

The Summer Math Skills Sharpener Book **Helps Preschoolers:**

Numbers and Operations

Demonstrate rote counting up to 10
Demonstrate one-to-one correspondence
Recognize number symbols with correct amount of objects
Match number symbols with correct amount of objects
Use ordinal numbers
Understand how numbers can be used to label events in real life
Recognize and describe the concept of zero
Describe comparative number relationships
Develop ability to combine and separate objects
Develop ability to name and compare objects
Understand that a single object is always one
Begin to name how many are in a group without actually counting
Explain part of a whole with real objects
Identify, name and write numerals 0-5
Begin to solve problems using numbers
Begin to identify pictured groups with number symbols
Recognize that the last number counted is the total number of objects

Patterning

Continue pictorial patterns
Continue numeral and letter patterns

Geometry and Spatial Sense

Begin to recognize, compare and name common shapes
Begin to predict the results of putting together two shapes
Determine whether or not two shapes are the same
Draw common shapes
Begin to understand the position of objects in relation to other objects
Compare same shapes in different positions
Show an awareness of symmetry
Recognize parts of a whole
Recognize geometric shapes in the environment

Problem Solving

Solve simple mathematical problems using pictures
Make predictions based on observations
Use pictured sets to show addition and subtraction

Data Analysis

Organize and display data on graphs
Gather information about self and environment
Contribute data for simple graphs

Compare, Categorize and Classify

Make comparisons between objects
Recognize how objects are different and alike
Identify objects that belong together
Sort objects into groups by attributes

Measurement

Develop an awareness of things in the environment that can be measured
Use standard and non-standard units of measurement
Understand concepts of length and weight
Show an awareness of concept of time
Use various devices to measure time
Demonstrate an awareness of volume
Demonstrate an awareness of temperature
Compare and order objects by size
Begin to use estimation to solve problems
Use tools to explore measuring
Identify most commonly used coins
Recognize that coins have different values

Extras

Dalmatian Station attribute page
Punch-Out Money (coins)
Measuring Cut-Outs

Instructions for Parents

- This book is based on National Standards of Math for Pre-K. However, your child's school may have covered more or fewer concepts.
- Because most children about to enter kindergarten are not reading, this program should be completed with the assistance of an adult. There is no answer sheet provided.
- All questions are posed in a manner to be read to a child. Further explanation may be necessary.
- Many children are able to identify and write numbers from zero to five before entry into kindergarten. Practice for writing numbers zero to five is included in the body of the program and numbers six through ten are at the back of the book.
- The child should be allowed to write answers if he/she is able to do so; otherwise, the helper should record answers.
- To use the *Summer Math Skills Sharpener* simply complete one page with the child three days per week for ten weeks. This schedule will ensure the greatest benefit and readiness for school in the fall.
- Skip material for which your child does not show readiness. You can, if you choose, introduce new concepts if your child does demonstrates readiness.



This icon indicates that your child will need to use the **Spoon, Shoe & Ruler Cut-Outs** (located at the back of the book) for problems pertaining to measurement so that he/she is familiar with using standard and non-standard tools. Have your child cut out the objects and keep them for use throughout the book.



This icon indicates that your child will use the **Dalmatian Station** dog cut-outs located at the back of the book for practice in discerning similarities and differences as well as sorting. Have your child cut these squares apart and keep them for use throughout the book.



This icon indicates that your child will need to use the **Punch-Out Money** located at the back of the book. Your child will be asked to punch the money out in the lessons themselves. These activities have been included to familiarize children with the four most commonly used coins. They are not expected understand the worth of coins at this stage.

- “**Match That**” game at the back of the book can be played many times throughout the summer and is meant to be an enjoyable learning experience.
- Make the *Summer Math Skills Sharpener* fun and a springboard for other math activities.

