

LESSON

9-1

Exploration Recording Sheet**Understanding Integers**

Integers can be represented with two-color counters. A grey counter represents -1 , and a white counter represents 1 . Each grey and white pair is called a zero pair.

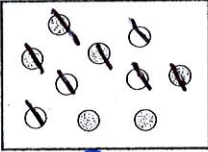
Zero pair



A zero pair has a value of zero. To find the value on an integer mat, remove zero pairs.

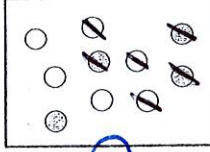
Find the value on each mat.

1.



-2

2.



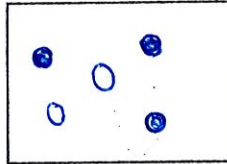
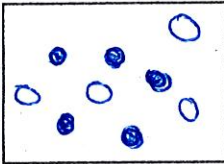
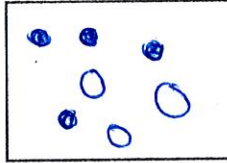
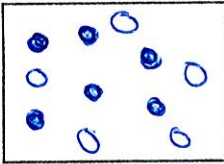
2

3.



-2

4. Create four different mats that show a value of -1 .



Unit 5: Integers

Positive Numbers are greater than zero.
* can be written with a (+) sign, but usually written without it

Negative Numbers are less than zero.
* always written with a negative sign (-)

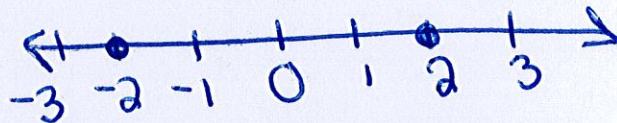
Integers in Real Life Situations

| Key Words for Positive Integers | Key Words for Negative Integers |
|--|---|
| gain increase raise above more bonus up deposit | lost less decrease drop below withdraw down |

Integers are the set of all whole numbers and their opposites.

Opposites are the same distance from zero, but on different sides of zero.

Example:



* the opposite of 2 is negative 2 (-2)

Absolute Value of an integer is its distance from zero on a number line
* The symbol for absolute value is

Special Note:

- Absolute values are always positive
- Opposite integers have the same absolute value

Examples:

1) $|-6| = 6$

2) $|2| = 2$

* \uparrow $|-2| = -2$
on the outside