Coding as Another Language - KIBO
(CAL-KIBO)

DEVTECH RESEARCH GROUP

Lesson 11:
Lights On!

Lesson 11 Overview: In Lesson 11, 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: Where Do We Find Light?

- Display images from the Sources of Light slidedeck.
- For the object circled in red for each slide/image, ask children, *Is this something that light comes from? Is this a source of light?*

II. Opening Tech Circle: Light Around Us

- After going through the slidedeck, ask children *What are other sources of light you come across in day-to-day life?*
- Tell children that KIBO, too, can be a source of light, if we program it to be and they are going to learn a new KIBO part that shines light!

III. KIBO Time: KIBO's Light & 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 6-7 blocks, including a Light Block and the Lightbulb.

IV. Closing Tech Circle: Sharing Creations

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

KIBO Blocks:

Light Blocks

KIBO Module:

Lightbulb Module