

LESSON 1



CA Standards

NS 2.6 Understand the special properties of 0 and 1 in multiplication and division.

MR 3.3 Develop generalizations of the results obtained and apply them in other circumstances.

Also **NS 2.0, AF 1.2, AF 1.5, MR 2.3, MR 3.0**

Vocabulary

Identity Property of Multiplication

$$6 \times 1 = 6 \text{ or } 1 \times 6 = 6$$

Zero Property of Multiplication

$$8 \times 0 = 0 \text{ or } 0 \times 8 = 0$$

Materials

- Workmat 1
- Counters

Hands On

Multiply with 0 and 1

Objective Use the special properties of 1 and 0 in multiplication.

Explore

Identity Property of Multiplication The product of 1 and any number is that number.

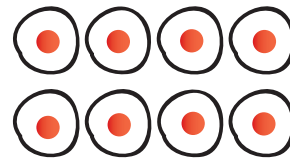
Zero Property of Multiplication The product of any number and 0 is 0.

Question How can you use counters and equal groups to show multiplication by 1 or 0?

Maya has 8 plates. She puts one mango on each plate. How many mangos are there?

- 1 Draw 8 circles to show the 8 plates.

Put 1 counter in each circle to show the mangos.



- 2 Write a multiplication sentence to show the total.

$$8 \times 1 = 8$$

$$1 \times 8 = 8$$

Solution: There are 8 mangos on the plates.



Maya has 5 baskets. There are no mangos in them.
How many mangos are in the 5 baskets all together?

- 1 Draw circles to show the baskets.
 - 2 Use counters to show the mangos.
How many counters do you need?
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- 3 Write a multiplication sentence to show the total.