



MRSEC

Education and Outreach
Education and Outreach



Student Worksheet

Test Tube	# of Drops of Food Coloring		Total # of Drops		Parts per Billion of Food Coloring
1	10	÷	10	× 1,000,000,000 =	1,000,000,000
2	1	÷	10	× 1,000,000,000 =	100,000,000
3	0.1	÷	10	× 1,000,000,000 =	10,000,000
4	0.01	÷	10	× 1,000,000,000 =	
5	0.001	÷	10	× 1,000,000,000 =	
6	0.0001	÷	10	× 1,000,000,000 =	
7	0.00001	÷	10	× 1,000,000,000 =	
8	0.000001	÷	10	× 1,000,000,000 =	
9	0.0000001	÷	10	× 1,000,000,000 =	
10	0.00000001	÷	10	× 1,000,000,000 =	1