

U1Ch1L4_Number Systems (Arbitrary & Combinations)

Purpose: Students will learn that numbers themselves (quantities) are laws of nature, but the symbols we use to represent numbers are arbitrary.

Activity:

“How many different ways can you represent the quantity “7”?

Take one minute to write your ideas down before sharing with your neighbors.”

Discuss

- Do a whip-around and have students suggest the different symbols used to represent numbers

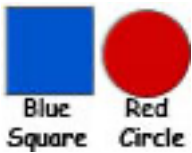
Journal: *(With Partner)*

- “If we kept going how many ways of representing “7” do you think we could come up with?”
There exist an infinite number of representations.

Total Number: _____

Challenge #1: How many Combinations Can Be Made From Just 2 Shapes?

Using the 2 shapes shown here, how many combinations can be assembled without repeating? In your Journals, begin assembling the combinations.



As an example, to the right is the first two combinations I came up with.
Now it is up to you to discover the total number of combinations that can be assembled.

