

Name _____

Secret Powers Answer Key

1. $x^5 \rightarrow E$
2. $a^5 \rightarrow X$
3. $m^6 \rightarrow P$
4. $4b^2 \rightarrow O$
5. $\frac{y^2}{z^2} \rightarrow N$
6. $c^7 \rightarrow E$
7. $n^5 \rightarrow N$
8. $p^6 \rightarrow T$

Secret Message: EXPONENT

Teacher's Guide

- Review the exponent properties before students begin so they know which rule applies to each expression.
- Encourage students to simplify carefully before looking at the Code Key to avoid decoding errors.
- Support students by allowing them to check each simplified expression with a partner before decoding the message.
- Increase engagement by challenging students to predict the secret word after decoding the first few letters.
- Differentiate by providing a reference chart of exponent properties for students who need additional support or by asking advanced students to justify each simplification.
- Extend the activity by having students create their own coded message using exponent expressions and exchange puzzles with classmates.