

180 Days of **MATH** for Prekindergarten



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How to Use This Book

Introducing the Concept Pages

To help teachers and caregivers understand each new section in *180 Days of Math for Prekindergarten*, there are Introducing the Concept pages to begin the sections. These pages support adults as they guide young learners through each topic.

Section overviews explain new concepts covered in the upcoming pages.

Materials lists provide suggestions that will help students as they complete the activities.

Additional recommendations are provided to help teachers and caregivers support student learning.

Introducing the Concept

Numbers 0–10

Learning All About 0–10

In this section, students are introduced to numbers 0 through 10. They practice the names of the numbers, how to count up to 10, and how to identify numbers 0 to 10 when they are mixed in with other numbers. Students learn the correct way to make each number from 0 through 10. Next, they explore adding and subtracting with numbers up to 10. Students also learn to compose and decompose using these numbers. This section of learning ends with students comparing numbers to see if a number is greater than, less than, or equal to another number.

What You May Need

- jumbo pencils or short golf pencils
- crayons, colored pencils, etc.
- modeling clay, interlocking cubes, coins

Understanding the Activities

As you work through these pages, here are some ways to further support student learning:

- Discuss the names of the numbers as they are introduced.
- Read directions to students. Follow the directions one step at a time, allowing enough time for students to complete each task before moving to the next step in the directions.
- As students write, double-check that they are writing numbers accurately by following the numbers and arrows. The repetition when learning to write numbers helps them later with math fluency.
- If students need extra support with their fine-motor skills, you may want to write the numbers with highlighters or light markers so students can trace over them more easily.

0 1 2 3 4
5 6 7 8 9

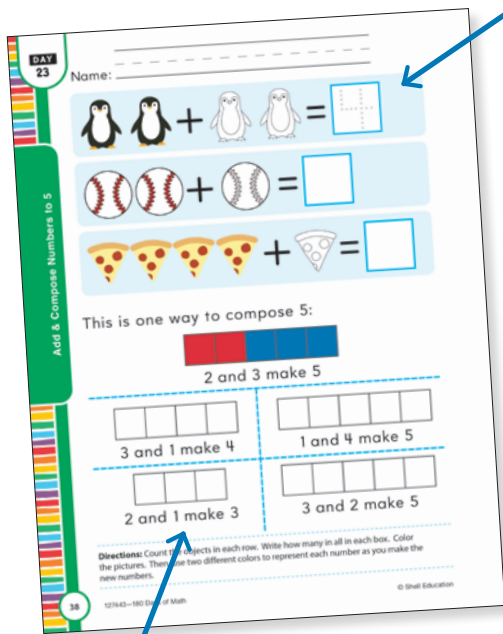
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How to Use This Book (cont.)

Using the Practice Pages

The practice pages in this book provide instructional opportunities for 180 days. Activities are organized into content themes. Each day's math skills are aligned to mathematics standards that can be found on pages 13–14.

Students practice counting objects and writing numbers to build fluency and recognition.



Students get multiple opportunities to make numbers in a variety of ways.



Easy-to-follow directions help adults support students as they complete activities.

Using the “Sky, Fence, and Grass” to Write

There are different ways to write numbers. This book suggests forming numbers using methods that generally do not require students to lift their pencils off the page. To support students in writing numbers, this book has writing lines with “sky, fence, and grass.” This is a concept reviewed throughout the 180 days.



Use the sky, fence, and grass to help students understand how to use the writing lines: sky = top line, fence = midline, and grass = bottom line.

Standards Correlations

Shell Education is committed to producing educational materials that are research and standards based. To support this effort, this resource is correlated to the academic standards of all 50 states, the District of Columbia, the Department of Defense Dependent Schools, and the Canadian provinces. A correlation is also provided for key professional educational organizations.

To print a customized correlation report for your state, visit our website at www.tcmpub.com/administrators/correlations and follow the online directions. If you require assistance in printing correlation reports, please contact the Customer Service Department at 1-800-858-7339.

