

**Lesson 12:
Light It Up!**

Lesson 12 Overview: In Lesson 12, children are introduced to the Lightbulb and the Light Blocks.

Powerful Ideas from Computer Science: Hardware/Software, Representation
Powerful Ideas from Literacy: Tools of Communication and Language

I. Warm Up: Look for Light

- Play the video “I see the light!” and have children dance to the music!

II. Opening Tech Circle: Where Do We Find Light?

- Tell children that in the video, we saw a few places where light comes from.
- Ask children about other sources of light they come across in their day-to-day life.
- Tell children that KIBO, too, can be a source of light if we program it to be.

III. KIBO Time: Lights On! & Free Play

- Introduce children to a new KIBO part: the lightbulb! Explain that the lightbulb needs its own special blocks. Point out that all the Light Blocks are yellow, just like all the movement blocks are blue.
- In groups, children will explore the Lightbulb module freely. By the end of this activity, they should feel comfortable assembling a complete KIBO program with at least 4-5 blocks, including a Light Block and the Lightbulb.

IV. Closing Tech Circle: Sharing Programs

- Have children share their programs from free play. Prompt them to talk about how they used the Light Blocks and Lightbulb module.

KIBO Blocks:
Light Blocks

KIBO Module:
Lightbulb module