

WOMEN LEADING THE CHANGE IN HONDURAS



<https://esperanzasunidas.org>

What can you do with a
piece of bamboo?

Title: What can YOU do with a piece of Bamboo?

Target Grade Level: 3rd-5th grade

Time Duration: Two -45 min sessions

Academic Vocabulary: Bamboo, Invention

CCSS:

RI.3.2: Determine the main idea of a text; recount the key details and explain how they support the main idea

RI.4.1: Refer to details and examples in the text when explaining what the text says explicitly and when drawing inferences from the text

NGSS:

3-5-ETS1-1: Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost

3-5-ETS1-3: Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved

21st Century Skills:

- Communication
- Collaboration
- Creativity

Materials

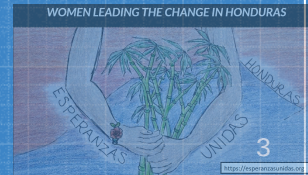
- Pencil, paper, ruler, [BAMBOO INVENTION PROJECT WORKSHEET](#)
- Preferably bamboo sticks so that students can build
 - Here's a link for 20 bamboo poles for \$9.99 ([Amazon Bamboo Poles](#))
 - [Twine](#), [micro-tip pruner](#)
- If you cannot purchase bamboo, have students use wooden dowels and/or popsicle sticks to build a prototype



Learning Objectives

By the end of this lesson, you will be able to:

- Explain different ways people around the world use bamboo to solve problems
- Present your own bamboo invention using the engineering design process



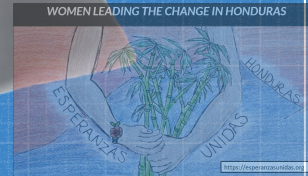
Before we begin...

What do we already think you know about bamboo?

What is an example of an invention? Have you ever invented something?



What can you do with a piece of bamboo?
Tie it in a knot? Use it for a shoe?



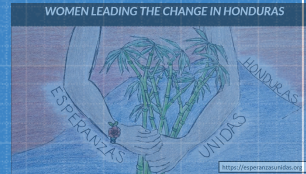
Bamboo is a grass that grows tall and strong.
Turn it into anything, you can't go wrong!



This plant can thrive in almost any place
Doesn't need much water. Just soil, sun,
and space!

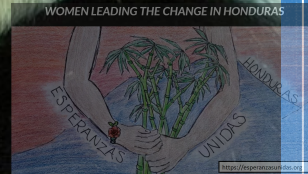


Bamboo Ranch in the
desert of Tucson, Arizona



Find it in Central America, Asia, United States too.

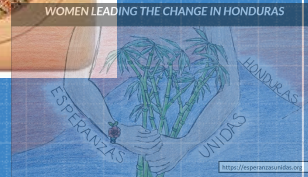
From construction of buildings or for pandas to chew!



Bamboo can be turned into many different things.
Make clothes, food, houses, bikes or swings!



What can you create? Can you make something new?



35 USES



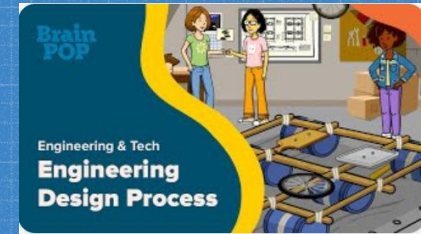
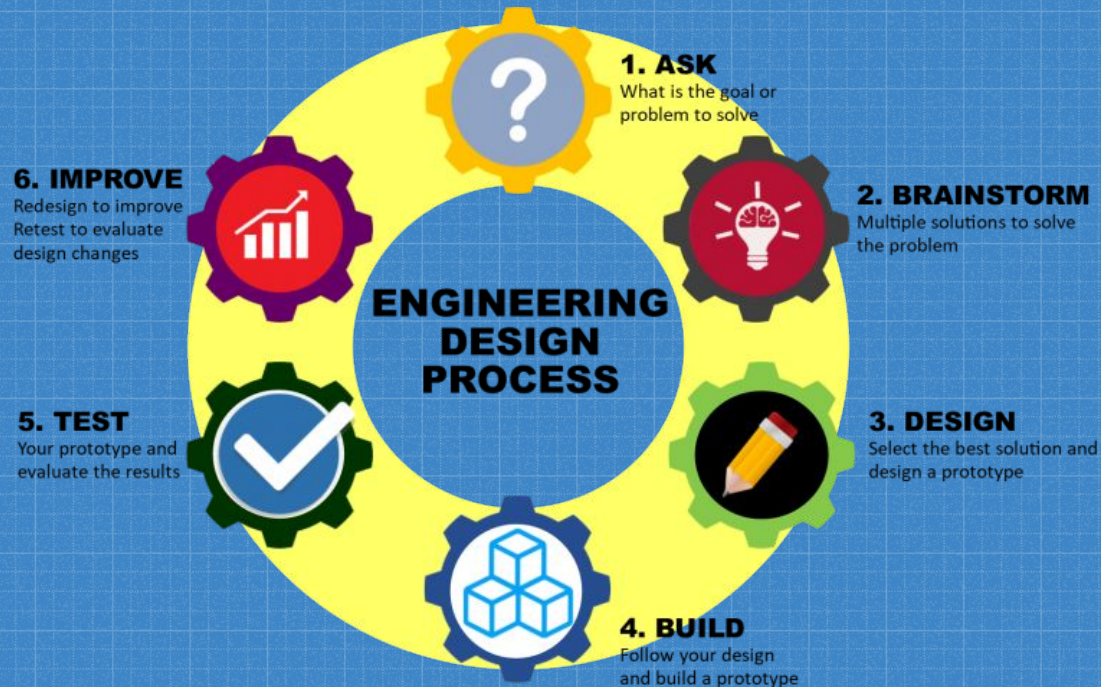
Click on the image to
watch a quick video!

Bamboo invention

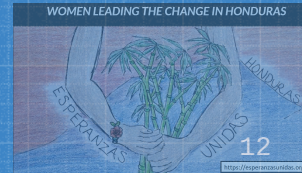
Why was this invention
created?



What is the Engineering Design Process?



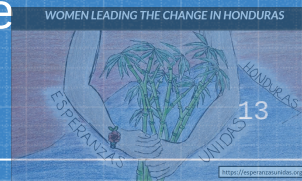
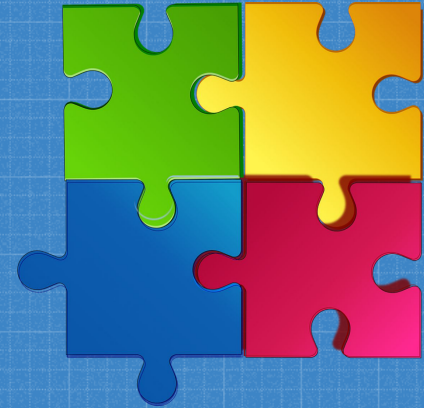
Want to learn more?
Click on the image!



Let's start making!

Within your group, decide...

- Who will be in charge of materials?
- Who will record everything on the worksheet?
- Who will watch the time and keep everyone on track?
- Will you rotate responsibilities throughout the project?



Keep Going!

Learn more about how the non-profit organization, Esperanzas Unidas, is helping women in Honduras through their bamboo cooperative project.

Want to help Esperanzas Unidas support more women and girls in rural Honduras?

Host your own community bamboo initiative night. Donate proceeds to Esperanzas Unidas so that they may help others!

Your school will receive an Esperanzas Unidas certificate to show everyone how much you have learned and how much you care about women, bamboo and the environment around the world

