

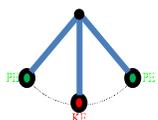
May the Force Be With You



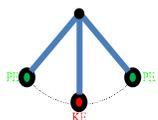
An Experiential Exploration of Force, Motion & Energy

May the Force be with You is a unique exploration of Force, Motion, and Energy. It utilizes Bar-T Mountainside's Giant Swing as a model of a pendulum, allowing students the opportunity to experience firsthand the concepts of Force, Motion, and Energy. Students will also participate in a variety of low ropes challenges that support a deeper understanding of their first marking period Thinking and Academic Success Skills.

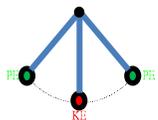
Part I – Giant Swing as a model of a Pendulum



Students take turns being harnessed with a partner to our Giant Swing. The remainder of the class uses a series of simple machines (ropes and pulleys) to transfer energy into the system. The swing then operates as a 35' high model of a pendulum, with two students acting as the pendulum's bob.



This lesson supports MCPS Curriculum 2.0 indicators and outcomes related to describing the motion of objects, explaining changes in the motion of objects, and citing evidence that energy exists in various forms (potential and kinetic).



Students use LabQuest 2 data collection technology, paired with a sensor that measure altitude, force, and acceleration. Students are then able to use graphs of this data to help analyze various aspects of the periodic motion of the swing.

Part II – A Low Ropes Course approach to TASS



In small groups students are presented with a variety of low rope challenges. Each challenge is designed to test students mentally and/or physically with a combination of outcomes in mind. Students will have to apply what they know about communication, collaboration, and flexible thinking in order to succeed as a group.



A debrief, facilitated by Mountainside Staff, will immediately follow each activity. Our staff will take the necessary time to break down what the group did well, what the group needs to work on moving forward, talking about how they used their Thinking and Academic Success Skills, and how what they did translates back into the classroom and their everyday lives.

Upon leaving Mountainside students will have had the opportunity to experience force and motion first hand, harnessed, and helmeted into our Giant Swing. They will have had the chance to fail and succeed while putting their everyday Thinking and Academic Success Skills to the test on our low ropes course.

Each student will have participated in experiential learning they won't soon forget!

Program Cost: \$15/Student (transportation not included) Program is held at Bar-T Mountainside in Urbana.

Contact us to learn more about [May the Force Be With You](#):

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