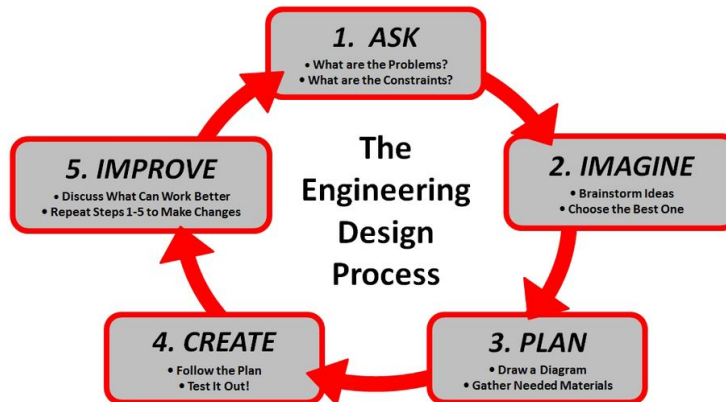


Maker Mindset! Week 6

Day 5: Build a Chair for Little Bear

Teacher/Parent Background:



Featured Story:

Goldilocks and the Three Bears illustrated by Gavin Scott

- Read Aloud Link: <https://www.youtube.com/watch?v=qyyJbnVzWIY>

Key Terms:

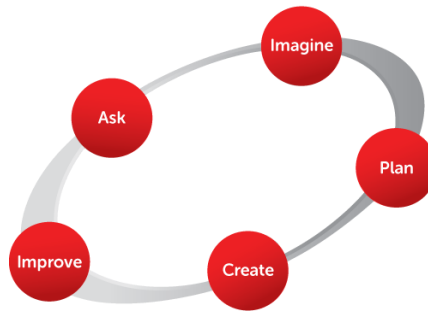
- Engineering Design Process
- Challenge

Materials List:

- Ruler
- Paper
- Straws
- Scissors
- Paperclips
- Tape
- Measuring tape
- Journal or Notebook

Activity Description:

- In this activity, students will read/listen to the story; *Goldilocks and the Three Bears* illustrated by Gavin Scott. After the reading, students will create their chair for a toy using a variety of materials to test strength, and if adding weight makes a difference in design.
- Read/ Listen to the story; *Goldilocks and The Three Bears*
 - *What do you think Goldilocks' process would be if she had to rebuild a chair?*
- *Introduce the Engineering Design Process below*



- Now introduce the challenge: Build a chair for a toy that can hold 100 pennies or paperclips (or whatever other objects you have at home). You will need to go through the Engineering Design Process to do so before testing your design. See below for some examples:



- Work with your student to get through the constraints of the challenge. Example questions below:

- *What materials are available?*
 - *Is there a time constraint?*
 - *How many tries do you get?*
- In a journal or notebook, have your student draw and imagine what their design could look like.
- Move on to the planning phase. Make sure your student is checking with the constraints of the challenge as well as their brainstorming to make a plan.
- Create
 - *Ask your student throughout the process why they chose one material over another, or a design over another?*
 - *How much weight do you think your chair will hold?*
- Before testing, fill out the the first three columns in the table below to make predictions:

Test #	What is the design made of?	How much weight will your chair hold?	How much weight did it hold before sinking?	What can you do differently to improve?

- Begin the first test.
 - *Add weight to their design. Add as much weight as the chair will hold. Record the weight.*
- After the first test, be sure to have your student fill out the last two columns on the table. Next, let your student work on their design and continue documenting their results. They may want to add materials like additional paper clips, pennies or other materials to test and see if weight makes a difference in the support needed for the chair.

- *Once they have a final design that they are happy with and feel is most successful, have the student document it in their journal/ notebook.*

Closure:

- After completion of the tests and final build, ask your student to reflect on the story and compare how what they did was similar.
 - *Why do you think the Engineering Design Process is so important?*
 - *What do you think you would tell Goldilocks if she was working on this project too?*
 - *What did you learn from building a chair?*
 - *What would you do differently?*

Extension:

Listen!

[Goldilocks and the Three Dinosaurs- Mo Willems](#)