## Vocabulary: Exponents and Power Rules

## Vocabulary

- Base - a number or expression raised to an exponent.
- For example, in the expression $5^{3}, 5$ is the base.
- Exponent - a number, written to the right of and just above a number or expression, that indicates how many times the number or expression is multiplied by itself.
- For example, in the expression $5^{3}, 3$ is the exponent.
- The expression $5^{3}$ equals $5 \cdot 5 \bullet 5$, or 125.
- Power is another name for exponent.
- For example, $6^{5}$ is read " 6 to the fifth power."
- The exponents 2 and 3 have special names -2 is "squared" and 3 is "cubed."
- For example, $4^{2}$ is read "four squared."
- For example, $4^{3}$ is read "four cubed."
- A negative exponent means to divide by that many factors.
- For example, $5^{-3}$ means $\frac{1}{5^{3}}=\frac{1}{125}$.
- A number raised the zero power equals 1.
- For example, $5^{0}=1$.

