

The Counting Principles and Beyond

ZACHARY CHAMPAGNE

zakchamp.com |  [@zakchamp](https://twitter.com/zakchamp) | zacharychampagne@gmail.com



A Counting Task



**What does this student
understand about counting?**



The Counting Principles



Standard Order

When counting, the names of the counting numbers are always said in the same order, and that order is meaningful.



One to One Principle

When counting a set of objects, each and every object in the set is tagged with one and only one number in the counting sequence and each number with one and only one object.



Cardinal Principle

When counting (in accordance with the standard order and one to one principles) the last number word spoken describes an important characteristic of the whole set.

The last number word indicates the cardinality of the set.



Conservation of Cardinality

The cardinality of a set remains stable when:

- The order in which the objects in the set are counted is changed, or
- The objects in the set are rearranged or transformed.



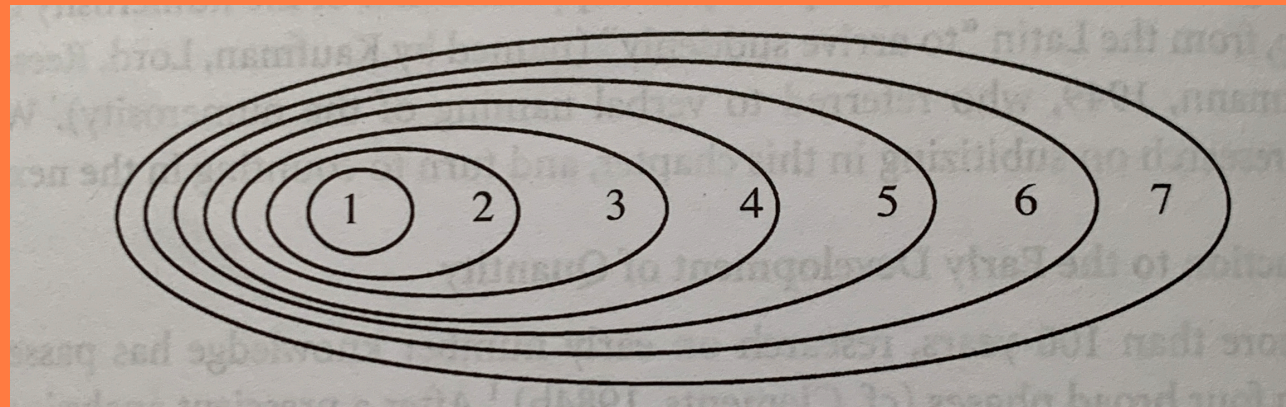
Successor Principle

There is a number that is one greater than every counting number.



Hierarchal Inclusion

Each cardinal number includes those that come before it. The number 7 contains a set of 6, a set of 5, a set of 4, etc.



Sarama & Clements, 2009

Count to tell the number of objects.

4. Understand the relationship between numbers and quantities; connect counting to cardinality.
 - a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
 - b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
 - c. Understand that each successive number name refers to a quantity that is one larger.



**What does this student
understand about counting?**



What tasks can help us
address the counting
principles in Pre-K through
Grade 2?



Quick Images



Mr. Mix Up



Counting Jar

Share Code: 69U3AXM9



Sneaky Mouse
Use Code - 9JLBZTNT



Cubes in Ziploc Bag



Cubes in Box



Make 10 Strategy
Share Code: 4MRDVTS6



Compensation



What's still on your mind?





THANK YOU!

ZACHARY CHAMPAGNE

zakchamp.com |  @zakchamp

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