3rd Grade Math: Odd and Even Numbers

What are Odd and Even Numbers?

- **Even numbers** are numbers that can be divided into two equal parts, with nothing left over.
- **Odd numbers** are numbers that cannot be divided into two equal parts, because there's always 1 left over.

Key Points:

1. **Even Numbers**:
    - Even numbers end in 0, 2, 4, 6, or 8.
    - They can be divided evenly into two equal groups.

    Examples:
    2, 4, 6, 8, 10, 12, 14, 16, 18, 20

    Visual Example:
    Imagine you have 8 apples. You can split them into 2 groups of 4, with nothing left over:

$$8 \div 2 = 4$$

- Since 8 can be divided into two equal groups, it's an even number.

- **Odd Numbers**:

    - Odd numbers end in 1, 3, 5, 7, or 9.
    - When you try to divide them into two equal parts, there's always 1 left over.

Examples:
1, 3, 5, 7, 9, 11, 13, 15, 17, 19

Visual Example:
Imagine you have 7 apples. You try to split them into 2 equal groups, but you have 1 apple left over:

$$7 \div 2 = 3\,\mathrm{R}\,1$$

Since 7 cannot be divided into two equal groups, it's an odd number.

How to Identify Odd and Even Numbers:

- **Even numbers** always end in 0, 2, 4, 6, or 8.
- **Odd numbers** always end in 1, 3, 5, 7, or 9.

Examples:

1. **12**:
   The last digit is **2**. Since 2 is even, 12 is an **even** number.
2. **27**:
   The last digit is **7**. Since 7 is odd, 27 is an **odd** number.

Practice:

Try to identify whether the following numbers are odd or even:

1. 34
2. 19
3. 56
4. 73

Answers:

1. **34** is even (last digit is 4).
2. **19** is odd (last digit is 9).
3. **56** is even (last digit is 6).
4. **73** is odd (last digit is 3).

Conclusion:

- Even numbers can be split into two equal parts.
- Odd numbers cannot be split into two equal parts and will always have 1 left over.
- You can easily tell if a number is odd or even by looking at its last digit!