

# Exponential and Logarithmic Vocabulary Review

## Across

2. \_\_\_\_\_ interest is an application of exponential functions.
4. Rules associated with logarithms that allow you to condense or expand a logarithm are log \_\_\_\_\_.
5. In exponential functions in the form of  $f(x)=ab^x$ , the  $a$  value represents the \_\_\_\_\_.

9. Logarithm to the base  $e$  is a \_\_\_\_\_.

11. \_\_\_\_\_ - \_\_\_\_\_ means that half of a sample of the substance will remain as the original element in time.

14. In exponential notation  $n^x$ ,  $x$  is the \_\_\_\_\_.

17. The growth of something exponentially, such as population or interest, is referred to as exponential \_\_\_\_\_.

19. \_\_\_\_\_,  $e$  can be used in interest problems when the interest is compounded continuously.

20. A function in the form of  $f(x)=ab^x$ .

## Down

1. The \_\_\_\_\_ logarithm is the logarithm with base 10.

3. In logarithmic functions, the asymptote the graph approaches but never touches or crosses.

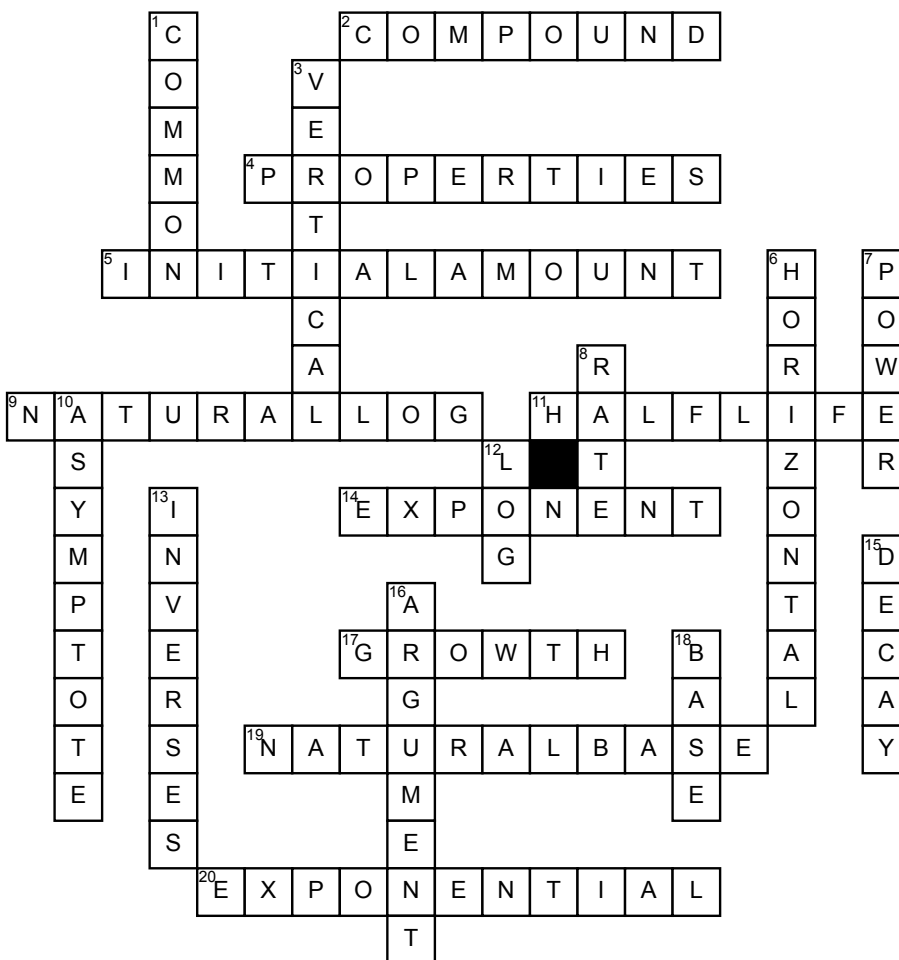
6. In exponential functions, the asymptote the graph approaches but never touches or crosses.

7. Another term used to describe an exponent.

8. In exponential functions in the form of  $f(x)=ab^x$ , the  $b$  value represents the \_\_\_\_\_.

10. A line that a graph approaches but does not touch or cross.

12. The abbreviation used for the logarithmic function.



13. Exponential and logarithmic functions are \_\_\_\_\_ of one another.

15. The decline of something exponentially, such as radioactive deterioration or a vehicle's value depreciating, is referred to as exponential \_\_\_\_\_.

16. A logarithm could be read as "log base  $b$  of the \_\_\_\_\_ (or answer) equals the exponent.

18. In a function involving the expression  $bx$  where  $b$  is a positive number other than 1,  $b$  is the \_\_\_\_\_.

