

# Painting by Number

Fluent Reading | 2nd Grade



LITERACY



MINDSET

## How can math help us solve everyday problems?

*Essential questions encourage fresh thinking, inquiry, and engagement, as well as long-term recall of important features of a story. These activities are organized by an essential question, which you will see in red.*

### 1. SOLVE ADDITION EQUATIONS (30 MINUTES)

Remind students that in the book *Painting by Number*, Tyrell uses addition to help the group figure out their needs for art supplies. Show students the equations on pages 7, 8, and 12, and point out how Tyrell draws pictures and writes out equations to help him add.

Gather similar items from around the classroom that add up to a total of 20 or fewer. Display these items split into two sets. For each type of item, have students create and solve an addition equation with pictures. Here are some equations you may consider (depending on the materials in your classroom):

- 6 erasers + 4 erasers = \_\_\_\_\_ erasers
- 11 rulers + 8 rulers = \_\_\_\_\_ rulers
- 8 markers + 7 markers = \_\_\_\_\_ markers

Next, show students that you can also write addition equations starting with the total. For example:

1. Have students write the equation frame \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_.
2. Show 10 erasers. Have students draw 10 erasers and write 10 after the equal sign: \_\_\_\_\_ + \_\_\_\_\_ = 10.
3. Separate 6 erasers from the collection. Have students draw 6 erasers and write 6 at the beginning of the equation: 6 + \_\_\_\_\_ = 10.
4. Have students complete the equation, drawing pictures and writing in the correct number in the remaining part of the equation: 6 + 4 = 10.

### 2. COLLABORATE TO SOLVE A MATH WORD PROBLEM (30 MINUTES)

Share with students that, as shown in the book, math can help us solve problems in our everyday lives. Tell students they will be working together in groups to solve a word problem using addition. Together, students will need to answer the question posed in the word problem and create an equation to show how they solved the problem. The equation should include pictures.



Use the bilingual book [Pintando por número](#) to help support Spanish-speaking ELL students with these activities.

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CLASS  
ACTIVITIES

Break students into six groups. Give each group one of the following word problems to solve. Provide groups with a large sheet of paper and supplies for writing out the equation that they will create. Inform students that they will be sharing their word problem and solution with the class.

## *Word Problems*

1. Shayla needs 18 blocks to build a castle. She opens her toy box and finds 9 blocks. Then she looks under her bed and finds 8 more blocks. Will Shayla have enough blocks to build a castle?
2. Derek needs 13 apples to make an apple pie. He has 7 apples in his kitchen. He then goes to the store and buys 6 more apples. Will he have enough apples to make a pie?
3. Camila is reading a book that has 20 pages. Before dinner, she reads 12 pages. After dinner, she reads 6 more pages. Has Camila finished her book?
4. Manuel wants to collect 15 seashells at the beach. He searches one area of the beach and finds 8 seashells. Then he moves to another area of the beach and finds 7 more seashells. Has he reached his goal of collecting 15 seashells?
5. Kim needs 17 beads to make a necklace. She looks in her jewelry box and finds 12 beads. Kim's grandma then gives her 5 more beads. Does Kim have enough beads for her necklace?
6. Kendrick wants 14 balloons to decorate for his mom's birthday party. He already has 9 balloons in his room. Kendrick's brother gives him 4 more balloons. Does Kendrick have enough balloons for the birthday party?

## **3. PRESENT A MATH WORD PROBLEM AND SOLUTION (60 MINUTES)**

Have groups orally present the word problem they solved in the previous activity. Instruct each group to begin by reading their word problem to the class. Then have the groups share the equation they created to solve the problem. Instruct groups to ensure that each member of the group speaks at least once, and remind students that they should follow class rules for discussion.



### **ELL SUPPORT**

While reading the book, pause regularly to ask comprehension check questions via circling. Review the details of the story using questions that are not open-ended.

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## What is a mural?

### 4. VIEW AND DISCUSS FAMOUS MURALS (30 MINUTES)

Remind students that in the book *Painting by Number*, the children are working with adult artists to paint a mural. Explain that a mural is a large picture that is painted on a wall or ceiling. Tell students that murals have existed for thousands of years—as far back as the earliest humans, who would paint on walls of caves. Share with students that murals can be created for a variety of reasons, including to make a place look more beautiful, to show an event in history, to bring people together, or to share the artist’s culture.

Show the class examples of well-known, age-appropriate murals. Some examples you could share include:

- *Girl with Balloon* by Banksy
- *Etnias* by Eduardo Kobra
- *We the Youth* by Keith Haring

After showing each mural, pause to have students share their thoughts about the painting. Students can comment on how the mural makes them feel, what they think the mural is meant to express, what they like or dislike about the mural, etc. Instruct students to listen carefully while others are speaking and to follow all other class rules for discussion.

### 5. EXPRESS IDENTITY THROUGH ART (45 MINUTES)

Tell students that the class will be working together to create a mural. Explain that every student will be an artist responsible for creating one part of the mural.

Inform the class that this mural will be created with the purpose of having each student share something important about themselves. This could be an aspect of the student’s culture, an activity or interest that they enjoy, a memory they treasure, etc.

Have students prepare by sketching the picture they want to draw on the mural. Students should also write a brief explanation of what they are sharing through the picture. They can use this [Journal](#) page for the sketch and written explanation.

A template for a journal page. At the top right, there is a line for 'NAME'. Below that, the word 'Journal' is written in a bold font. To the left of 'Journal' is a small icon of a pencil. Below the title, there is a large rectangular box labeled 'Draw.' for sketching. Below the drawing box is another rectangular box labeled 'Write.' for writing an explanation. At the bottom right of the page, there is a small copyright notice: '© 2018 by Waterford, Inc.'

Journal Page

### 6. CREATE A CLASS MURAL (60 MINUTES)

Use a large sheet of butcher paper for the class mural that students planned in the previous activity. (For ease of access, it may be best to lay the paper on the floor for students to draw on before taping to a wall or door.) Provide students with paint (and/or other art supplies), and have them each create their part of the mural. (Depending on class size, it may be necessary to have students work on the mural in small groups at a time.) When the mural is complete, hang it on a wall or door of the classroom for display. Have each student share their portion of the mural and explain what they are expressing through their art.