



POTENTIAL & KINETIC ENERGY (3-5)

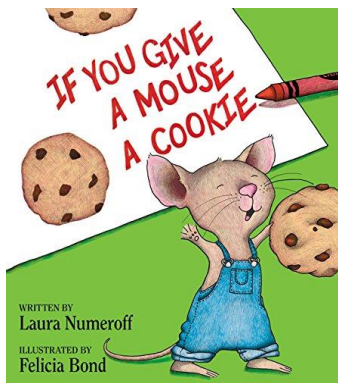
The SCIENCE of CHAIN REACTIONS:

Energy – the ability to do work

Kinetic energy – the energy of motion

Potential energy – stored energy

The **law of conservation of energy** - energy cannot be created or destroyed, only changed or transferred



LITERACY CONNECTION:

If You Give a Mouse a Cookie, by

Laura Numeroff, is a perfect example of a chain reaction! One thing keeps leading to another and off you go on an adventure. Don't have the book at home? There are fun [read aloud versions](#) online.

ACTIVITY: CHAIN REACTIONS

Materials: [dominoes](#) and various objects (Don't have dominoes? You can use wood blocks, LEGO bricks, or even books)

1. Stand the dominoes/blocks on the short end and place them about an inch apart from each other.
2. Make a line of 5 or 6 dominoes, then choose a side to knock down towards the other pieces.

Did all the pieces fall over in a row? This is a chain reaction also called the **domino effect**.

What is happening? Each domino set up on its end has the potential to fall over. When the domino falls, potential energy in the first piece is transferred to the next and on and on until they all fall over.

Engineering Challenges: Try something new with these cool builds

- Build a Spiral (shown)
- Up the Steps – build stairs for your domino chain.
- Rolling Reaction – make a domino chain that bumps a ball, which rolls down a ramp and knocks down more dominoes.
- One Path Becomes Two – build a split (shown)

EXPLORE: Find more fun challenges online at [Frugal Fun](#) or [Domino-Play](#)

For step-by-step instructions, watch the video at: [Domino STEM Activity](#)

This at-home educational activity is from the Literacy Coalition of Palm Beach County's literacy-based Stories & STEM program. Stories & STEM is made possible with support from Prime Time Palm Beach County, Inc., which receives significant funding from the Children's Services Council of Palm Beach County, Inc.

Having fun? Send pictures or video links of you and your Stories & STEM projects to csharkey@literacypbc.org

