

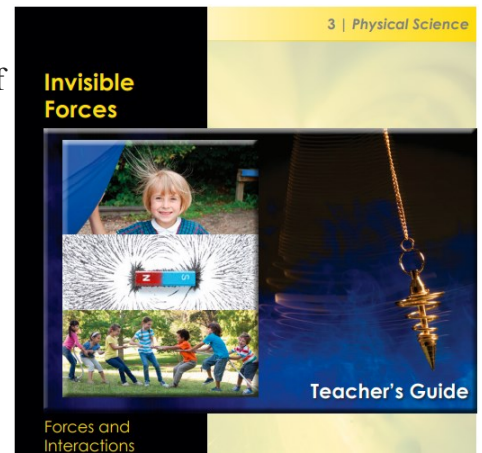


Two New BOCES 4 Science Units Unveiled

New units have recently been added to the previous offerings of the innovative science program, BOCES 4 Science. They are titled “Invisible Forces” and “Earth and Space Explorers.” As is the case with other BOCES 4 Science units, these new units are phenomena and inquiry-based. Student questions and investigations help guide student learning so they can make sense of the real world or find solutions to problems.

“Invisible Forces” is designed for third graders. While progressing through this unit, students see the impact of unseen forces such as magnetism, static electricity, gravity, and friction on the motion of an object. By studying the cause-and-effect relationships between these unseen forces and a moving object, they learn that future motion can be predicted. This culminates with the students creating a Rube Goldberg-style machine that incorporates these invisible forces.

“Earth and Space Explorers” offers a scenario that takes fifth graders on an exploration of Earth and space as they try to solve the mysterious disappearance of their online instructor, Dr. Ima Perdido. Students pursue a series of clues over nine weeks that challenge them to find the answers as they engage in the lessons. These include observing patterns of the sun by graphing the daily changes in shadows, learning about gravity, and working on an engineering challenge to design a shock absorbing system that will protect astronauts as they land on another planet.



The “Invisible Forces” unit is scheduled to be in the classroom for seven weeks, with approximately 22 instructional sessions of 30-40 minutes each. “Earth and Space Explorers” is nine weeks long with approximately 27 sessions of 30-40 minutes.

A wide variety of BOCES 4 Science units are available for grades K through middle school. The high-quality instructional materials and lesson plans for the units were created by teachers for teachers and are closely aligned with New York State P-12 Science Learning Standards.

BOCES 4 Science is a science program service developed through a partnership between the BOCES in the mid-western New York State region. Participants are Monroe 2-Orleans BOCES, Wayne-Finger Lakes BOCES, Monroe 1 BOCES, and Genesee Valley BOCES.

The BOCES 4 Science program supports elementary science in many districts throughout New York State.