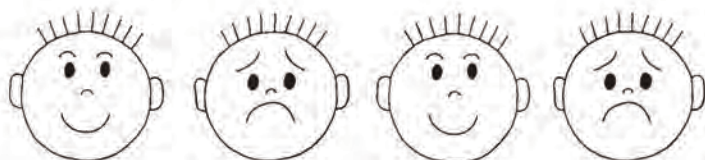
Lesson #4

1. Trace the number **3** on the lines below. Then write the number **3** as many times as you can on the lines.

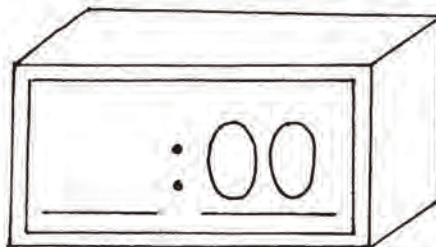


2. Draw **3** clouds.

3. Complete the pattern below.



4. What time does the clock on the left show? _____

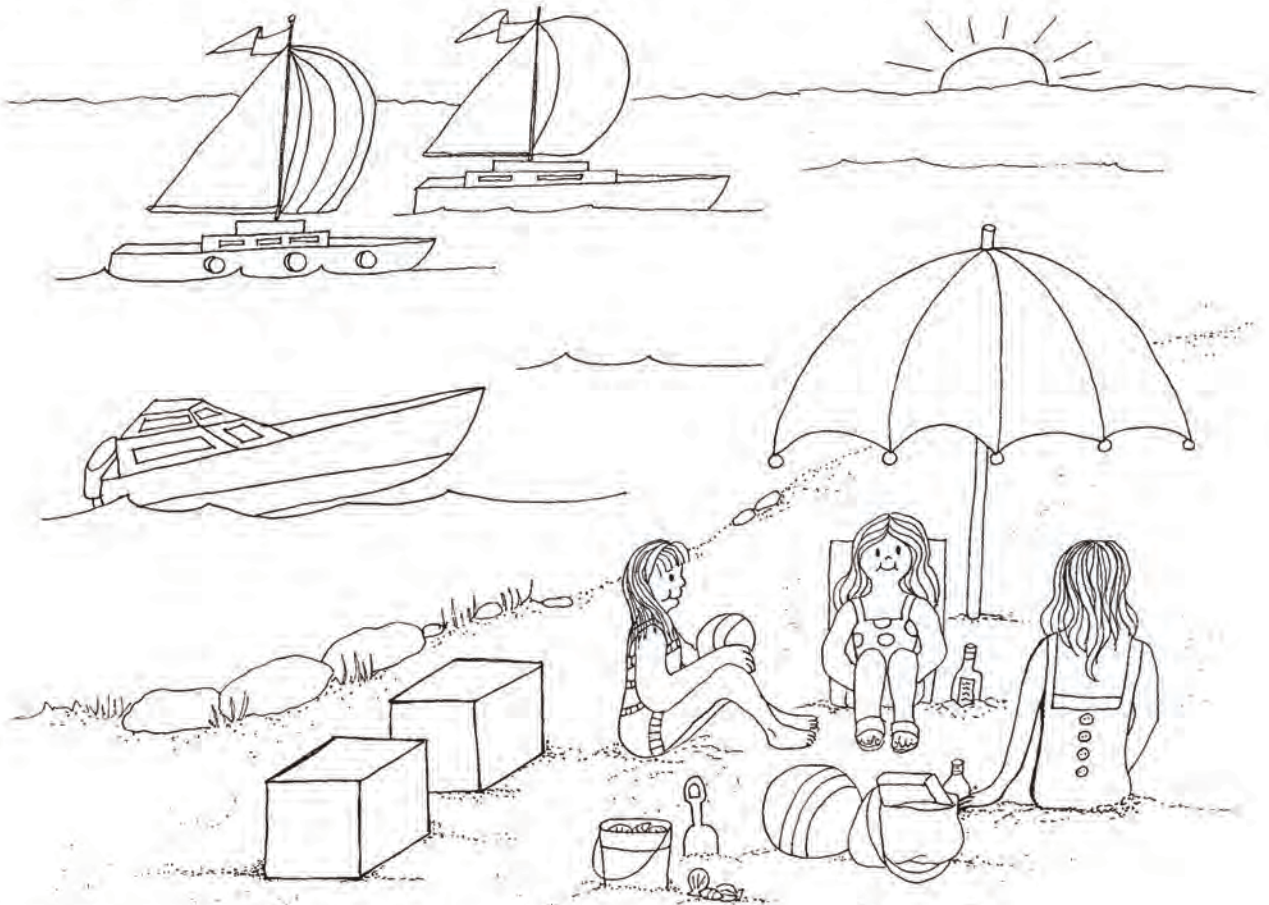


Now fill in the digital clock to show **1 o'clock**.



Lesson #4 continued

5. Look at this picture then follow the directions below.



Count how many people there are altogether. _____

Count how many motor boats are in the picture. _____

Count how many sailboats are in the picture. _____

Count how many boats there are altogether. _____

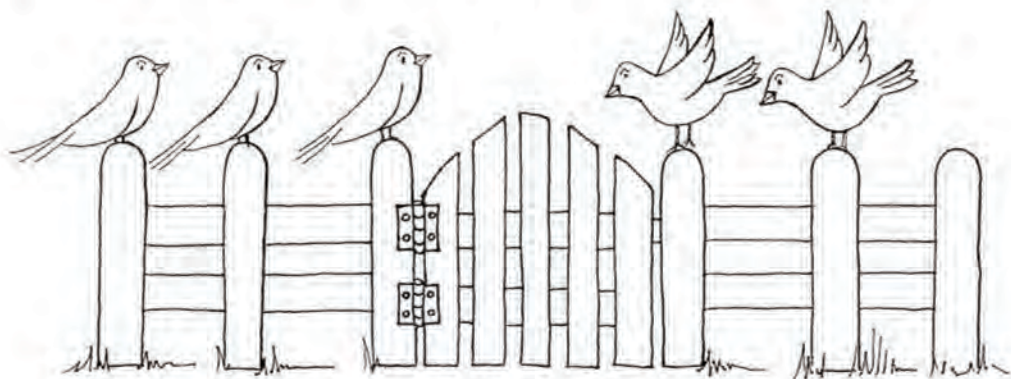
