



MULTIPLICATION WITH ARRAYS

A quick teaching guide for parents

YOU NEED

12 coins, buttons, counters, or pieces of cereal

TIME

10 MIN

1 Start with what your child knows

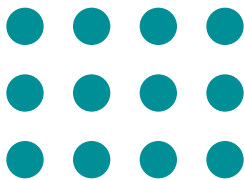
Give your child 12 small objects. Ask: "Can you make 3 equal groups?" Ask how they know the groups are equal.

IF EQUAL GROUPS ARE DIFFICULT

Start with 6 objects. Make 2 groups of 3 together, then try 12 again.

2 Show how rows make multiplication visible

3 rows of 4 objects in each row



$$3 \times 4 = 12$$

$$4 + 4 + 4 = 12$$

Rows go across. Columns go up and down. This array shows 3 rows with 4 objects in each row.

3 What to say, try, and check

SAY "There are 3 rows with 4 in each row. Let's count: 4, 8, 12. So $3 \times 4 = 12$."

TRY Build 2 rows of 5 together. Ask how many rows and how many in each row.

CHECK "Show me the rows. How did you figure out how many objects there are?"



BUILD IT. DRAW IT. EXPLAIN IT.

Work together. No timer and no score. Talk about how you know.

A. Make 3 rows of 4

Fill in the circles to show 3 rows of 4. Then explain your picture.

ASK: "How many rows? How many in each row?"

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☐	☐	☐	☐
☐	☐	☐	☐

Rows: _____

In each row: _____

_____ × _____ = _____

B. Make 2 rows of 5

Fill in the circles to show 2 rows of 5. Count by fives to find the total.

ASK: "How did you find the total?"

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☐	☐	☐	☐	☐

Rows: _____

In each row: _____

_____ × _____ = _____

C. Turn your array

Look back at A. Fill in 4 rows of 3. Does the total stay the same?

ASK: "What changed? What stayed the same?"

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☐	☐	☐
☐	☐	☐
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Rows: _____

In each row: _____

_____ × _____ = _____

PARENT CHECK

Can your child explain the rows and the total?

YES / WITH HELP / NOT YET