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Resource ID#: 13424

Primary Type: Virtual Manipulative

Direct Link: <http://phet.colorado.edu/en/simulation/energy-skate-park>

Energy Skate Park

The students will make ramps and hills for a skateboarder to ride on. Students will explore the relationship between kinetic and potential energy, as well as thermal energy. Several variables, such as gravity, mass of skater, and friction can be manipulated. You can even test your skater in space! Amount of energy can be displayed in pie and bar graphs.

General Information

Subject(s): Science

Grade Level(s): 6, 9, 10, 11, 12

Intended Audience: [Educators](#)

Instructional Time: 20 Minute(s)

Keywords: Skateboard, Simulation, Skate Park

Instructional Component Type(s): [Virtual Manipulative](#)

Resource Collection: iCPALMS

Suggested Technology: Computer for Presenter, Computers for Students, Java Plugin

Freely Available: Yes

Source and Access Information

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Name of Author/Source: PhET

District/Organization of Contributor(s): Leon

Is this Resource freely Available? Yes

Access Privileges: Public

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Aligned Standards

Name	Description
SC.6.P.11.1:	Explore the Law of Conservation of Energy by differentiating between potential and kinetic energy. Identify situations where kinetic energy is transformed into potential energy and vice versa. Analyze the motion of an object in terms of its position, velocity, and acceleration (with respect to a frame of reference) as functions of time.
SC.912.P.12.2:	<p>Clarifications:</p> <p>Solve problems involving distance, velocity, speed, and acceleration. Create and interpret graphs of 1-dimensional motion, such as position versus time, distance versus time, speed versus time, velocity versus time, and acceleration versus time where acceleration is constant.</p> <p>Florida Standards Connections: MAFS.912.N-VM.1.3 (+) Solve problems involving velocity and other quantities that can be represented by vectors.</p>

