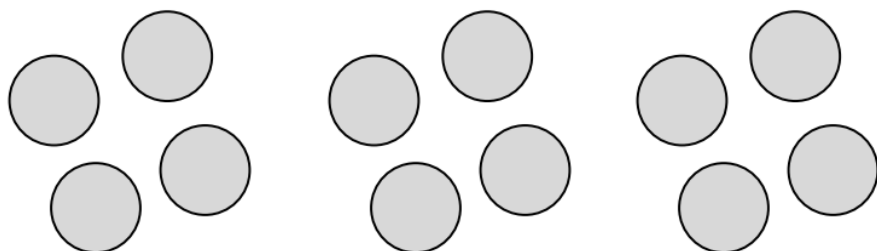




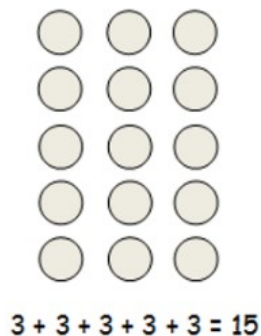
What Should I Already Know?

Solve multiplication problems using practical equipment and jottings. Use the equipment to make groups of objects.

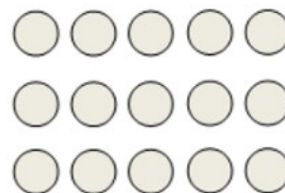


What do I need to know?

Arrange items into equal groups and count to find the total.
Understand how arrays can show repeated addition of rows and/or columns and that multiplication is commutative.



$$3 + 3 + 3 + 3 + 3 = 15$$



$$5 + 5 + 5 = 15$$

Vocabulary

multiply

array

groups

times

lots of

repeated addition

commutative

row

column