



Activity focus: 2nd - 6th grade

**What is Gamification?**

The incorporation of game elements, like point and reward systems, to tasks as incentives for people to participate. Many schools are using game like elements to help children engage at new levels with learning.

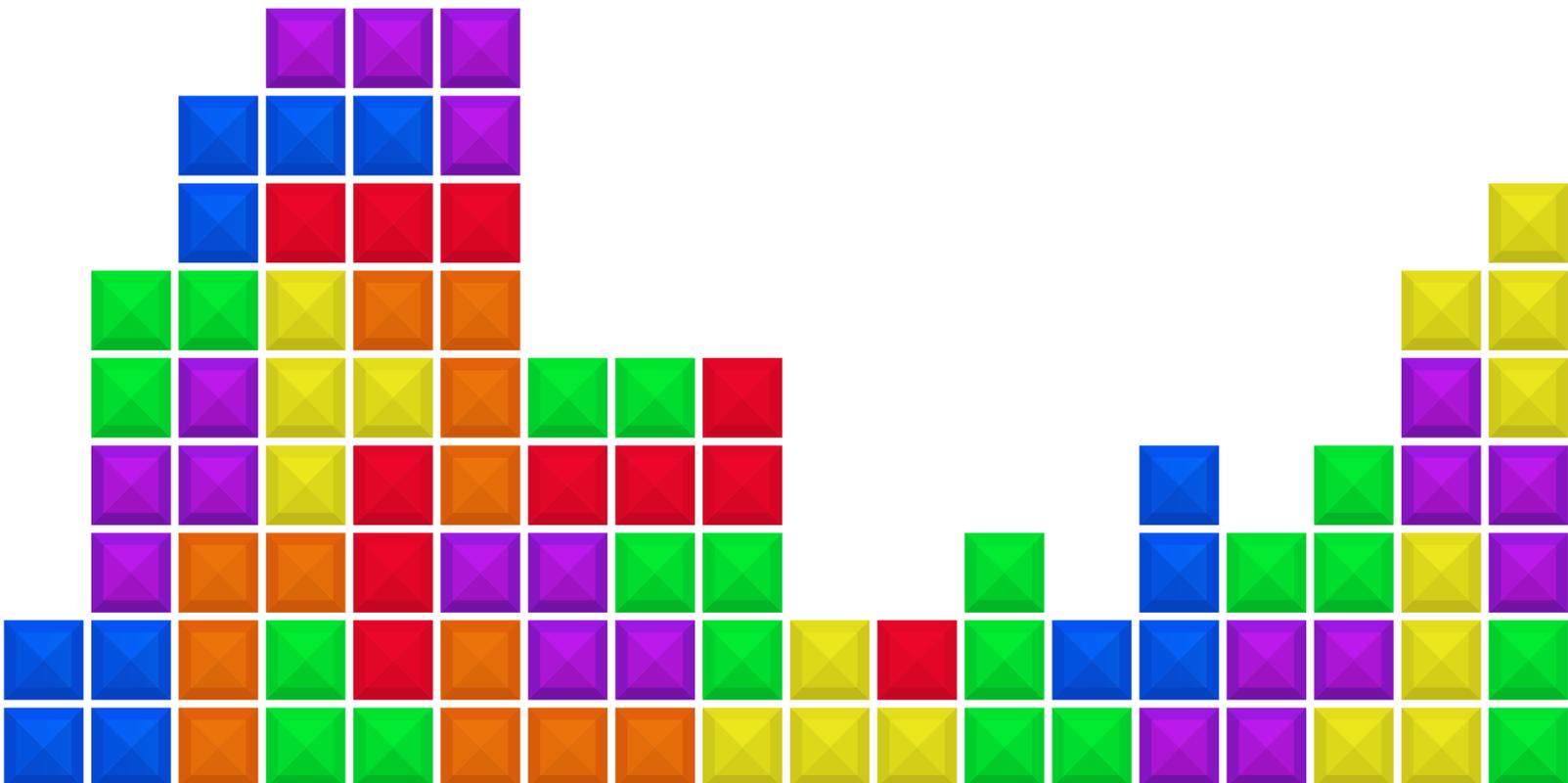
**Website:** [http://strideacademy.com/stride\\_academy\\_demo\\_private.php](http://strideacademy.com/stride_academy_demo_private.php)

**Planning the event:**

Ask the teacher to reserve a time for computer lab or library where there is a space that the class can be divided into multiple teams. Ask the staff to verify that the gamification website works on their network.

**Day of the event:**

Each team will need a captain who will make the choice for answers on the Gamification website. Provide the link to the Gamification site and help each team navigate to the site, create a profile, and enter the math or science at the appropriate grade level. Explain that students are to answer as many questions correctly as possible in the time allowed. The winning team will receive a prize that is pre-approved by the teacher.





**After the event:**

Explain that people who have chosen careers in STEM have more than likely done so because they think math and science are fun. STEM stands for Science Technology Engineering and Mathematics. STEM education creates critical thinkers, increases science literacy, and enables the next generation of innovators. That is important because according to the U. S. Department of Commerce,



STEM occupations are growing at twice the rate of other.



STEM degree holders have a higher income even in non-STEM careers.

Science, technology, engineering and mathematics workers play a key role in the sustained growth and stability of the U.S. economy, and are a critical component to helping the U.S. win the future. Innovation leads to new products and processes that sustain our economy. iPhones and Androids are more advanced than any computer that existed 20 years ago. Car manufacturers are working on technologies that will make cars autonomous meaning they drive themselves. This kind of innovation and science literacy depends on a solid knowledge base in the STEM areas. It is clear that most jobs of the future will require understanding of math and science.

Connect engineering, the "E in STEM", to ASHRAE. Explain how people in ASHRAE solve challenges in the building industry where people spend over 80% of their time. ASHRAE members design, build, operate, and maintain the mechanical systems in buildings so that people are comfortable in the changing seasons and the air in the buildings is free from contamination. The systems we design are automated and provide the highest level of energy performance. Analytics in these systems now help owners and service companies to have fault detection before something fails. Solving the problems in air-conditioning requires people in our field to understand the science and to be able to do the calculations and to apply it at the lowest installed cost and the lowest energy.

Encourage the students to continue to learn about math and science and apply what they learn about the physical world and to make it a better, more comfortable place to live.