College and Career Readiness Standards

Counting and Cardinality	<p>Know number names and the count sequence.</p> <ul style="list-style-type: none"> • Count to 100 by ones. • Count forward beginning from a given number within the known sequence. • Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20. <p>Count to tell the number of objects.</p> <ul style="list-style-type: none"> • Understand the relationship between numbers and quantities; connect counting to cardinality. • When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. • Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. • Understand that each successive number name refers to a quantity that is one larger. • Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.
Numbers and Operations in Base Ten	<p>Work with numbers 11–19 to gain foundations for place value.</p> <ul style="list-style-type: none"> • Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and zero, one, two, three, four, five, six, seven, eight, or nine ones.

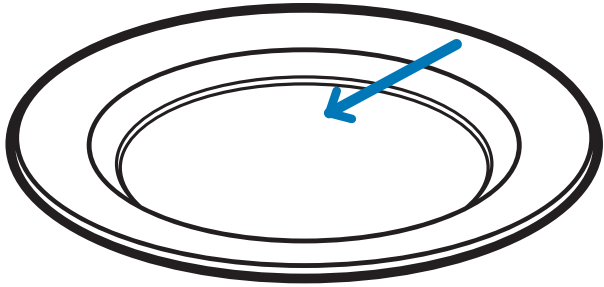
Standards Correlations (cont.)

Operations and Algebraic Thinking	<p>Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</p> <ul style="list-style-type: none"> • Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. • Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. • Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$). • For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation. • Fluently add and subtract within 5.
Measurement and Data	<p>Describe and compare measurable attributes.</p> <ul style="list-style-type: none"> • Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. • Directly compare two objects with a measurable attribute in common to see which object has “more of”/“less of” the attribute, and describe the difference. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i>
Geometry	<p>Identify and describe shapes (squares, circles, triangles, rectangles, hexagons).</p> <ul style="list-style-type: none"> • Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above, below, beside, in front of, behind, or next to</i>. • Correctly name shapes regardless of their orientations or overall size. <p>Analyze, compare, create, and compose shapes.</p> <ul style="list-style-type: none"> • Analyze and compare two-dimensional shapes in different sizes and orientations.

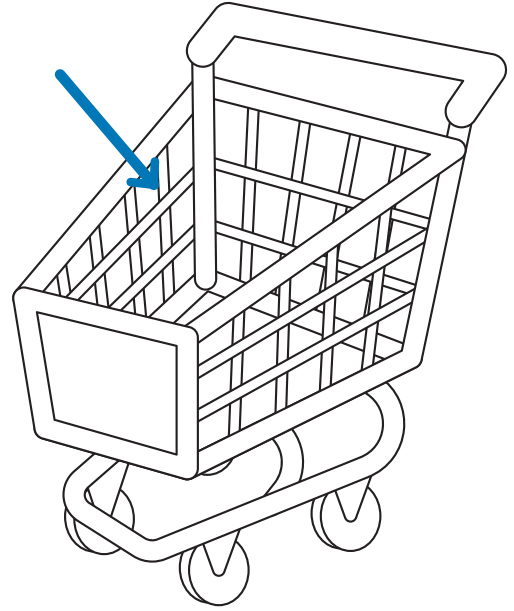
TESOL and WIDA Standards

In this book, the following English language development standard is met: Standard 1: English language learners communicate for social and instructional purposes within the school setting.

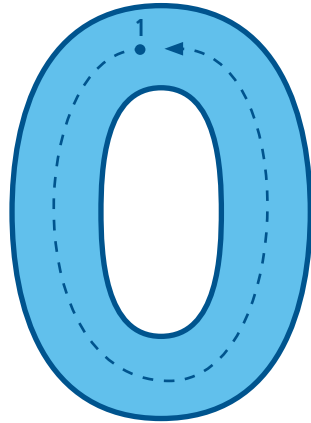
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0 cookies

