may work in lab or office settings.



# YouTube Channel of the Month: CA Assessment of Student Performance Progress (CAASPP)

### https://www.youtube.com/channel/UCjjzq3RWBZ2yBXUWQNroRjQ

The CAASPP testing window has opened and as we dive into the assessment season some questions may arise. While this month's spotlighted channel may not be the most exciting to watch, it is full of information and answers to frequently asked questions about the CAASPP assessments and digital testing platform. Especially for those of you who are proctoring the California Science Test (CAST), there is a recorded webcast that covers topics such as changes from the pilot to this year's assessment and test proctoring tips to support student success.

	Recommended Pause Points						1
	TEST SEGMENT 1 Discrete Items (12-17) items)	TEST SEGMENT 2 Discrete Items (12-17 items)	TEST SEGMENT 3 Discrete Items (12–17 items) or Performance Task (4–7 items)	TEST SEGMENT 4 Performance Task (4-7 items)	TEST SEGMENT 5 Performance Task (4-7 items)	TEST SEGMENT 6 Student Survey (3-4 questions)	No.
		The 2018–19 CA	ST Operational Test Trai	ning Webcast		<b>(ETS)</b> 40	1
2019 CAST Test California Asse	essment of Stu	ration Web					1,071 views



# Free App of the Month: ISS HD Live

April 11<sup>th</sup>, SpaceX launched the Falcon Heavy from the Kennedy Space Center to deliver a communications satellite and the thousands of users who downloaded the ISS HD Live app had the opportunity to watch the launch from the comfort of their home devices. I was lucky enough to watch the launch on my phone thanks to a hand notification about 20 minutes before launch. Other nifty notifications from this app include NASA press conferences, broadcasted astronaut space walks, sunrise and sunset from the ISS, and so much more! This free app provides high definition images from space 24/7 while also providing a free viewing platform for anyone to follow the ISS in its orbit around Earth.



Here are some highlights from the app's description in the Google Play store:

1. Live HD camera - a wonderful HD video streaming view of our planet

2. Live Standard camera - this is not HD, but it shows a live streaming of the Earth and from time to time details of the ISS, like tests, maintenance and communication with Earth

3. NASA TV - is the television service of the United States government agency NASA (National Aeronautics and Space Administration). You can watch science and space documentaries, interview with scientists, astronauts, engineers and personalities such as Elon Musk



- 4. NASA TV Media.
- 5. Spacewalk (Recorded) Beautiful HD images from cameras of astronauts outside the ISS.

6. Inside the International Space Station - Take a video tour of each module inside the ISS, all explained by the astronauts.

7. Eventual Channel - Temporary live cameras from NASA, European Space Agency (ESA), Russian Space Agency (Roscosmos) and SpaceX.

Do you want to see the ISS in the sky at night?

This is the easiest way to spot the station. With the built-in ISS detector tool, ISS HD Live will tell you when and where to look for the International Space Station. You get an alarm a few minutes before a pass. And you will get a notification when it will pass over your region during the daylight. By this way, you can admire your country from space.





# **Bioblitz: Tracking Biodiversity on Your Campus**

### https://www.nationalgeographic.org/projects/bioblitz/

A teacher recently shared that their school has a population of swallows that returns every Spring. Nests are being built and many birds are flying around the playground. They might notice if there are generally more or less that years before, but perhaps there are some Science and Engineering Principles we could enact so that students could study the local population. Perhaps they could count nests or they could track how many chicks they can safely observe.

One way to observe the biodiversity around us is to hold a bioblitz. A bioblitz is a timed event where a group of individuals attempts to record as many different species of flora and fauna as can be safely observed and how big those populations are in a given area. These events are often held at parks or in wildlife viewing areas, but they can be held in urban settings as well such as your school campus. A bioblitz gives students the opportunity to practice their

observation and recording skills as well as encouraging them to look at what species thrive locally.

National Geographic provides a wealth of resources to help guide you in planning a class or school-wide bioblitz. Along with providing suggestions for procedures, safety, and corresponding lesson plans, they also suggest using the app

#### PLAN A BIOBLITZ

Use our new BioBlitz guide and the ideas and resources below to create an event at a school, in a park, or anywhere.

BIOBLITZ GUIDE



#### Schoolyard BioBlitz



Neighborhood BioBlitz

iNaturalist as shared in last month's issue of Science Monthly. As an event organizer, you have the ability to create a project in iNaturalist that users can sign on to participate in. The project tracks the species documentation of users in your event and keeps track of your top performers. After the event is wrapped up, review the species documented with your students and look for trends in the data.

Invite families to participate and get everyone involved in researching and caring for our San Jacinto wildlife!



# **Open Call for 2019-2020 Article Submissions**

Doing something exciting with your students? Have a resource that you want to recommend to other teachers? Did you attend a conference and have some experiences you would like to share? Submit your articles to be included in next school year's issues of Science Monthly.



At SJLA, 8<sup>th</sup> graders in Mr. Hilkey's class experimented with magnetic fields and 7<sup>th</sup> graders in Mr. Marais' class assembled an aquaponics garden. At SJHS, Mr. Temple used the 3D printer in the makerspace to make battery presses for making wet-cell galvanic cells in his Area 154 apocalypse-themed course. What is happening in your class?



### Contact and Support

Jackie Gardner: SJUSD NGSS TOSA jgardner@sanjacinto.k12.ca.us Website: https://thefishnerd.weebly.com Phone: (951) 929 - 7700 ext. 4252 Request a Site Support Visit: http://bit.ly/NGSSvisit