PS: K-8 Engagement Activities - Language and thought precision

Exploration: K-8 Problem Solving - Language and thought precision

Tools Required: None

Pre-requisites : None

This exploration looks at the last of three key activity categories in K-8 CS: language and thought precision required in computational thinking.

Background:

Evidence exists that CS learning is accelerated when bolstered with on-ramping activities, especially un-plugged on-ramping activities. Annoyingly, a computer will perform what you ask it to, not what you want it to. Numerous activities exist to help you on-ramp your students, including playing a variant of the childhood game of "Mother May I"; or making a peanut butter and jelly sandwich as directed by your students, as shown in the following video.
The jam sandwich algorithm (https://www.youtube.com/watch?reload=9&v=NaRrq2q9-eI)

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Completing "human machine" activities, can be fun , as well. Sample human machine activities can be found on the **Computer Science Unplugged website (https://csunplugged.org/en/)**, or from any of the CS curriculum-in -a-box providers. **We have included a Code.org version on the next page, followed by a sample grid problem for the younger grades.**

Reflection:

Reflect on how you might make explicit connections from on-ramping activities to subsequent curriculum. For example, when helping a student create algorithms or debug code, you might say

something like: what did you want to have happen here? What did you instruct the robot, computer, etc. to do? Remember when we made the peanut butter and jelly sandwich?