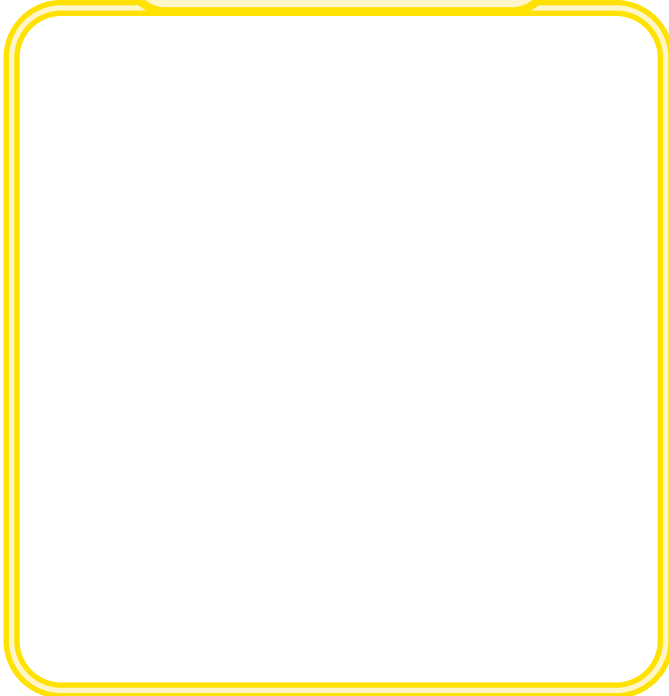


0 items



zero

Time to Draw



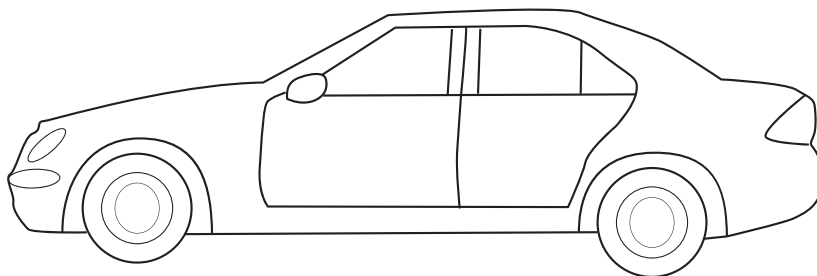
0 eggs

Directions: Trace the 0 at least 10 times with your finger. Say its name as you do this. Count the objects in each picture. Color the pictures. Circle each number 0. Then, draw yourself with 0 objects in your hands.

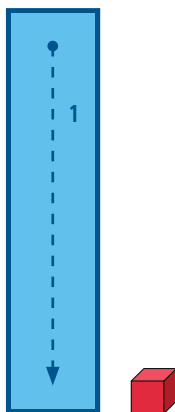
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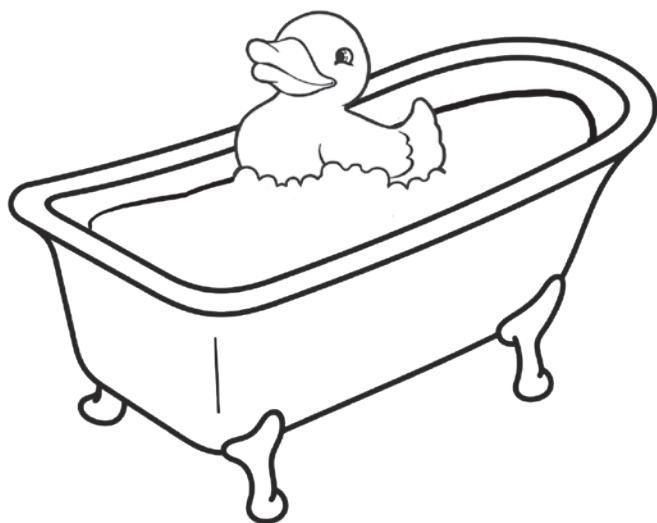
1 finger



1 car



one



1 duck



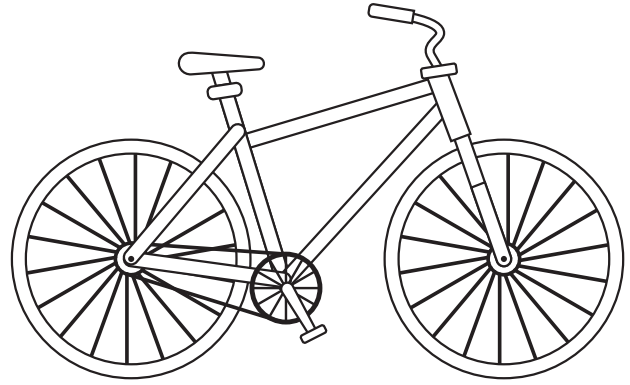
1 ball

Directions: Trace the 1 at least 10 times with your finger. Say its name as you do this. Count the objects in each picture. Color the pictures. Circle each number 1. Then, make the number 1 with your body.

