

Name _____

Scientific to Standard Answer Key

- | | |
|----------------|-------------------|
| 1. 480,000 | 9. 0.0000709 |
| 2. 70,300 | 10. 0.00000142 |
| 3. 91,500,000 | 11. 0.0000000097 |
| 4. 206,000,000 | 12. 0.00000000456 |
| 5. 5,001,000 | 13. 1,080 |
| 6. 0.84 | 14. 0.0002305 |
| 7. 0.0325 | 15. 8,090,000,000 |
| 8. 0.00618 | |

Teacher's Guide

- Quick implementation tips
 - o Review how a positive exponent moves the decimal to the right and a negative exponent moves it to the left.
 - o Encourage students to rewrite each coefficient before moving the decimal point.
 - o Have students check that the number of decimal moves matches the exponent.
- Differentiation strategies
 - o Provide a place value chart for students who need visual support.
 - o Allow students to mark each decimal move with arrows before writing the final number.
 - o Challenge advanced students with larger exponents after completing the worksheet.
- Engagement ideas
 - o Turn the activity into a relay where partners take turns solving and checking each problem.
 - o Ask students to identify which completed answer is the greatest and which is the smallest.
- Extension activities
 - o Have students write the scientific notation for each completed standard form answer.
 - o Ask students to create three new scientific notation problems for a classmate to solve.
 - o Discuss real world examples, such as distances in space or microscopic measurements, that use scientific notation.