Ideas for Hour of Code / CS Ed Week activities:

These were brainstormed by educators and the Hour of Code / CSEdWeek Advisory Committee, if you have another idea, feel free to add it here to inspire others. Any ideas welcome (we are not culling this list).

Idea / Link	**Target audience**
Existing self guided tutorials on www.code.org/learn	Varied, but mostly new students / teachers to CS
Existing teacher led tutorials at https://code.org/educate/curriculum/teacher-led	Varied, but mostly more experienced teachers (remind teachers that they can use Code Studio for the HOC) (remind teachers that they can use Code Studio for the HOC)
Existing Tech Jams at https://csedweek.org/educate/cstechjam	Varied
Example of a subject focused activity: Mirror Images (an activity for an art teacher)	Art teacher
MUSIC - so much programmatic or algorithmic music fun can be had, especially in the tightly bound, single-session style activity. Example: https://gym.pencilcode.net/jam/#/jam/beats.html	Music, Math, CS… electronics?
Example hist ory lesson: A history of technology activity for a history teacher	History teacher
Shakespearean Insult Generator" - lists of options, randomly assigned on demand"	English literature teachers
Theater stage directions as code to control actors	English/Drama teachers

A hackathon where students would design apps for a social cause they care about. (a shortened version of Apps for Good or other activities like this)	Somewhat experienced CS students / teachers
Elementary science - create games showing food webs, life cycles using Scratch, and remixing to cut down time	Beginning students and teachers at the elementary level, can align with NGSS CSFirst from Google uses videos and re-mixes
CS Unplugged Examples from NCWIT - activities that do not require a computer to teach CS concepts https://www.ncwit.org/resources/computer-science-box-unplug-your-curriculum http://csunplugged.org/ is also in more languages and has teacher guidelines	Students 9-14 years of age Unplugged lessons can be for early learner also...age 4 and up. They are also good for parents! They are part of the audience as well. Local librarians could also participate by conducting the Unplugged activities. Many have attended the Code.org Fundamentals Course so they would be a great resource for cities
Parent piece? CS after-hours that includes parents	Whole school - Parents help drive curriculum and what is being taught - could be good partners for adding CS to class expectations *One of the schools in my district hosted “An evening of code” where students and parents worked through HOC activities. They had over 100 people attend and received positive feedback. How about an ‘event kit’ for this kind of outreach to get parents and siblings involved?
Celebrations/showcases - Show off what the class has made with code to other groups of people from the school.	Current CS teachers/classes
Math activity (student led) that integrates Algebra-Geometry to engage math teachers. Maybe an activity from Algebra CS that was really fun for students and more student self directed. Or use code to create geometrical figures like regular polygons in an artistic way.	Math Teachers and Math Students (6-12) I like this idea and would even suggest “A week of code” lesson ideas to teach (and grade) concepts
A non coding Activity perhaps from CS Principles that deals with real world events (Internet and Security) EThics, Data, anything. All were interesting and cross curricular.	All HS Teachers
E-textiles https://www.ncwit.org/resources/e-textiles-box	All ms/hs students/teachers. Approx. 20 hrs to complete the entire project

Other curriculum from existing CS curriculum repositories	• App Inventor http://appinventor.mit.edu/explore ○ http://www.appinventor.org/ • Blueroom http://blueroom.bluej.org/ • Computational Science Education Reference Desk (CSERD) http://www.shodor.org/refdesk/ • Computer Science Open Educational Resources (OER) http://iiscs.wssu.edu/drupal/csoer • Computing at School (CAS) http://community.computingatschool.org.uk/door • CS10K https://cs10kcommunity.org/ • CSTA source http://drupdev.csc.villanova.edu/csta7/ • Engage CSEdu https://www.engage-csedu.org/ • Ensemble Computing Portal http://www.computingportal.org/ • Greenroom http://greenroom.greenfoot.org/ • Nifty Assignments http://nifty.stanford.edu/ • ScratchEd http://scratched.gse.harvard.edu/ /
Modeling tutorials/activities, focused on simplified scenarios regarding e.g. ecology, economy, social interactions, ...	For high school students
Physical education, unplugged activities as cooperative games	Elementary students, PE teachers
Students create an animation (simple) which can be added to a school website or students website promoting HoC or computer science	Students, teachers, beginning to intermediate
Activity about why computer science is interesting and career paths using it. Idea from email with Nacho: Without understanding WHY learning to code is so powerful, I think it's challenging for older students to get behind it. So, let's say we had a product kids know and love, like Nike sneakers. In the design of Nike sneakers—who uses code and why. Then design an hour of code programming activity in which students can master a basic skill in that programming language. That's one way to do it. Another way, might be to make a fun game in which we help learners understand WHY they benefit from learning code. So, I am pre-med. Why would I need to learn how to code. For college students, if you're interested in hooking them, I would share infographics about the hybrid job market in which computer science and computational thinking skills make the difference between getting a job or not, if you're a liberal arts or business/marketing major, etc. High school students would relate to this, too.	College students picking a major, High School students thinking about what direction they want to go (especially in countries like England or Australia where they need to pick their major before college)

Connect HOC with screenings and promotion of the movie hidden Figures - http://www.imdb.com/title/tt4846340/	I would love to see screenings for students for hidden Figures coinciding with Hour of Code events.
https://teachinglondoncomputing.org example computational-thinking exercise for English class: https://teachinglondoncomputing.files.wordpress.com/2015/08/booklet-magicalbookmagic.pdf They have computational thinking activities for English, Math, BIology, Physics, History, Languages, Music, and Art.	Subject specific teachers