

1st Grade Math: Making Patterns and Ordering Numbers

Making patterns and **ordering numbers** are key math concepts in 1st grade. They help students recognize sequences and understand the order and structure of numbers.

Making Patterns with Numbers

Patterns in math are sequences that follow a certain rule. When we create patterns with numbers, the goal is to find and continue the sequence based on a rule (like adding the same number each time).

Common Types of Patterns:

1. **Growing Patterns:** Numbers get bigger.
2. **Shrinking Patterns:** Numbers get smaller.
3. **Repeating Patterns:** A sequence repeats in the same way.

Example of Patterns:

- **Growing Pattern:** 2, 4, 6, 8, 10... (Add 2 each time)
- **Shrinking Pattern:** 10, 8, 6, 4, 2... (Subtract 2 each time)
- **Repeating Pattern:** 5, 7, 5, 7, 5, 7... (Alternating between 5 and 7)

Steps to Make a Pattern:

1. **Choose a rule:** Decide if you will add, subtract, or alternate numbers.
2. **Start with a number:** Pick the first number in your pattern.
3. **Follow the rule:** Add or subtract the same amount each time, or repeat numbers as needed.

Practice Pattern:

- Start with **3** and add **2** to each number:
 - 3, 5, 7, 9, 11...

Ordering Numbers

Ordering numbers means arranging them in a specific sequence, from **smallest to largest** (ascending order) or from **largest to smallest** (descending order). This helps children understand how numbers relate to each other.

Example of Ordering:

- **Ascending Order:** Small to big.
 - 3, 5, 7, 10, 15
- **Descending Order:** Big to small.
 - 15, 10, 7, 5, 3

Steps to Order Numbers:

1. **Look at the digits:** Start with the tens place (if it's a two-digit number) or the number itself.
2. **Arrange the numbers:** In ascending order (smallest to largest) or descending order (largest to smallest).

Example:

- Order these numbers: **8, 3, 15, 12, 6**
 - In **ascending order:** 3, 6, 8, 12, 15
 - In **descending order:** 15, 12, 8, 6, 3

Practice Example:

Order these numbers from smallest to largest:

- **4, 9, 2, 7, 1**
- Ascending order: **1, 2, 4, 7, 9**
- Descending order: **9, 7, 4, 2, 1**

Real-Life Example of Patterns and Ordering:

1. **Patterns:** If you have 1 apple, then 2 apples, and then 3 apples, you're following a **growing pattern** (adding 1 each time).
2. **Ordering:** You have 5 marbles, your friend has 3, and another friend has 7. To order from smallest to biggest: 3, 5, 7.

Conclusion:

Making patterns helps kids recognize regularities and sequences, while **ordering numbers** builds understanding of how numbers compare. Both concepts lay the groundwork for more advanced math skills.