

## **Free Summer Enrichment Ideas for Math, Science, and Technology** **Grades 6-8**

If you would like to practice some of the math skills you've learned so far at Carl H. Kumpf Middle School or get ahead during the summer, here are a few websites you can try. The websites below all have free options, some may have additional features that cost money.

- Site: [www.khanacademy.org](http://www.khanacademy.org)

**Type of learning tools:** video tutorials, practice printouts

**Subjects:** Math and science

One of the first and still the largest source for free, online learning video tutorials. You can browse the website's content by grade and subject, quickly finding material to supplement in-class instruction. For example, there are articles you can share or print to review skills before tests. These skills are rooted in algebra, geometry, statistics and other topics. In total, the online academy has more than 20,000 closed-captioned videos and material covering more than 5,000 topics.

- Site: <https://www.buzzmath.com/>

**Type of learning tools:** Interactive problem solving, games, question modules with instant feedback

**Subjects:** Math

BuzzMath focuses on helping middle schoolers practice their math skills. It contains high-quality problems. It gives immediate and detailed feedback, letting students progress at their own pace. Randomly generated values let students to retry problems to obtain mastery. Teachers also receive detailed results that help them guide and monitor student progress.

- Site: <https://www.thirteen.org/get-the-math/>

**Type of learning tools:** Videos, complex problem solving, real-word uses of algebra

**Subjects:** Math

Fantastic proof that algebra is used to solve real problems in kid-approved professions -- basketball, music, and fashion. Get students excited about algebra by providing context and interesting examples for them to see. This website provides videos from real professionals how they use math in their jobs.

- Site: [www.brilliant.org](http://www.brilliant.org)

**Type of learning tools:** Interactive questions and games, logic puzzles, general critical thinking tools

**Subjects:** Math, science, logic, computer science principles

Brilliant offers guided problem-solving based courses in math, science, and engineering, based on National Science Foundation research supporting active learning

Additionally, Brilliant publishes challenging problems in math and science each week from problems written by members of their community. Brilliant also maintains an interactive, community-written math and science wiki of approximately 2,000 pages.

- Site: <https://www.brainpop.com/>

**Type of learning tools:** Interactive games, videos, quizzes

**Subjects:** Math, Science

Playful, engaging learning games, animated movies, and activities. Designed with relevance, depth, and humor to encourage kids on their unique learning paths.

Learning is made visible through tools that challenge students to reflect, make connections, and engage in deeper, curiosity-driven learning.

- Site: <https://code.org/learn>

**Type of learning tools:** Coding tutorials, Coding Games

**Subjects:** Computer Science, Computer logic, critical thinking

Code.org® is a nonprofit dedicated to expanding access to computer science in schools and increasing participation by women and underrepresented minorities. Our vision is that every student in every school has the opportunity to learn computer science, just like biology, chemistry or algebra. Code.org provides the leading curriculum for K-12 computer science in the largest school districts in the United States and Code.org also organizes the annual Hour of Code campaign which has engaged 10% of all students in the world. Code.org is supported by generous donors including Amazon, Facebook, Google, the Infosys Foundation, Microsoft, and many more.