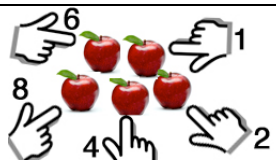
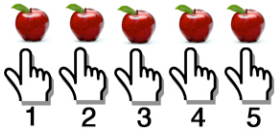
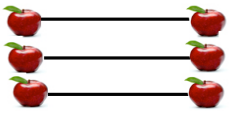
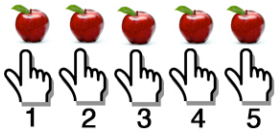
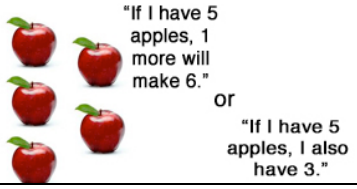
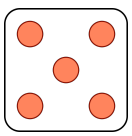
Mathematical Development Concepts

Strategies		
Concept	**Definition**	**Example**
Rote Counting	Reciting the names of the numerals in order or sequence.	"1,2,3,4,5…"
Tagging	Linking a single number name with one object, and only one, at a time. Student may still not recite the names of numerals in order.	
Synchronic Counting	Counting, saying one number for each object	

Big Ideas		
One-to-One Correspondence	Matching objects from one set to objects of an equal set.	
Magnitude	Knowing which one has more.	 **"Set A has more."**
Cardinality	Attaching a number name to a series of objects; to understand that the number spoken when tagging or touching the last object also identifies the total number in the group.	 "There are five apples."
Conservation	Recognizing equivalent collections of items despite appearances.	
Hierarchical Inclusion	The idea that numbers build by exactly one each time and that they nest within each other by this amount.	
Unitizing	Standard grouping of a specified number used to represent quantities. Underlies the understanding of place value; ten objects become one ten.	 = 10 pennies
Subitizing	Understanding that objects can be seen as a whole. Children can perceive the amount without needing to count.	 **"5"**

Adapted from information found in Young Mathematicians At Work by Cathy Twomey Fosnot