

Activity 1: Rabbit Riddle (Fill-in all the blanks!)

Directions: Find the next two terms of each sequence. Then look for the answers on the spaces below. Fill the spaces with the letters for the answers. The resulting words will be the answer to the riddle.
(Note: Not every answer has a space below.)

$$1. \ 8, 16, 24, 32, \frac{40}{M}, \frac{48}{N}$$

$$6. 7, 4, 1, -2, -5, \frac{\boxed{}}{C} \rightarrow \frac{\boxed{}}{D}$$

$$2. \ 1, 8, 27, 64, \boxed{}, \boxed{}$$

$$7. 3, 4.5, 6, 7.5, \boxed{}, \boxed{}$$

X **Y**

$$3. \ 1, 3, 9, 27, \boxed{}, \boxed{} \\ \text{S} \qquad \text{T}$$

$$8. \ 6.89, 7, 7.11, 7.22, \boxed{}, \boxed{} \\ Q \quad R$$

$$4. \ 1, 4, 7, 10, \boxed{} \xrightarrow{\text{H}} \boxed{} \xrightarrow{\text{I}}$$

$$9. \ 1, 3, 7, 13, 21, \boxed{}, \boxed{}$$

K **L**

$$5. \ 1, 1, 2, 3, 5, \boxed{}, \boxed{} \quad \begin{matrix} F \\ H \end{matrix}$$

$$10. \ 5, -1, 2, -4, -1, \boxed{}, \xrightarrow{\text{G}} \boxed{}$$

Question: What did the construction worker say when the rabbit stepped onto the forklift?

<u>M</u>	<u> </u>								
40	10.5	243	13	16	81	16	81		
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>N</u>	<u> </u>				
-11	216	8	16	48	16	243	216	43	10.5
<u> </u>	<u>N</u>	<u> </u>							
13	125	7.44	216	-	7.44	125	16	81	16
<u> </u>	<u>N</u>	<u> </u>							
216	9	-4	216	7.44	16	216	48	-8	216



□ Sequences

Sequences are just lists of numbers, usually with some type of pattern driving the sequence. If you can learn the pattern for a sequence of numbers, then you can continue creating more numbers to build onto the list.

Example: Given this sequence of numbers: 3, 6, 9, 12, _____, _____, _____, name the missing numbers.

Answer: The pattern shows that three is added to the previous number to find the next term; therefore, the missing terms must be 15, 18, and 21.