Warm Up – Keeping safe
How do we use passwords?

Order these sample passwords (1-4) from the least (1) to most secure (4). Offer a brief explanation for your answer.

Password	Order (1-4)	Explanation
qwertyz		
080718		
P8ss>ord		
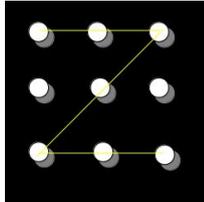
Mini-lesson
How do you create a secure password?

How many combinations can be made of the nine dots in a smartphone locking patterns? Show your work
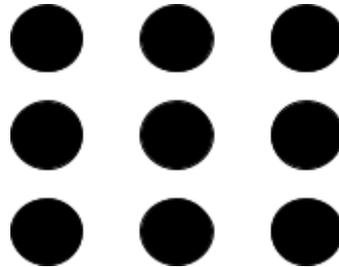
Keyword Review
Choose the best keyword to complete each sentence.

- Sequence
- Secure
- Safe
- Mnemonic
- Pattern
- Special characters

The order of letters in a password is called the _____ You should

use _____ to make a password secure. Don't use a

_____ that is predictable, that is unsafe. A _____ can

help you remember your password and other important information. Being

_____ online is easy if we remember the rules

Let's Discuss: *Why is it important to use passwords? In your workbooks or with a partner, record, discuss, or share an example of a safe password.*

_____

_____

_____

_____

Worked Example
*Design a SAM system that will illuminate a light on inputting a certain code*

Look at the pictures and read the steps that describe Challenge 1. What happens first? Second? Third? Write the number of the step below each picture.

Step 1 has been completed for you.

Steps	Instructions	Workspace
	Connect two AND blocks to the Toggles To each AND block connect One Key (A or B or) One Compare block	

Step 1.	Connect an RGB LED to a Toggle and the Toggle to an AND block	
	Connect both Keys to the Counter and connect the Counter to the 2 Compare blocks	
	Connect a Counter to the Compare blocks, open the Settings and set it to reset after '2'	
	Connect two more Toggles to the AND block	
	Test it! Press Keys A & B and see the light come on.	
	Each Toggle is going to respond to two inputs: ● The Key which was pressed ● The number of presses	
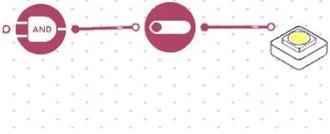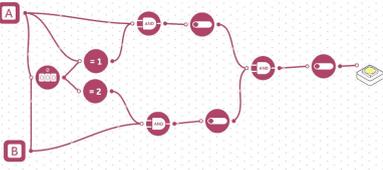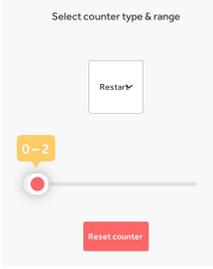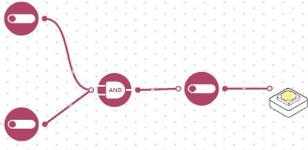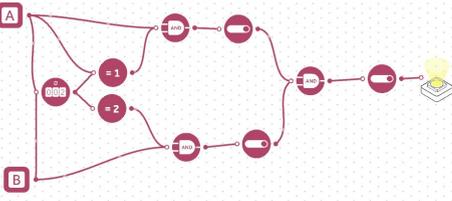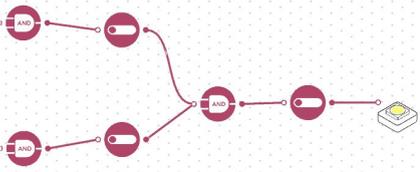
We can use transitional phrases to talk about the order events or actions that take place. Practice by using transitional phrases to discuss the steps you took to build your system.

Time & Sequence	Compare (+)	Contrast (-)	Cause and Effect
first/second/third	also	but	because
next	equally	however	so
after	likewise	otherwise	therefore
then	in addition	on one hand… ...on the other hand	as a result
finally/overall/to sum up	similarly	opposite	due to