



## SIMPLE MACHINES (6-8)

### KEY CONCEPTS:

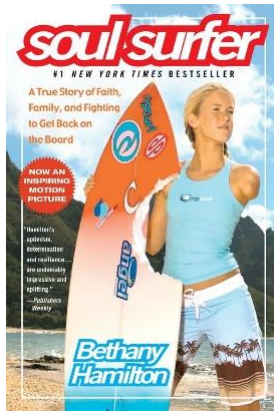
A **machine** is an apparatus that has several parts working together to perform a specific task.

Simple or basic machines help apply forces more efficiently. Examples are an **inclined plane**, a **wedge and lever** or a **pulley**.

Machines are even used to help the human body. A **prosthetic** is an artificial body part, like an arm or leg.



### LITERACY CONNECTION:



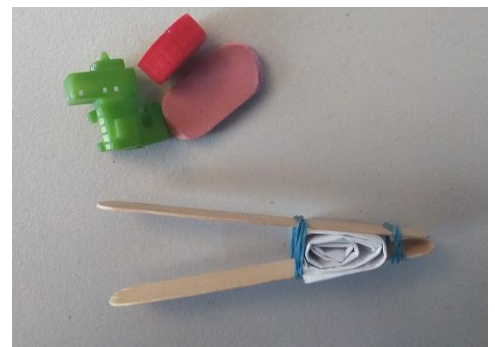
What would you do if you lost a limb? Bethany Hamilton shares her true story of triumph in her book [\*Soul Surfer\*](#). As a promising 13-year surfer, she lost her arm in a shark attack. Since then, Bethany has traveled the world, started a family and continued to follow her dreams.

Don't have the book? You can find above for [free online access](#) if you cannot get a copy from the local library.

### ACTIVITY: SIMPLE MECHANICAL GRABBER

Materials: 2 six-inch rulers (or sticks, chopsticks, etc.), 1 sheet of paper, two rubber bands (optional – small items to pick up)

1. Turn the piece of paper sideways and fold it in half over and over until it is a lengthwise strip about 1 ½ inches wide.
2. Roll up the strip of paper and place it between the two sticks, about 2 inches from one end.
3. Wrap two rubber bands around the sticks, one on each side of the rolled-up paper.
4. Test your grabber by picking up different objects.



**EXPLORE:** Try making grabbers of different lengths or out of different materials. What works best? How heavy of an object can you pick up? Set up a course of items to collect and race a friend or beat your own best time.

For step-by-step instructions, watch the video at: [Simple Machine 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@literacypbcc.org](mailto:csharkey@literacypbcc.org)*