Name: _____



2 wings



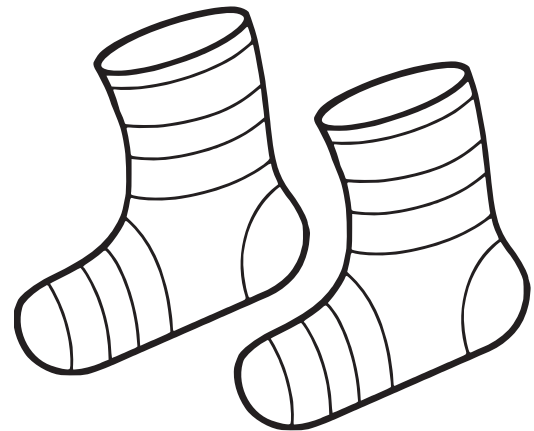
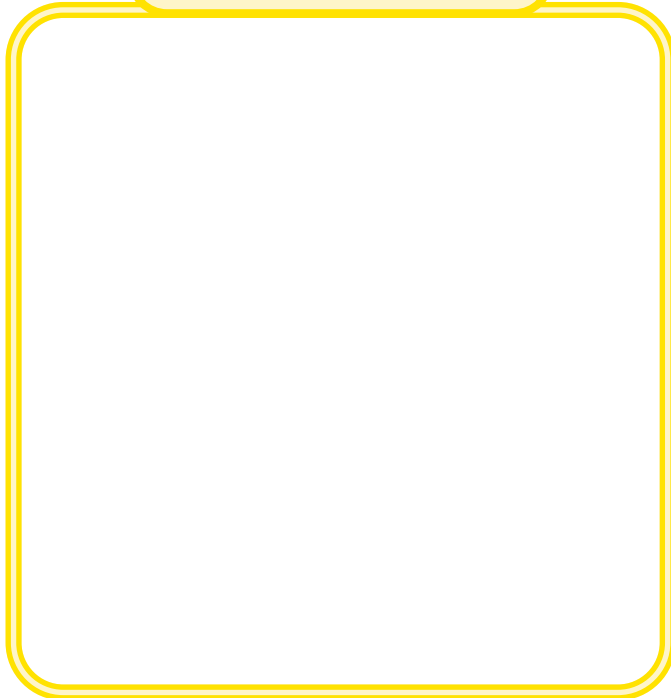
2 wheels



two



Time to Draw



2 socks

Directions: Trace the 2 at least 10 times with your finger. Say its name as you do this. Count the objects in each picture. Color the pictures. Circle each number 2. Then, go on a scavenger hunt to look for objects that come in twos. Draw what you find.

