Creative Computing with KANO

Create Technology!

Prep: Kano World accounts require an email address. If learners cannot provide a personal or school email address, a teacher or parent/guardian email address may be used. Plan in advance to determine how / whether students can create accounts.

Optional resources:
- Projector to show videos
- Printouts of diagram of a Raspberry Pi (or show on a screen)
- Chalk/markers for writing on the board
- Engineering blog - a journal for student reflection

Learning Objectives:
1. Learners can describe the components of a computer system, including hardware, operating systems, and applications.
2. Learners can give examples of how computers are used in the real world.
3. Learners build computers and write lines of code.

Lesson: Create Technology – The World of Computers	Time: 1 hr 15 min
Intro to computers: Describe components of a computer system. Identify popular examples of: • Computer hardware • Operating Systems • Applications • Coding languages Optional: Print out diagram of a Raspberry Pi and talk through each component. Write key words on the board and talk through each component or leave as a takeaway or follow-up to define each term together. **Intro to Kano kits:** Get excited! Learners to get ready to unbox the Kano kits. Why is it important to understand what's inside of the technology we consume? Optional: Show Monkey versus MacBook video: https://www.youtube.com/watch?v=FHO9uCQBiwI	15 min

Important announcement! Make sure to follow the instructions in the orange booklet! When stuck, the answers are almost always there. Learners are their own IT helpdesk agents when they're able to troubleshoot issues! *Optional: Give out IT Helpdesk badge when learners are able to solve problems. by working through them with the information they have.* **Build!** Build Kano computers! Clap and cheer as learners get powered up and type "cd rabbithole."	40 min

Kano world: Teacher to stop the class once first group gets to account creation and describe Kano World. Talk to the class about sharing online. Teacher to walk through creating an account with learners. Learners to continue creating their profiles and exploring the desktop.
 	
[Optional] Learners to reflect on their experiences in their Engineering Blogs and answer the questions:
   • What was your favorite part about today's session?
   • What was your least favorite part about today's session?
   • What are 3 things you learned today?
   • Why is it important to create, not just consume, technology?
 	
Teacher calls on 4 people to answer 1 of the 4 questions above.
	15 min

Cleanup: Pick 2 Kano keepers for the month. The keepers help make sure everything is put away properly.	5 min