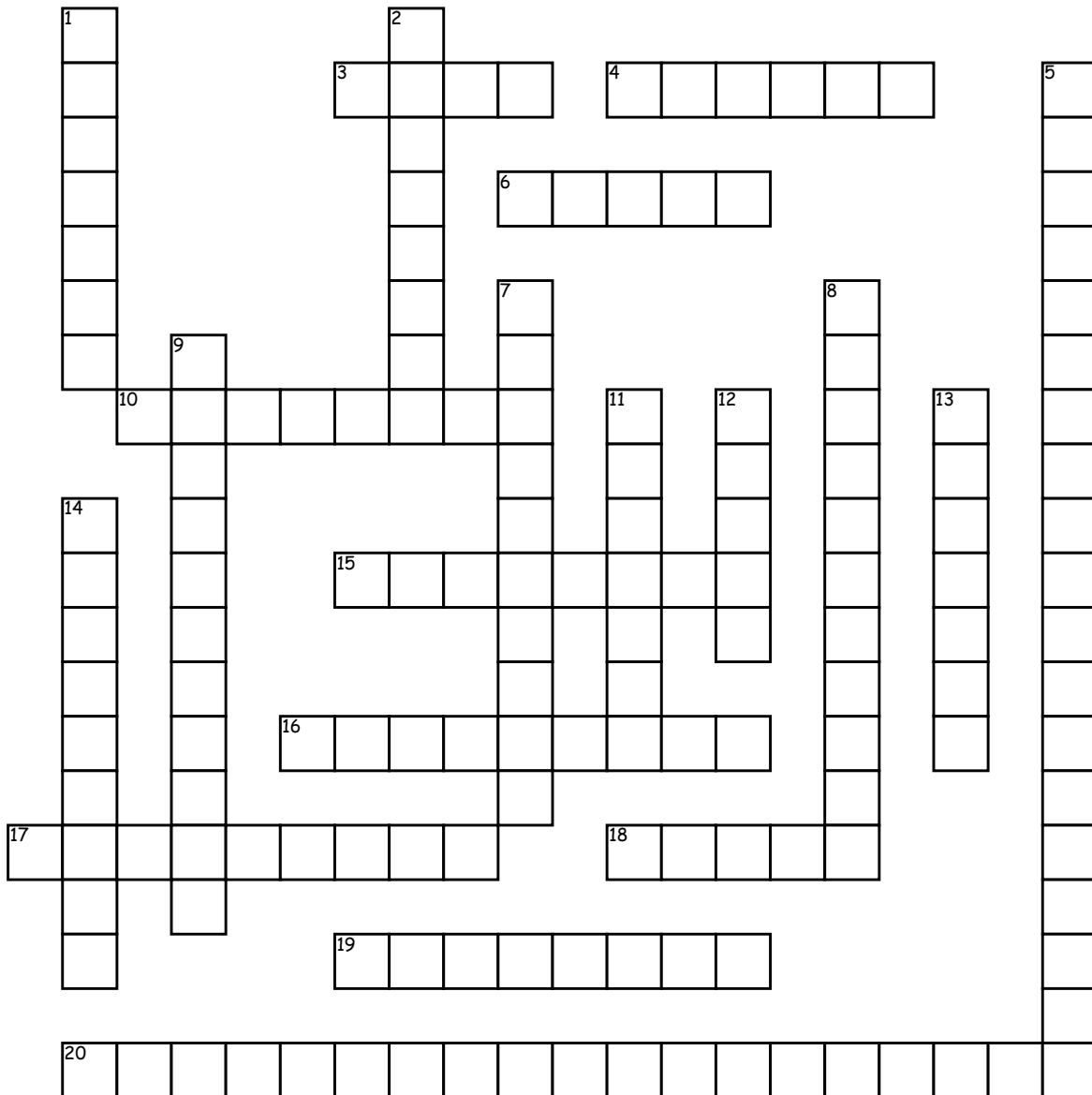


# Desi & Hali's Exponential & Logarithmic Crossword



**Across**

- 3. In the equation  $f(x)=b^x$ , what does  $b$  stand for?
- 4. Will be represented by a positive exponent.
- 6. Will be represented by a negative exponent.
- 10. In the equation  $f(x)=b^x$ , what does  $x$  stand for?
- 15. You can never have a \_\_\_\_\_ base in a log, nor can you have a log to a \_\_\_\_\_ power.
- 16. A logarithm to the base of 10.
- 17. an exponential function written in its inverse form.

18. a number that describes both the direction and the steepness of the line. Often denoted by the letter  $n$ .

- 19. The log of a \_\_\_\_\_ is equal to the difference of the logs of the numerator and denominator
- 20. An equation with logs in it.

**Down**

- 1. it means 'opposite.' Logs are the \_\_\_\_\_ form of Exponential equations/expressions.
- 2. After each period of time, there is half of the material left as before. Can be shown with exponential decay.
- 5. An equation with exponents in it.
- 7.  $\ln$  stands for...

8. represented by  $e$ .

- 9. opposite of logarithm.
- 11. Many people mistakenly call this a 'square root' symbol, and many times it is used to determine the square root of a number. However, it can also be used to describe a cube root, a fourth root or higher.
- 12. The log of a \_\_\_\_\_ is equal to the power times the log of the base.
- 13. The log of a \_\_\_\_\_ is equal to the sum of the log of the first base and the log of the second base
- 14. The line which a graph never crosses.