6. Point to and name as many of these numbers as you can.

1	3	7	4	9	6	2	5	8	10
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Lesson #7

1. Do you know what a **number story** is? Look at the picture below while I tell you a number story.

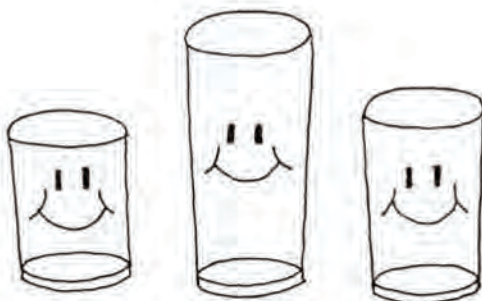
There were **3** birds sitting on a fence. **2** more birds flew over to sit on the fence. Then there were **5** birds sitting on the fence.



Now you tell me a **number story** that goes with the picture below.

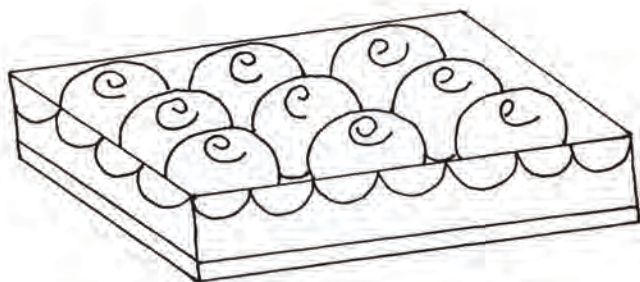


2. Circle the glass that will hold the **most** milk.



Lesson #7 continued

3. Without counting, **guess** how many pieces of candy are in the candy box below. I'll write your guess on the line next to the candy box.



