

The Great Number Rumble

Grade 4

5 skill lessons · 4 math-through-reading

Skill lessons

5 lessons on the mathematics the book carries. Printable workbook pages and teacher keys are not available for this book yet.

1. One Cent, Then Double: Building Sam's Wage Table

Concept · Doubling a money amount over and over and reading what the total becomes

2. Take It From One Side, Put It Back On the Other

Representation · Building a shape that tessellates by moving a piece from one side to the opposite side

3. Stacking Dots: Where 1, 3, 6, 10 Comes From

Representation · Adding consecutive numbers to build the triangle numbers and stacking dots to show them

4. Why the Bees Chose Hexagons

Reasoning · Comparing shapes by how well they cover a surface with no gaps

5. Reverse and Add Until It Reads Both Ways

Fluency · Reversing the digits of a number and adding, repeating until the total reads the same both ways

Math through the reading

The mathematics is reached through a sentence the book prints: change one word in the reading and the numbers change with it. These carry their own standards, matched against these lessons rather than inherited from the skill ones.

6. The Word That Cost Ten Million Dollars

Integrated · Students build Sam's wage table twice, once under the word the book uses and once under a word one letter of meaning away, and use the book's own printed totals to say which table Sam wrote.

7. Rebuild the Table Sam Wrote

Integrated · Students reconstruct the missing rows of Sam's wage table between the three totals the book reports, and prove the order matters by trying to compute a row with the row above it hidden.

8. The Rows Sam Never Showed Us

Integrated · Students recover the day-five pay the book leaves out and the day the wage first passes a dollar, and must hand in each number with the sentences that force it.

9. Would You Have Picked the Hexagon?

Integrated · Students tile one frame with triangles, squares and hexagons, count what each tiling costs, and argue for the shape the bees should have chosen using a number they counted themselves.

Reading and language lessons

5 lessons on the reading and language the book carries - what a word means in its sentence, how a character is shown, how a text is built. No mathematics: these are matched against the English language arts curricula, which are a different and smaller set than the mathematics ones.

10. That's what I thought

Comprehension · Reading what a first-person narrator reveals about himself

11. Two ways of saying the same news

Author's craft · Comparing formal report language with the same person speaking

12. The box with its own name

Text features · Explaining what a headed sidebar does for a reader

13. Agreeing on the way to disagreeing

Comprehension · Following a claim, an objection and a reply through a debate

14. The reason he gives and the reason he has

Comprehension · Telling the reason a character states from the reason a reader infers