Name: _____ Date: _____

Multiply by Powers of 10 Picture Patterns

Year 6

When you multiply by 10, 100 or 1000, the digits move left in the place value chart.
Use the pictures to help you see the pattern.

1. Complete the place value charts.

a) 37 × 10 = _____

	Th	H	T	O
			3	7
× 10				
× 100				
× 1000				

b) 245 × 10 = _____

	Th	H	T	O
		2	4	5
× 10				
× 100				
× 1000				

c) 6.8 × 10 = _____

	Th	H	T	O	t	h
		6	.	8		
× 10						
× 100						
× 1000						

2. Draw base-ten blocks to show each number. Then draw the new blocks after multiplying by 10, 100 and 1000.

a) 23

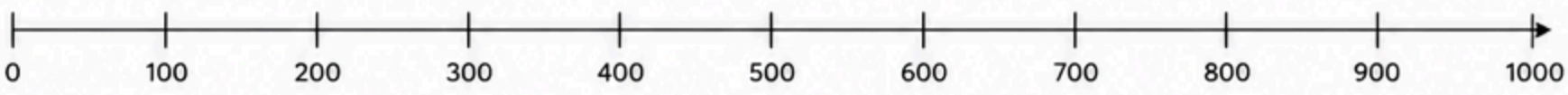
b) 407

c) 6.4

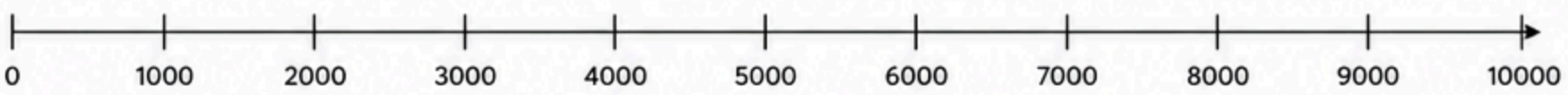
Original (× 1)			Original (× 1)	
× 10			× 10	
× 100			× 100	
× 1000			× 1000	

3. Use the number lines to show the multiplications. Plot the starting number, then make jumps to show × 10, × 100 and × 1000.

a) 52 × 10 52 × 100 52 × 1000



b) 314 × 10 314 × 100 314 × 1000



c) 6.7 × 10 6.7 × 100 6.7 × 1000

