Welcome to Exploring Positive and Negative Integers!

In this worksheet, you will learn about positive and negative integers, how to represent them on a number line, and perform basic operations with them.

Integers are whole numbers that can be positive, negative, or zero. They can be represented on a number line, with positive integers to the right of zero and negative integers to the left.

What are Integers?

Read the following definition and provide an example of an integer:

Integers are whole numbers that can be positive, negative, or zero.

Activity 1: Integer Number Line

Draw a number line and plot the following integers: -3, 0, 2, -1, 4. Label each integer on the number line.

[Space for number line]

What are Positive and Negative Integers?

Read the following definitions and provide examples:

Positive integers are whole numbers greater than zero, while negative integers are whole numbers less than zero.

Activity 2: Sorting Integers

Sort the following integers into two groups: positive and negative.

- -5
- 3
- -2
- 1
- -4
- 0

Basic Operations with Integers

Read the following examples and calculate the results:

You can perform basic operations such as addition and subtraction with integers.

Activity 3: Adding and Subtracting Integers

Calculate the following:

1. -2 + 3 = ?
2. -1 + (-2) = ?
3. 4 - 2 = ?
4. -3 - (-1) = ?

Real-World Applications

Read the following scenarios and determine the integer that represents each situation:

Integers have many real-world applications, such as representing temperatures, financial transactions, and scores in games.

Activity 4: Real-World Scenarios

Read the following scenarios and determine the integer that represents each situation:

1. You have $10 in your savings account and you spend $5.

2. The temperature outside is 5 degrees below zero.

3. You score 2 points in a game and then lose 1 point.

Conclusion

Congratulations! You have completed the introduction to positive and negative integers.

Remember that integers are whole numbers that can be positive, negative, or zero, and they have many real-world applications.

Assessment

Answer the following questions to assess your understanding:

1. What is the definition of an integer?

2. How do you represent integers on a number line?

3. What is the result of adding 2 and -3?

Extension Activity

Create your own real-world scenario that involves integers and share it with the class.

[Space for scenario]

Glossary

Define the following terms:

- Integer: a whole number that can be positive, negative, or zero
- Positive integer: a whole number greater than zero
- Negative integer: a whole number less than zero
- Number line: a visual representation of numbers on a line

Reflection

Reflect on what you have learned about positive and negative integers.

Individual Reflection:

1. What was the most surprising thing you learned today?
2. How will this learning change your actions in the future?
3. What questions do you still have about environmental impact?