Energy Skate Park Mission

(No time limit)

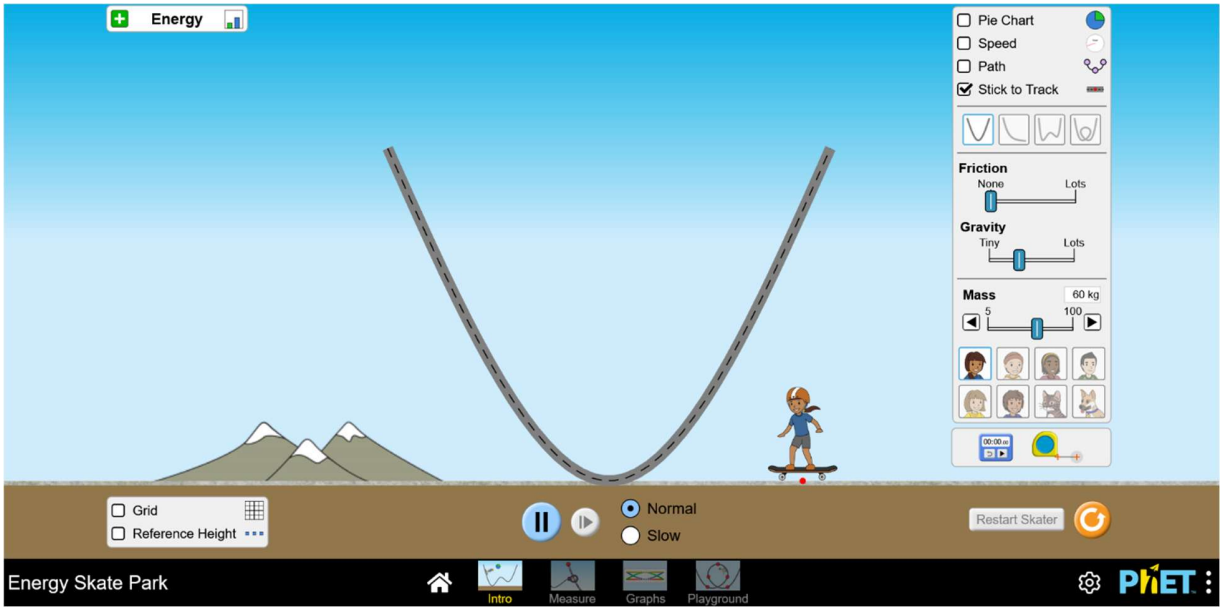
Instructions:

In this activity, you'll **become a physicist** experimenting with energy — kinetic energy, potential energy, and how energy changes when you move.

For this activity, please go to:

https://phet.colorado.edu/sims/html/energy-skate-park/latest/energy-skate-park_all.html

It should lead you to a page that has this illustration:



🧠 Mission Objectives:

1. Create a track for the skater. (Try a U-shape first.)
2. Send the skater down the track. Watch what happens to:
   - Kinetic Energy (K.E.)
   - Potential Energy (P.E.)
   - Thermal Energy (if friction is turned on)
3. Experiment with different heights and ramps.

Disclaimer:
This worksheet is distributed for free and is not intended to measure a child's skills or intelligence. It is designed as a supplementary exercise to support the child's learning alongside the educational activities they receive from schools or other institutions.0

🔥 Challenge 1:

What happens to the skater’s speed when you **start him from a higher place**?

- Answer:

🔥 Challenge 2:

When friction is turned ON, what happens to the skater's movement over time?

- Answer:

🔥 Challenge 3:

Build your crazy track.
Where is the highest speed reached?
Why do you think that's where it happens?

- Answers:

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