

Core Focus

- Introducing subtraction and acting out subtraction stories
- Representing subtraction situations and writing subtraction sentences
- Analyzing and identifying 2D shapes



Subtraction

- Students learn about **subtraction** through a variety of situations that illustrate the idea of “take away”. Students participate in active stories involving ideas such as “flying away”, “walking away”, “jumping away”, and so on.
- In Grade 1, students will learn about other subtraction situations (e.g. comparison and part-part-whole) but “take away” is generally the easiest to learn, which is why it is introduced first.

9.1 Introducing the Subtraction Concept (Active Stories)

Write numbers to match each picture.

a. birds in total fly away	b. ladybugs in total fly away
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In Lesson 1, students act out subtraction stories. They show the total group and the quantity taken away.

- Take away stories suggest movement (birds fly away, bugs crawl away, and so on), so this type of subtraction is called active. When students begin to work with pictures instead of objects, they learn to “cross out” or “cover” the amount taken away.

9.2 Representing Subtraction Situations

Draw more objects to show the total.
Then read the sentence and **cross out** the number shown.

8 balls One rolls away.	
6 books Four fall down.	

In Lesson 2, students draw objects to represent subtraction stories. They cross out the quantity that is taken away.

Ideas for Home

- Have your child count out a small set of objects (3 to 10). Ask them to close their eyes while you place paper or fabric over some of the objects. When they open their eyes, ask them to figure out the number of objects that are covered. Tell your child the starting total if needed.
- Use mathematical language when talking about everyday events. To reinforce subtraction you might say, “There were 4 toys on the ground. We put 3 away and now there is 1 left.” Some ideas to reinforce counting are asking your child to count the number of steps to the sidewalk or count the number of windows that are open, the number that are closed, and the total number of windows.

Glossary

- Students use pennies to act out take away, or **subtraction**, stories.

spend
3 pennies



- At this early stage of subtraction work, students count the total, notice how many “go away”, and count how many remain.

9.3 Acting Out Take-Away Situations

Write the total you see. **Cross out** the number that go away. Then write the number that are left.

a.

bees in total. 2 go away. bees are left.

In Lesson 3, students begin to write subtraction sentences to show the total and the amount left after some have been taken away.

- Students learn a new way to show subtraction by covering the amount that is taken away from a total. The use of “cover” or “cover up” can be used with all subtraction situations so it is helpful to learn now.

9.4 Writing Subtraction Sentences

Write the total. Cover 1 or 2 dots. Then write the number that are left.

a.

b.

cover 2 =

cover 1 =

In Lesson 4, students write subtraction sentences using the language “cover”.

Geometry: 2D Shapes

- Students continue to work with two-dimensional shapes. They identify the number of sides and the number of corners (angles) of shapes. Students learn that an angle is where two straight sides of a shape join together.
- Students investigate, describe, and then sort 2D shapes by name. They work with circles, triangles, hexagons, squares and rectangles. They learn that squares are a type of rectangle.

9.5 Analyzing 2D Shapes

Write the number of sides and corners for each shape.

a.

b.

sides corners sides corners

In Lesson 5, students describe 2D shapes by the number of corners and sides.

Ideas for Home

- A rectangle is a 2D shape with four sides, four equal corners and two pairs of parallel lines. The most familiar example of a rectangle has two long sides and two short sides (think of the outline of a door). What we typically call a square has all these same features but all four sides are the same length. You will hear your child talk about non-square rectangles and square rectangles to describe these two shapes.
- Play a guessing game with your child to practice the names of common 2D shapes. For example, hints to describe a triangle might be, “I’m thinking of a shape with straight sides; it looks like a tortilla chip; it looks like the roof of a house; it has three corners and three sides. What shape is it?” Take turns with your child to give hints and to name the shape.

Glossary

