

**Lesson 6:  
Think Like an Engineer**

**Lesson 6 Overview:** Lesson 6 introduces the steps of the Design Process. Children use the Design Process to create something of their choosing out of arts, crafts, and recycled materials.

**Powerful Ideas from Computer Science:** Algorithms, Design Process  
**Powerful Ideas from Literacy:** Writing Process, Sequencing

**I. Warm Up: What Is an Engineer?**

- Ask children if they know what an engineer is. Give examples of things made by engineers.
- Explain to children that they are going to be engineers today and plan and design their own creations!

**II. Opening Tech Circle: Design Process Steps**

- Explain the Design Process using the Design Process Anchor Chart.
- Walk through each step of the Design Process (Ask, Imagine, Plan, Create, Test & Improve, Share) to make KIBO dance.

**III. Unplugged Time: Your Design Process**

- Explain that the Design Process isn't just for KIBO, it's for making anything! Today they are going to get to choose what they design using the Design Process!
- Give the children a prompt of how to make something. Break into small groups to brainstorm ideas for their projects. Ask the children at the end of the small group time to share their plans.
- Give children time to use craft and recycled materials to make their creation! Pause and ask children if their creations are following their plan. Are there any changes they want to make now that they've started actually making their project?
- Go around and share creations as a class.

**IV. Closing Tech Circle: Design Process Song**

- Ask children if seeing everyone's projects, and working on their own projects, gave them ideas of new things they want to make. Remind children that the design process is a cycle!
- Finish by singing the Design Process Song together.

**Vocabulary:**

Design Process

Ask

Imagine

Plan

Create

Test

Improve

Share

Cycle

Engineer