Unit 8 Family Support Materials

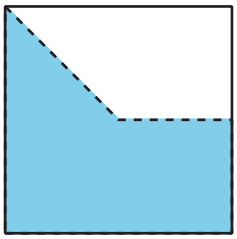
Putting It All Together

In this unit, students apply what they have learned throughout the year to strengthen the major concepts and fluency goals of the grade.

Section A: Fraction Fun

In this section, students revisit and build on the important fraction ideas that they have learned in the course. They think about different ways to represent fractions and to estimate the size of a fraction presented in different forms: an area diagram, a shaded strip, and a number line.

What fraction of the square is shaded?



What number is represented by the point on the number line?

Students also practice identifying and locating fractions on the number line, using tape to create a number line that shows a large number of fractions.

Section B: Measurement and Data

In this section, students first use their knowledge of shapes, perimeter, and area to design their own tiny house. They ask and answer questions about the area and the perimeter of shapes in their design. Then they calculate the cost of finishing a room in their tiny house.

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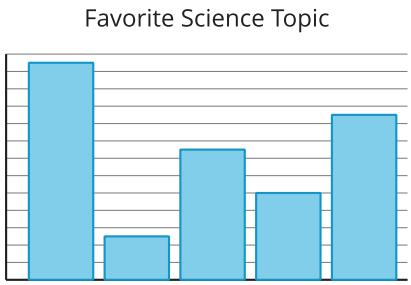


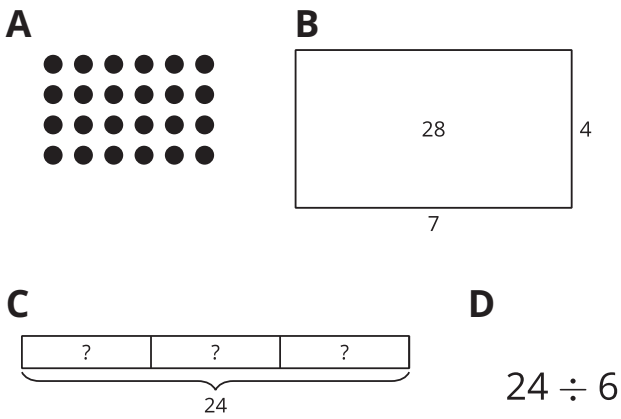
Next, students focus on data collection and representation. They conduct a survey in the school community, organize their data, and represent the data, with a scaled graph. They also ask and answer questions about the data.

Section C: Multiplication and Division Games

In this section, students continue to build their fluency with multiplication and division. They reflect on the products within 100 that they know from memory, or can find quickly, and the products that they don't know yet. Students then practice multiplication facts through games.

They also reinforce their understanding of the connections between multiplication and division by matching equations and diagrams.

Which 3 go together?



Section D: Create and Design

Throughout the course, students have participated in *Warm-up* routines such as *Number Talk*, *Exploration Estimation*, *Which Three Go Together? True or False?* and *How Many Do You See?*

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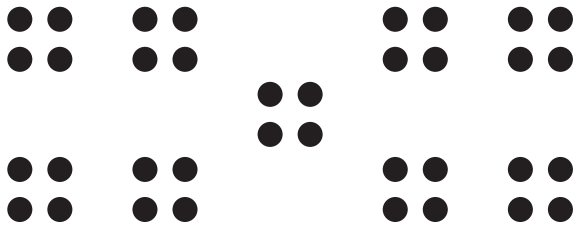
In this section, they apply the mathematics they have learned to design *Warm-up* activities that use some of these routines.

How many do you see? How do you see them?



Try it at home!

Near the end of the unit, ask your third grader to share the *Warm-up* routines they created. Questions that may be helpful as they share:

- How did you design the routine?
- How does the routine relate to what you learned this year?
- What might you change to improve the routine?

Solution:
Answers may vary.

Sample response:

- I designed an *Estimation Exploration* routine by first thinking about a situation or a picture that I could use that would make an interesting estimation problem. I wrote a question and then thought about answers that would be about right, too low, and too high.
- This year I used estimation to help me think about answers that are about right, too low, or too high. Using estimation helped me figure out if my answers were reasonable or not.
- I might include more information in the directions to make it clear for someone who may not have used this routine before.

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