

May the Force be with You



An Experiential Exploration of Force, Motion, and Energy

May the Force be with You is a unique lesson that utilizes Bar-T Mountainside's Giant Swing as a model pendulum, allowing students to experience firsthand the concepts of force, motion, and energy. Students learn about the benefits of simple machines as they work together to transfer their energy into the system that raises classmates up. Stopwatches help students measure the pendulum period and draw conclusions about which variables affect the Giant Swing. They will also participate in a variety of low ropes challenges that support leadership and team building.

In addition to supporting students' understanding of STEM concepts, this lesson is also designed around the following NGS Standards*:

- 4-PS3-1. Use evidence to construct an explanation relating the speed of an object to the energy of that object.
- 5-PS2-1. Support an argument that the gravitational force exerted by Earth on objects is directed down.

May the Force be with You exemplifies experiential learning as students are helmeted and harnessed up for the Giant Swing. Teamwork is the focus of the low ropes challenges, testing students physically and mentally while encouraging them to communicate, collaborate, and think flexibly in order to succeed as a group.

**This lesson is also aligned with MCPS and FCPS curriculum standards.*

Cost per student for May the Force be with You is \$15

To learn more, please contact:

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