

Computer Science Education Week (CSEd Week): December 4-8

The STEM team has collaborated with STEM Teacher Leader Advisors and our STEM Pathway providers to generate the sample activities below that could be utilized during CSEd week. These activities are designed to be 30-45 minutes in duration, arranged with a suggested daily focus topic, and assembled below for grades 3-5. The list also lists the level of computer science the teacher may need in order to facilitate the activity. The theme of this year's CSEd Week is **Computer Science (CS) Everywhere!**, highlighting the impact computer science has on our students' world. **If you have questions please contact** <u>STEM@la.gov</u>.

Day of the week	Focus Topic	Description	
Monday	Cybersecurity and Cybersafety	Helping students understand cybersecurity with grade appropriate resources	
Tuesday	Computer Science Career Exploration	What are the CS careers in Louisiana? Nationally? What do we do to prepare for them?	
Wednesday	Computer Coding	Computer Coding resources and activities for students and their families	
Thursday	Responsible Social Media Awareness and Usage	How to avoid cyberbullying and the best practices for responsible Social Media usage	
Friday	Applying CS to Your Students' Interests	CS unplugged activities using hands-on learning, robotics, digital media, computational thinking, data analysis, digital photography, and opportunities to showcase CS courses that are active in your school/community.	

If your school would like a visitor to share in the excitement and fun of your activity please complete this form.

Please use the following social media tags so we can help celebrate your event: @LABelieves, @LACSEdWeek, @CSLA, and @LASTEM.





3-5 Suggested Resources

Day of the Week	Description of Resource/ How to use/ Website Link	Teacher CS Experience Needed
Monday	Cyber.org has resources for grade level lessons that you can access. These lessons highlight many aspects of cybersecurity, cyber safety, cyber bully prevention, and digital citizenship. Teachers will need to preview and select the lesson they wish to utilize prior to the resource use.	Familiarity with CS skills and teaching are suggested; Teachers will need to create a free account with <u>cyber.org</u> in advance of accessing resources
Monday	 Google has created interactive games for students to explore various aspects of cybersecurity, cyber safety, cyber bully prevention, and digital citizenship. <u>Be Internet Awesome</u> has lesson plans and student games to engage students. <i>Interland</i> game options include: a) Reality River: Don't fall for fake (evaluating Internet information/ preventing phishing), b) Mindful Mountain: Share with care (stopping the spread of malware), c) Tower of Treasure: Secure your secrets (passwords and data security), and d) Kind Kingdom: It's cool to be kind (Digital Citizenship) 	No CS Teaching Experience Needed
Monday	<u>PBS's NOVA Lab Cybersecurity Lab</u> - NOVA has teamed up with cybersecurity experts to create the Cybersecurity Lab, a game in which players will discover how they can keep their digital lives safe and develop an understanding of cyber threats and defenses. Players will advance by using computer coding, logical reasoning, critical thinking, and vulnerability detection to solve various problems. Students will not need any prior cybersecurity or coding expertise to succeed. Video introduction on what the Internet is and how it formed is also located here.	No CS Teaching Experience Needed





3-5 Suggested Resources(Continued)

Day of the Week	Description of Resource/ How to use/ Website Link	Teacher CS Experience Needed
Tuesday	Amazon Future Engineer has created a free set of <i>virtual field trips</i> to inspire and show students career possibilities. These can be used with Kahoot, but it is not required.	No CS Teaching Experience Needed
Tuesday	Exploring Computer Science Careers with Younger Students is a resource from Code.org. This resource allows you to access videos, schedule virtual field trips, and locate guest speakers for CS career exploration.	No CS Teaching Experience Needed; Planning and arrangement ahead of time will be needed to secure some speakers
Wednesday	Tynker is an online learning platform that introduces children to the joy of coding. Teachers can create a free account and add their students to the class for them to begin guided coding lessons.	Some CS Teaching Experience Suggested
Wednesday	The <u>Hour of Code</u> is a global movement reaching tens of millions of students in 180+ countries. Anyone, anywhere can organize an Hour of Code event or try any of the over 500+ one-hour tutorials, available in over 45 languages.	No CS Teaching Experience Needed
Wednesday	NASA has a project that allows you to <u>explore a real Moon or Martian landscape</u> with scratch! This project has all the images, instructions, and free resources to make exploration happen. This can occur on a 1:1 device setup or as a class with a projector or SMART Board setup.	No CS Teaching Experience Needed; Teacher needs to plan ahead and download the appropriate images to 1:1 devices





3-5 Suggested Resources(Continued)

Day of the Week	Description of Resource/ How to use/ Website Link	Teacher CS Experience Needed
Wednesday	Scratch is a block based coding program that anyone can use. This is a fun way to add some story art, make a neat animation, and learn some math. Step by step tutorials are freely available and many sample projects can be viewed.	No CS Teaching Experience Needed; Teacher needs to plan ahead to familiarize themselves with controls
Thursday	<u>Cyber.org</u> has a curriculum for grade level lessons that you can access. These lessons highlight many aspects of cybersecurity, cyber safety, cyber bully prevention, and digital citizenship. Teachers will need to preview and select the lesson they wish to utilize prior to the resource use. Teachers will need to create a free account with <u>cyber.org</u> in advance of accessing resources.	Familiarity with CS skills and teaching are suggested
Friday	<u>CS Unplugged</u> is a collection of free teaching materials that engage students with hands-on games, puzzles, and activities that involve computing. These lessons use cards, string, crayons, and moving around to experience CS without a computer!	No CS Teaching Experience Needed
Friday	Students use <u>VEX Robotics</u> , to code a virtual robot through a series of challenges. Teachers that are comfortable using code should allow students to choose a playground. Otherwise, teachers should choose a class playground challenge. No logins or user profile accounts are required.	No CS Teaching Experience Needed
Friday	NASA's Space Place has a game that combines coding with <u>Exploring Mars</u> . The game is designed for grades K-4 and contains images, facts, and technology tools that are used by NASA scientists. This is a 1:1 device activity.	No CS Teaching Experience Needed

