

Please use the following resources to learn about energy.

Watch this Video: https://www.youtube.com/watch?v=Q0LBegPWzrg

## Answer these questions:

- What is kinetic energy?
- What is potential energy?
- What do we call it if there is both kinetic and potential energy together?

**<u>Activities</u>**: Follow these directions to explore the transfer of energy between two objects.

You will need:

<ul> <li>a basketball or other playground ball</li> </ul>	<ul> <li>a tennis ball or other small, light ball</li> </ul>	<ul> <li>outdoor space</li> </ul>	
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- 1. First, drop the basketball. Notice how high it bounces (bounce height) a bit lower than the height you dropped it from.
- 2. Then, drop the tennis ball. Again, pay attention to its bounce height. This is what you'll use for comparison in the next parts.
- 3. Now, place the basketball on top of the tennis ball. Hold them together, with one hand on the tennis ball and the other keeping the basketball in place. Try to get the basketball positioned right on top of the tennis ball.
- 4. Drop the two balls together, at the same time. What happens? Does the basketball bounce higher than it did before? What does the tennis ball do?
- 5. Last, hold the tennis ball right on top of the basketball. Just like the last try, drop them at the same time. Make sure you're not looking straight down at them when you do this! What happens?

## Make observations & use Claims, Evidence, and Reasoning!

- Claim: Energy transfers between objects.
  - Evidence:
  - Reasoning:
- Claim: An example of energy I see everyday is \_\_\_\_\_
  - Evidence:



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