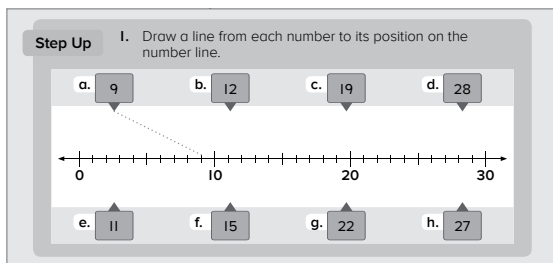


Core Focus

- Number: Exploring position on a number line
- Time: Reviewing on-the-hour and half-past the hour
- Addition: Reinforcing the use-doubles and other strategies

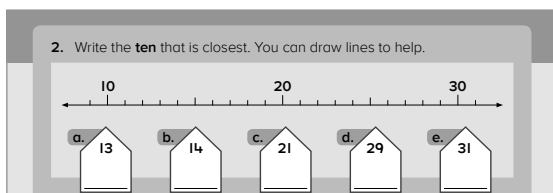
Number lines

- The number line is introduced as another model that helps students see how numbers can be compared. E.g. 21 is farther from zero than 15, and so 21 is greater than 15.



In this lesson, students use their place value understanding of tens and ones to locate numbers on a number line and then compare the numbers by thinking of their distance from zero.

- Students visualize where numbers appear on a number line to decide on the closest ten.



In this lesson, students write the ten that is closest.

- In later lessons, students will use number lines to compare two two-digit numbers in terms of which one is a greater distance from zero.

2.5 Number: Comparing two-digit numbers on a number line

Step In Look at this number line.

Trace your finger along the part of the number line that shows numbers that are equal to or greater than 50.

Trace your finger along the part of the number line that shows numbers that are equal to or less than 30.

Show the position of these two numbers. **45** **62**

Which number is greater? How did you decide?

The distance from 0 to 62 is greater than the distance from 0 to 45.

Ideas for Home

- Draw a simple 0 to 100 number line with the tens marked (10, 20, 30, etc.). Name two-digit numbers and ask your child to point to where the numbers are on the number line and tell you which multiple of 10 is closer.
- On the same number line, name pairs of two-digit numbers and ask your child which one from each pair is farther from zero.

Helpful videos

View these short one-minute videos to see these ideas in action.

www.bit.ly/OI_24
www.bit.ly/OI_4


Time

- Students review how to read and write on the hour and half-past the hour on **analog** and **digital** clocks. They also review the number of minutes in an hour and in a half-hour, so when they read times on the half-hour as *half-past b* and as *six thirty*, they understand the relationship between the number of minutes and the equivalent fraction of an hour. Also, students are asked what time it will be one hour before and one hour after a given time.

2.8 Time: Reviewing half-past the hour


Step In Look at this analog clock.

What does the long hand tell you?
What does the short hand tell you?
What time is shown on the clock?



Look at this digital clock.

What do the numbers on the left side of the colon tell you?
What do the numbers on the right side of the colon tell you?
What time is shown on the clock?



How many minutes are in one hour?
How many minutes are in half an hour? How do you know?

In this lesson, students write times showing on the hour and half-past the hour.

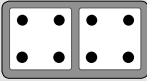
Doubles Strategy

- In the latter half of the module, students continue using the count-on and **use-doubles strategy** for addition.

2.11 Addition: Reinforcing the doubles strategy

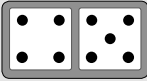
Step In What doubles fact does this domino show?

What equation can you write to show this double?



How can you use that doubles fact to figure out the total number of dots on this domino?

What equation can you write to match?



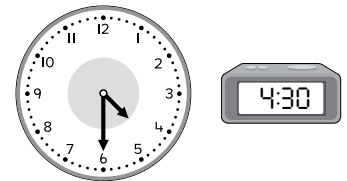
In this lesson, students investigate strategies using doubles.

Ideas for Home

- Help your child develop an understanding of elapsed time by talking informally during daily activities, e.g. “We must leave for school at 8:30. Can you figure how much time we have until then?”
- Point to your watch or an analog clock (with hour and minute hands) and ask your child to tell you the time. Ask them to describe the time in more than one way, e.g. “it’s 7:30” or “half past 7.”

Glossary

- Analog** and **digital** clocks both indicate time, but analog clocks better illustrate the passage of time, and can demonstrate position in ways similar to a number line.



Both of these clocks could be read as “four thirty”, “half past four”, or “30 minutes past four.”

- The **use-doubles strategy** helps students visualize addition with addends that are the same or almost the same. They see $b + b$, but think *double b is 12*; or see $b + 7$, but think *double b plus 1 is 13*.

