Unplugged K - 8 Computer Science Enrichment Activities

Week 3 | *Kitchen Sort* | [K-2 Link to files](#) [3-8 Link to files](#)

Big Idea: Recognizing patterns and grouping objects are important skills for all age groups. They're also key parts of the Computer Science concept called abstraction. When using this activity with older students you can make connections to data science and data analysis. How we collect and sort data is extremely important in the story that our data will tell. Have fun!

Instructions: Read the directions for your grade level. It explains how many minutes per day you should complete Computer Science work for your grade level, along with the suggested computer websites on Ms. Sisney's class website. Click the **link to the files** above for your assignments. Make a copy of the files in order to type, write, or draw on the documents.

K - 2	Standards

Time: 30 - 45 minutes
● **MWF** | 10 minutes per day
● **T/Th** | 15 minutes per day
● **1-day** | 30 minute block
 	
Modifications: Students can draw (rather than write) items and categories
	CSTA
	    K-2 | *1A-DA-06* | Collect and represent data in various visual formats/Abstraction
	
	Common Core Mathematics
	    K | *Goal 8* | Identify and describe common attributes, patterns, and relationships in objects.
	    1 - 2 | *CCSS. Math. Practice.MP7* | Look for and make sure of structure.

3 - 5 **Time:** 60 - 75 minutes ● **MWF** | 20 minutes per day ● **T/Th** | 30 minutes per day ● **1-day** | 60 minute block	**Standards** **CSTA** *1B-DA-07* | Use data to highlight or propose cause-and-effect relationships, predict outcomes, or communicate an idea. Abstraction/Communication **Common Core Mathematics**

Modifications: Differentiate by changing the number of items per category and the number of categories required.	*CCSS. Math. Practice.MP7* | Look for and make sure of structure.

6 - 8
Time: 90 minutes
   • **MWF** | 30 minutes per day.
   • **T/Th** | 45 minutes per day.
   • **1-day** | 90 minute block
Modifications: Differentiate by changing the number of items per category and the number of categories required. Have students draw a graph to visualize something from the data.
	Standards
	CSTA
	   2-DA-07 | Represent data using multiple encoding schemes/Abstraction
	
	Common Core Mathematics
	   CCSS. Math. Practice.MP7 | Look for and make sure of structure.