unit 1

The Naming Game:

A Computer Science Solution to the “Digitization” Problem

Item	Computer Name
	0
	1

glossary

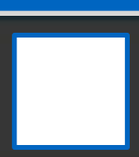
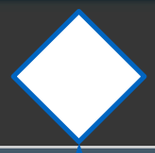
def: To ***digitize*** information is to create a clear system of repressing information as a unique collection of digits.

glossary

def: When we digitize, we often document the clear system with a ***mapping*** ; this is a table of information as well as the matching digits that name them. This is like a key in a cipher.

Activity - The Naming Game

- Fill in the mapping below with unique names, i.e., fill in the blanks so that no item has the same computer name.

Item	Computer Name (using two bits)
	0 0
	_ _
	_ _
	1 1

- Task: Fill in the mapping below

Item	Computer Name (using three bits)
	_____
	_____
	_____
	_____
	_____
	_____
	_____
	_____

Activity - Reflection

- Prompt: How many unique names can you create when the names are one bit long? How about two bits long? Three bits long? How many unique names do you think you can create when the names are four bits long? Explain.
- My responses: