



THE SCIENCE OF SWINGING: EXPLORING KINETIC & POTENTIAL ENERGY

In this activity, you'll discover how energy changes from one form to another as you swing! You'll see how the higher you go impacts speed and energy. Ready to swing into action? Let's explore the energy of motion together!

SUPPLIES

 Swingset

INSTRUCTIONS

1. Find a swing on a playground or swing set.
2. Ask a friend, sibling, or adult to give you a push. Start by swinging to a low height. As you swing, pay attention to how fast you are moving and how the swing feels. Is it easy to swing at this height?
3. Now, swing higher! Ask for a bigger push so you can go higher. How does the swing feel now? Is it harder or easier to move? Focus on how fast the swing is moving when it's higher up compared to when it's lower. Do you feel like you're moving faster or slower when you're at the top of the swing?
4. Keep swinging and notice how you go up and down. Think about where the swing feels the fastest and where it feels the slowest.

QUESTIONS

1. How did the speed of the swing change when you swung higher or lower?
2. When the swing was high up, it had potential energy. What do you think happened to that energy as the swing went down and got faster?
3. When you were at the bottom of the swing, you were moving quickly. What kind of energy do you think the swing had at that point?
4. How did the swing's height affect how fast you were moving? What do you think this tells you about energy?

