Two great opportunities for your home-schooler this fall!

Home-School Virtual STEM Club for ages 8–12

The STEM Club will engage students through six unique STEM Club sessions, each with two live instructors.

**WHERE:** Zoom virtual classrooms. **WHEN:** 10–11:30 a.m. EST; see specific topics and dates, below.

**COST:** $142, which includes all six sessions plus the cost of mailing materials to each student’s home.

**Session 1: Density**
- **Oct. 6**
- Explore density with density towers and floating foil boats.

**Session 2: Water**
- **Oct. 13**
- Investigate the wonderful and weird properties of water through experiments with pepper, milk, food coloring and soap.

**Session 3: Sound**
- **Oct. 27**
- Deepen your understanding of sound waves by creating your own musical instruments and devices that imitate animal sounds.

**Session 4: Flight**
- **Nov. 10**
- Design, build and fly gliders while learning the science behind flight.

**Session 5: Engineering Challenge**
- **Dec. 1**
- Apply the laws of physics to build, test and evaluate your own bridge designs.

**Session 6: DNA Day**
- **Dec. 8**
- Discover the biomolecule that makes you YOU and solve a mystery with your new knowledge of biochemistry.

Register for the fall 2021 Virtual STEM Club at: https://bit.ly/3eKXgDa

Dec. 15, 9:30 a.m.– noon: The Clemson Science Outreach Center is hosting an in-person science lab day for home-school students. For only $12 per student, your child will engage in the following hands-on STEM exploration:

**Ages 8–13: Mystery of the Dead Hemlock Tree**

*In this lab, students will:*
- Use solutes and solvents to create mixtures and solutions.
- Learn techniques to micropipette and measure small quantities of liquids.
- Perform gel electrophoresis to compare DNA from known pests to an unknown tree killer (scientists use this method to separate out parts of a mixture). Discover the interdependent relationships of the hemlock ecosystem.

**Ages 14 and up: Biology: DNA Fingerprinting/Crime Scene**

*In this lab, students will:*
- Isolate their own DNA.
- Set up a restriction digest of DNA from a “crime scene.”
- Run DNA samples from crime scene and suspects on a gel and compare the results to ensure that the right guy/girl is caught.

Register for either Home-School Science Day lab at: https://bit.ly/3eKXgDa

For more information, contact the Clemson University Science Outreach Center:

**Email:** culsoc@clemson.edu
**Call:** 864-656-9939
**Web:** https://bit.ly/3qt4bob