

## Core Skills Analysis

### Mathematics

- Understood the concept of like terms in algebraic expressions, recognizing which terms share the same variable(s) and exponent(s).
- Practiced combining like terms to simplify algebraic expressions, improving skills in equation manipulation.
- Developed attention to detail by correctly identifying coefficients and variables before performing operations.
- Strengthened foundational skills critical for solving more complex equations and progressing in algebra.

### Tips

To deepen understanding of working with like terms, encourage Ella to create her own algebraic expressions and practice simplifying them, explaining her process aloud to solidify reasoning. You can introduce real-world scenarios, like combining ingredients in a recipe or grouping expenses, to see how like terms apply practically. Incorporate games or digital apps that focus on algebraic manipulation for engaging practice. Finally, explore visual representations, such as using colored tiles or drawing term groups, to reinforce the concept of like terms through multisensory learning.

### Book Recommendations

- [Algebra Survival Guide](#) by Josh Rappaport: A friendly and accessible guide that breaks down algebra concepts, including like terms and simplifying expressions, for middle school students.
- [No-Nonsense Algebra](#) by Richard W. Fisher: This book offers clear explanations and practice problems designed to build a strong foundation in algebraic skills.
- [Math Doesn't Suck: How to Survive Middle School Math Without Losing Your Mind or Breaking a Nail](#) by Danica McKellar: Engaging math book that empowers middle schoolers to grasp essential math concepts, including working with variables and algebraic expressions.

### Learning Standards

- MA.6.A.1.1: Solve one-step equations and inequalities involving sums, differences, and products of rational numbers.
- MA.6.A.1.2: Apply properties of operations to generate equivalent expressions.
- MA.6.A.1.3: Identify and combine like terms to simplify expressions.

### Try This Next

- Worksheet: Write and simplify ten algebraic expressions by combining like terms with step-by-step explanations.
- Drawing task: Color-code terms in mixed expressions to visually group like terms before simplifying.

### Growth Beyond Academics

Ella demonstrated focus and perseverance in working through equations involving like terms, showing growing confidence in manipulating algebraic expressions. This activity also encouraged logical thinking and attention to detail, which are important for academic independence and problem-solving.