

5 Patterns from Billions to Billionths



Pairs

Start

Look at the Patterns from Billions to Billionths Chart.

Follow these steps and discuss the answers with your partner.

1. Circle the words *thousands*, *millions*, and *billions*.
2. Circle the word *thousandths* and describe the relationship between the *thousands* and *thousandths* positions. How far is each from the ONES place?
3. Circle the word *millionths* and describe the relationship between the *millions* and *millionths* positions. How far is each from the ONES place?
4. Circle the word *billionths* and describe the relationship between the *billions* and the

billionths positions. How far is each from the ONES place?

5. Describe the relationships between the numbers of zeros in the whole number, in the fraction denominator, and in the decimal for a position.

Extend Add three more place value positions to each end of the chart. Put paper at each end to make room for the new positions.

Patterns From Billions to Billionths																			
billions	hundred millions	ten millions	millions	hundred thousands	ten thousands	thousands	hundred	tens	ONES	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths	ten millionths	hundred millionths	billionths	
1,000,000,000	100,000,000	10,000,000	1,000,000	100,000	10,000	1,000	100	10	1	0.1	0.01	0.001	0.0001	0.00001	0.000001	0.0000001	0.00000001	0.000000001	
										$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1,000}$	$\frac{1}{10,000}$	$\frac{1}{100,000}$	$\frac{1}{1,000,000}$	$\frac{1}{10,000,000}$	$\frac{1}{100,000,000}$	$\frac{1}{1,000,000,000}$	