

Remote Learning Enrichment Resources for Science

The following links have been identified or created by the Sacramento County Office of Education (SCOE) Curriculum & Instruction Department as resources that may be helpful for distance learning. Resources are for informational purposes, and their inclusion on this list is neither an endorsement nor a recommendation by SCOE. Schools and districts should review resources and determine appropriateness for their students.

Resources for Other Subjects: <https://www.scoe.net/covid19/resources/>

Also Explore Resources for Mathematics: <https://scoe.net/media/fprijvp5/math.pdf>

Audience	Grades	Description	Link
Families, caregivers, teachers	Pre-K–3	Creative Catapult’s mission is to transform research into early learning experiences that inspire creative problem solving.	https://creativitycatapult.org
Families, caregivers, teachers	K–12	Discovery Engineering works to ensure people everywhere understand how engineers, technicians, and technologists make the world a better place. 30 years ago we were the first to call on the engineering community to volunteer in their local schools and help young students discover engineering. Now we lead a growing volunteer and educator movement recognized worldwide. Help celebrate our legacy and build for the future.	http://www.discovere.org/our-activities

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Families, caregivers, teachers	K–12	<p>How to Smile Search over 3,500 of the very best science and math activities on the web. Find handpicked activities from your favorite science museums, public television stations, universities, and other educational organizations. All activities are available to anyone, free of charge. Start searching now and filter by age, material costs, and learning time to find exactly what you need for your class, educational program, or family.</p>	https://www.howtosmile.org
Families, caregivers, teachers	K–12	<p>Curiosity Machine has engineering design challenges related to specific fields of engineering</p>	https://www.curiositymachine.org/challenges/
Families, caregivers, teachers	K–12	<p>Exploratorium Science Snacks Hungry for fresh, exciting science activities based in amazing phenomena? <i>Science Snacks</i> are hands-on, teacher-tested, and use cheap, available materials. Satisfy your curiosity without ever getting full.</p>	https://www.exploratorium.edu/snacks/snacks-by-subject
Families, caregivers, teachers	K–12	<p>California Academy of Sciences has complete science lessons plans online for K–12.</p>	https://www.calacademy.org/educators

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Families, caregivers, teachers	9–12	<p>Science in the Classroom (SitC) is a collection of freely available annotated research papers from the <i>Science</i> family of journals. SitC aims to help educators, undergraduates, and advanced high school students understand the research contained in scientific primary literature by using annotations and providing accompanying teaching materials. Annotations include vocabulary, methods, descriptions of prior research, and explanations of major conclusions. Each paper has an educator's guide outlining connections to science competencies within STEM learning frameworks and standards. Educator guides also provide suggested activities, discussion questions, and resources for further exploration of the subject.</p>	<p>https://www.scienceintheclassroom.org/topics</p>
Families, caregivers, teachers	3–12	<p>TED is a global community, welcoming people from every discipline and culture who seek a deeper understanding of the world. We believe passionately in the power of ideas to change attitudes, lives and, ultimately, the world. On TED.com, we're building a clearinghouse of free knowledge from the world's most inspired thinkers — and a community of curious souls to engage with ideas and each other, both online and at TED and TEDx events around the world, all year long.</p>	<p>https://www.ted.com/topics/science</p>

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Families, caregivers, teachers	K–5	<p>Mystery Science lessons are expertly designed to engage students, achieve learning outcomes, and be easy for teachers to use. We have short mini-lessons that are completely digital and full lessons that include an activity. All of the activities are designed to use simple supplies a parent will likely already have at home.</p>	<p>https://mysteryscience.com/school-closure-planning</p>
Teachers	K–12	<p>Science Buddies Teacher Resources</p> <p>Science Buddies has over 1,200 Project Ideas in all areas of science.</p>	<p>https://www.sciencebuddies.org/teacher-resources</p>
Families, caregivers, teachers	3–8	<p>American Chemical Society The Secret Science of Stuff</p>	<p>https://www.acs.org/content/acs/en/education/whatischemistry/adventures-in-chemistry/secret-science-stuff.html</p>
Families, caregivers, teachers	K–12	<p>California Education and the Environment Initiative (EEI) Curriculum</p> <p>The EEI Curriculum includes 40 science units organized by grade level. Online access includes access to pdf readings and student activity sheets</p>	<p>https://www.californiaeei.org/curriculum/science-units/</p>

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Teachers	K–12	<p>NASA STEM Lessons from Space</p> <p>Follow astronauts as they demonstrate STEM concepts such as Newton’s Laws of Motion, surface tension, advances in technology and more. Select a topic below to go beyond textbooks, and use the videos and additional resources to supplement classroom activities.</p>	<p>https://www.nasa.gov/audience/foreducators/stem-on-station/science.html</p>
Families, caregivers, teachers	K–4, 5–8, 9–12	<p>NASA STEM</p> <p>Resources Includes downloadable storybooks and has companion Educator Guides</p>	<p>https://www.nasa.gov/stem/foreducators/k-12/index.html</p>
Families, caregivers, teachers	K–12	<p>NASA STEM</p> <p>Resources Includes downloadable storybooks and has companion Educator Guides</p>	<p>https://www.nasa.gov/stem</p>
Students	TK–4	<p>NASA Kids Club</p> <p>a place to play games and learn about NASA</p>	<p>https://www.nasa.gov/kidsclub/index.html</p>
Families, caregivers, teachers	All	<p>National Parks Virtual Tours</p> <p>Answer the following questions:</p> <p>What do you notice?</p> <p>What do you wonder?</p> <p>What does the structure of the animal/plant/building/park tell you about its function?</p>	<p>https://www.nps.gov/.../lea.../photosmultimedia/virtualtours.htm</p>
Families, caregivers, teachers	All	<p>Mars Tour</p> <p>Answer the following questions:</p> <p>What do you notice?</p> <p>What do you wonder?</p>	<p>https://accessmars.withgoogle.com/</p>

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Families, caregivers, teachers	All	John Muir Laws supports students in nature journaling with bird, mammal, and plant drawing tutorials.	https://johnmurlaws.com/drawing-birds/