Name: _____



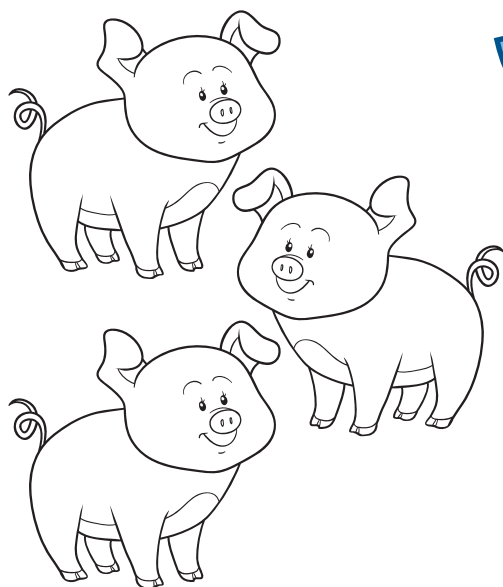
3 cupcakes



3 colors



three



3 pigs

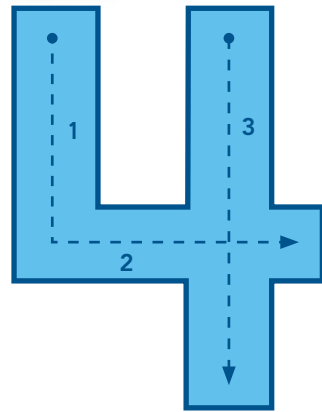


Directions: Trace the 3 at least 10 times with your finger. Say its name as you do this. Count the objects in each picture. Color the pictures. Circle each number 3. Then, find and put a box around the number 3 in the images.

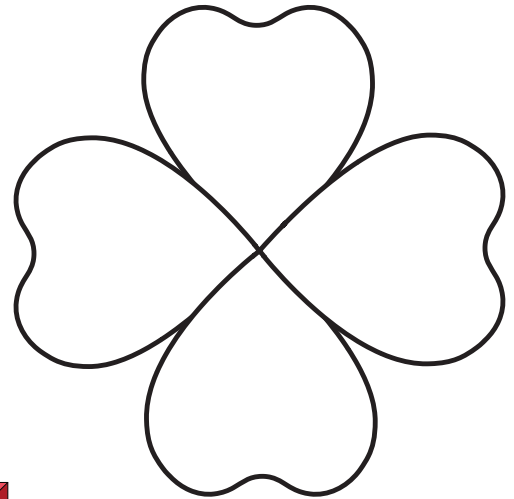
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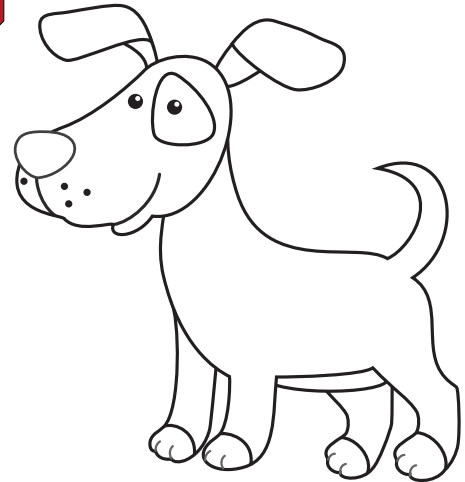
4 tires



four

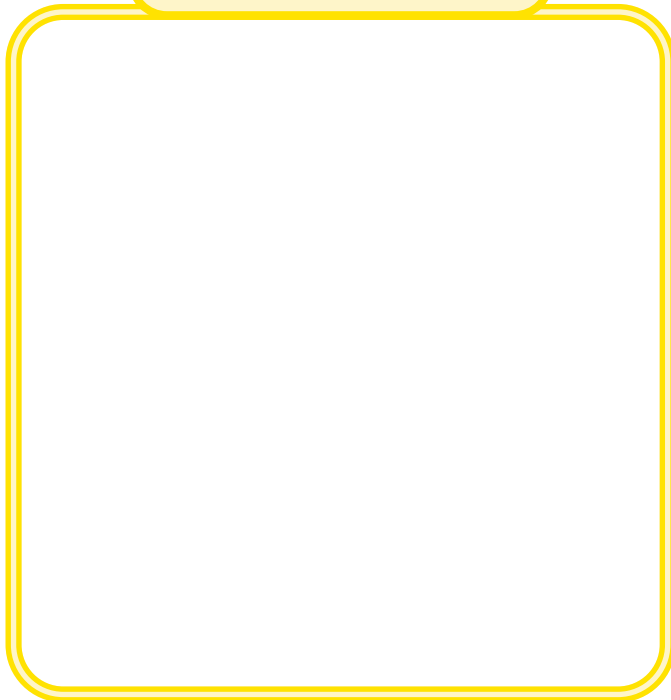


4 leaves



4 legs

Time to Draw



Directions: Trace the 4 at least 10 times with your finger. Say its name as you do this. Count the objects in each picture. Color the pictures. Circle each number 4. Then, draw 4 objects.