RISING GRADE 7

Math Teacher Guides

SAMPLE

RedThread™
A Lavinia Mathematics Program

Table of Contents

Story Problems

IMPLEMENTATION GUIDE 6

Guiding Principles 6

Rising Grade 7 Scope and Sequence 7

Program Materials 7

Intellectual Preparation 8

Math for Meaning™: Story Problems Implementation 9

Lesson 1 11

Lesson 2 14

Lesson 3 17

Lesson 4 20

Lesson 5 23

Lesson 6 26

Lesson 7 29

Lesson 8 32

Lesson 9 35

Lesson 10 38

Lesson 11 41

SAMPLE

Copyright © 2026 Lavinia Group. All Rights Reserved

Lesson 12 44
Lesson 13 47
Lesson 14 50
Lesson 15 53
Lesson 16 56
Lesson 17 59
Lesson 18 62
Lesson 19 65
Lesson 20 68

SAMPLE

 Copyright © 2026 Lavinia Group. All Rights Reserved

Implementation Guide

Guiding Principles

Math for Meaning™: Story Problems—Rising Grade 7 is an approach to teaching mathematics that uses a student's own mathematical thinking as the basis for instruction and prepares students to independently solve math problems with joy, confidence, and precision. During a Math for Meaning™: Story Problems—Rising Grade 7 lesson, students independently solve one real-world math problem using any strategy they choose based on their intuitive mathematical understanding. Students then come together as a classroom community to discuss the problem, share their strategies for solving it, and unearth big mathematical ideas.

The Math for Meaning™: Story Problems—Rising Grade 7 approach is backed by extensive academic research demonstrating dramatic improvements in a variety of areas, from student confidence to verbal communication skills to standardized test scores. Math for Meaning™: Story Problems—Rising Grade 7 focuses on supporting all students in progressing along the trajectory of learning, rather than on mastering a specific daily objective. Whether students already have a strong grasp of the content or have historically had difficulty meeting grade-level benchmarks in math, the process of choosing, discussing, and applying new strategies deepens their level of understanding. The student-driven nature of Math for Meaning™: Story Problems—Rising Grade 7 allows teachers to meet all students where they are and respond to the needs of their class. Finally, students in Math for Meaning™: Story Problems—Rising Grade 7 classrooms frequently cite math as their favorite subject, something all but unheard of in traditional mathematics classrooms. Math for Meaning™: Story Problems—Rising Grade 7 allows all students to gain a deeper understanding of grade-level content; construct, defend, and critique mathematical arguments; and become better mathematical thinkers and problem solvers.

SAMPLE

 Copyright © 2026 Lavinia Group. All Rights Reserved

Rising Grade 7 Scope and Sequence

The standards that follow are the major standards covered through the Math for Meaning™: Story Problems block. These standards have been selected because they play a pivotal role in students' mathematical understanding and ability to access grade-level content. Each problem is tagged to the standard that is most closely linked to the content of the problem. Depending on the focus of the Discourse section of the lesson, other standards may also be addressed through each day's story problem. Teachers should use pre-assessment data to strategically plan how they will target priority standards throughout the course of the summer.

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
6.RP.2	6.RP.2	6.RP.3	6.RP.3	6.RP.2
Lesson 6	**Lesson 7**	**Lesson 8**	**Lesson 9**	**Lesson 10**
6.RP.3	6.RP.3	6.NS.1	6.NS.1	6.RP.2
Lesson 11	**Lesson 12**	**Lesson 13**	**Lesson 14**	**Lesson 15**
6.RP.3	6.RP.2	6.RP.3	6.RP.3	6.RP.3
Lesson 16	**Lesson 17**	**Lesson 18**	**Lesson 19**	**Lesson 20**
6.RP.3	6.RP.3	6.RP.3	6.RP.3	6.RP.3

SAMPLE

Program Materials

- Chart paper
- Graph paper
- Chart markers
- Math for Meaning™: Story Problems student worksheets

Copyright © 2026 Lavinia Group. All Rights Reserved

Intellectual Preparation

Intellectual preparation is key to leading an effective Math for Meaning™: Story Problems—Rising Grade 7 lesson. Before each lesson, teachers should complete the following steps:

1. **Solve the Problem and Make Sense of the Math:** Review the Story Problem and Story Problem Basics sections in the lesson guide. Take time to solve the problem, think about the action and unknown in the story, and ensure you understand why the problem type and equation match the story.
2. **Plan the Launch:** Review the Launch Planning Guide and think through how you will engage students in the problem and build access without giving away how to solve the problem. Consider how you will:
    - **Engage students:** Tell the problem like an authentic story to get students thinking about the problem and excited to solve it.
    - **Unpack the problem:** In Rising Grades 4–6, choose the 3 students you will ask to retell the story, starting with a student who can likely retell correctly and ending with a student who has historically struggled with access. In Rising Grades 7–9, plan for a conversation around the "knowns" and "unknowns" of the problem.
    - **Check for Meaning:** Ask students the Check for Meaning question and anticipate responses and misconceptions.
3. **Anticipate Student Strategies:** Fill in the Strategy and Strategy Example columns of the Anticipated Strategies and Observation Tool with the different ways students might approach the problem. The strategies should be listed in order of sophistication, with a correct but low-level or inefficient strategy in the first row and a more complex and abstract strategy in the last row. Fill in the Who? column during the lesson as you observe students and their work.
4. **Plan the Discourse:** Complete the Discourse Planning section of the lesson guide. Look at student work to determine one transferable takeaway that will benefit a majority of the class. Then plan the strategies you will share and questions you will ask to help students reach the chosen transferable takeaway.

SAMPLE

 Copyright © 2026 Lavinia Group. All Rights Reserved

LESSON 1

Story Problem Lesson 1

Which plant grows faster: A plant that grows 8 centimeters in 6 days or a plant that grows 12 centimeters in 9 days?

Story Problem Basics

- **Problem Type:** Ratio Problems: Rate (Comparison)
- **Equation:** 8 ÷ 6 = 12 ÷ 9
- **Answer:** They both grow at the same rate.

Launch Planning Guide

- **Check for Meaning:** What are we trying to figure out? What do we know? What do we need to know?
- **Exemplar Response:** We are trying to figure out which plant grows faster. We know that each plant grows a certain amount of centimeters over a certain amount of time. In order to figure out which plant grows faster, we need to determine the rate at which each plant grows so that we can compare them.

SAMPLE

Copyright © 2026 Lavinia Group. All Rights Reserved

Anticipated Strategies and Observation Tool		
Strategy	**Strategy Example**	**Who?**

Discourse Planning	
Which strategies will you share? How do they connect to one another?	
What guiding questions will drive toward the transferable takeaway?	
Transferable takeaway or conjecture	

SAMPLE

 Copyright © 2026 Lavinia Group. All Rights Reserved



Story Problem Lesson 1 — Exit Ticket

Two sisters made bracelets for their friends. Evelyn made 4 bracelets in 6 minutes and Gianna made 6 bracelets in 9 minutes. Who made bracelets at a faster rate?



Story Problem Basics

- **Problem Type:** Ratio Problems: Rate (Comparison)
- **Equation:** 4 ÷ 6 = 6 ÷ 9
- **Answer:** They both made bracelets at the same rate.

SAMPLE

Anticipated Strategies and Observation Tool		
Strategy	**Strategy Example**	**Who?**

Copyright © 2026 Lavinia Group. All Rights Reserved