Unit 5 Family Support Materials

Composing and Decomposing Numbers to 10

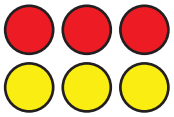
In this unit, students compose and decompose numbers to 10 in different ways. We call this “making” and “breaking apart” numbers.

Section A: Compose and Decompose Numbers to 9

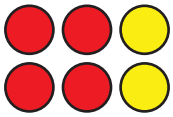
In this section, students compose and decompose numbers to 9. As they compose and decompose numbers in different ways, students first work only with numbers up to 5 to build fluency with addition and subtraction within 5.

Students understand that there are different ways to compose and decompose a given number. They work with physical objects, such as counters and connecting cubes, which they use to compose and decompose numbers.

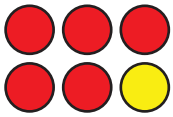
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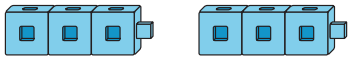
6 is 3 and 3.



6 is 4 and 2.

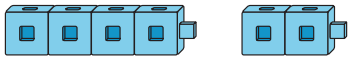


6 is 5 and 1.



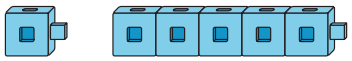
6 is 3 and 3

$3 + 3$



6 is 4 and 2

$4 + 2$



6 is 1 and 5

$1 + 5$

Section B: More Types of Story Problems

In this section, students represent and solve story problems. Students compose and decompose numbers as they solve story problems in which both addends are unknown. For example,

Jada and her brother make 6 fruity ice pops
called *paletas* (pah-LAY-tuhs).
They make two flavors, lime and coconut.
How many of the paletas are lime?
Then how many of the paletas are coconut?

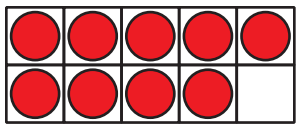
Students may find it more challenging to make sense

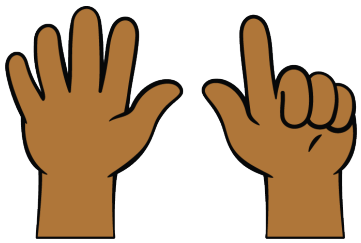
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of these problems because there is no action in the story and they have more than one solution. By the end of the section, students find multiple solutions to problems. Students use math tools and drawings to represent and solve story problems. It is important that students can explain how their representation shows the story. Some students may be interested in finding all solutions to a problem, and they should be encouraged to do so although this is not an expectation for kindergarten.

Section C: Make and Break Apart 10

The number 10 is foundational to the place-value work students will do in later grades. In this section, students are introduced to a 10-frame by putting together two 5-frames, which allows them to build on previous understandings of the numbers 6–9 in relation to 5.





Students use the 10-frame, as well as their fingers, to

make and break apart 10 in different ways. These tools are helpful because the blank squares in the 10-frame and the fingers that are down allow students to see or count how many more are needed to make 10. Students use these tools to figure out the number to add to any number from 1 to 9 to make 10.

Try it at home!

Near the end of the unit, ask your kindergartener to draw a picture that goes with this story:

At the market, you get 10 apples from a bin.
Some of the apples are green, and some of the apples are red.
How many of the apples are green?
Then how many of the apples are red?

Questions that may be helpful as they work:

- Explain your picture to me.
- How many green apples and how many red apples did you draw?
- Does this story match the equation $10 = 1 + 9$,

$10 = 2 + 8$, $10 = 3 + 7$, $10 = 4 + 6$ or $10 = 5 + 5$? How do you know?

- Is there another way you can make 10 apples?

Solution:
Answers may vary.

Sample response:

- A picture of some green apples and some red apples for a total of 10 apples.
- I drew 5 green apples and 5 red apples. There are 10 apples.
- It matches the equation $10 = 5 + 5$. I know this because there are 5 green apples and 5 red apples. There are 10 apples total.
- Yes, I also can make 10 apples with 2 green apples and 8 red apples. Or I could have 3 green apples and 7 red apples.