

Grade 3 Unit 2

Lesson 11

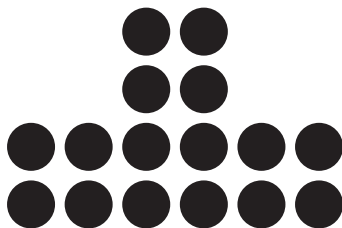
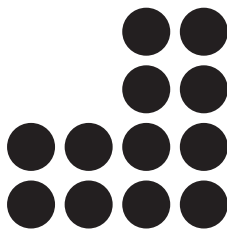
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Unit 2 Lesson 11: Area and the Multiplication Table

WU How Many Do You See: Arrays that Grow (Warm up)

Student Task Statement

How many do you see? How do you see them?



1 Area and the Multiplication Table

Student Task Statement

What do you notice? What do you wonder?

×	1	2	3	4	5
1					
2					
3	3				
4					
5					

×	1	2	3	4	5
1					
2					
3		6			
4					
5					

×	1	2	3	4	5
1					
2					
3			9		
4					
5					

×	1	2	3	4	5
1					
2					
3				12	
4					
5					

1. Use the blank table to create your own rectangle.

Start from the top left corner. Record the product that the rectangle represents. Be prepared to explain your reasoning.

×	1	2	3	4	5
1					
2					
3					
4					
5					

2. Use the following table to create a rectangle with an area of 24 square units. Start from the top left corner. Record the product that the rectangle represents. Be prepared to explain your reasoning.

×	1	2	3	4	5	6	7	8	9
1									
2									
3									
4									
5									
6									
7									
8									
9									

2 Products in the Multiplication Table

Student Task Statement

What do you notice? What do you wonder?

\times	1	2	3	4	5	6	7	8	9	10
1		2								
2	2	4	6	8	10					
3		6								
4		8								
5		10								
6										
7										
8										
9										
10										

1. Find as many other products in the table as you can. You may want to start with rows and columns that show products of 2, 5, and 10.
2. What patterns do you see in the row and column that show products of 5?
3. Write some equations that show one of the patterns that you see in the multiplication table. Explain or show your reasoning.