_____ pieces of candy

Now **count** the pieces of candy in the box. I'll write how many pieces are in the box on the line below. Did you make a good guess?

_____ pieces of candy

4. Look at these **3** shapes.



Draw the shape that is **between** the circle and triangle.

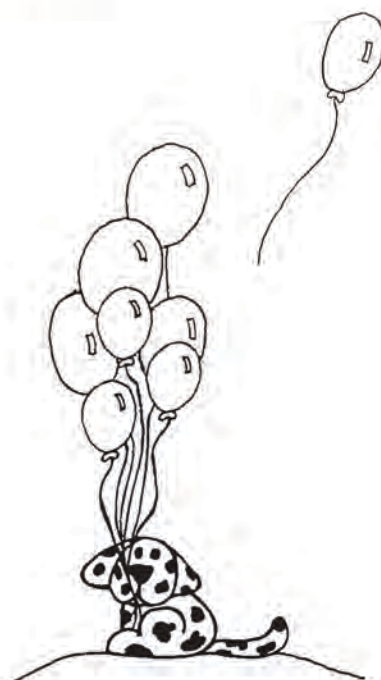
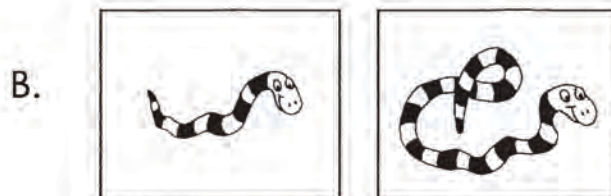
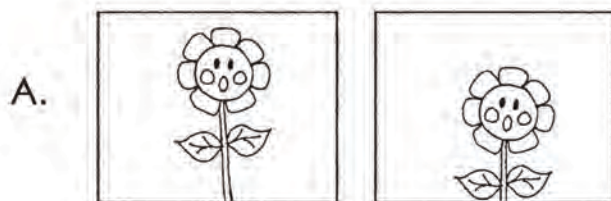
Draw the shape that is **above** the square.

Draw the shape that is **below** the square.



Lesson #19

1. Look at the three pairs of pictures below. Tell me how the second object is **different** from the first object in each pair.



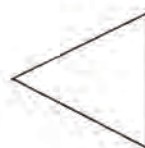
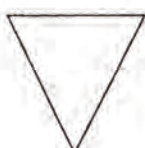
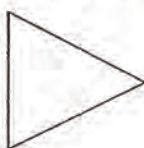
2. Continue this pattern:

1 2 3 1 2 3 1 _____

3. If you turned this triangle which of the following?

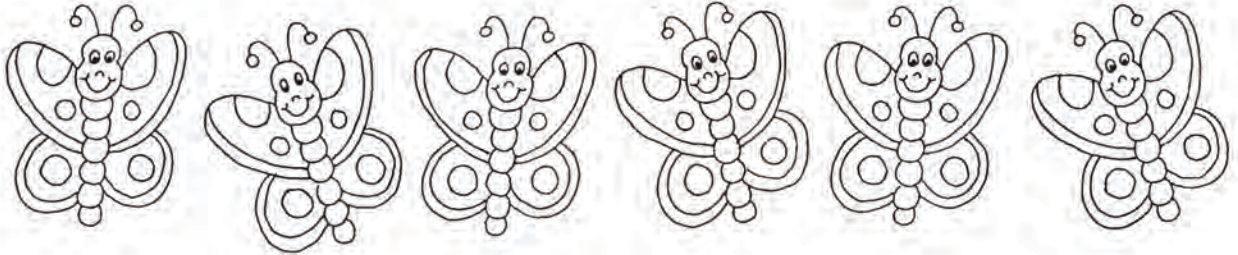


upside down, it would look like



Lesson #19 continued

4. Divide these

into **2** equal groups by drawing a line.5. Circle the group that has **7** objects.6. Write these numbers in order from **largest** to **smallest** on the lines below.

5

2

4

1

3

7. About how much time does it take for you to get dressed?

Circle:

5 minutes

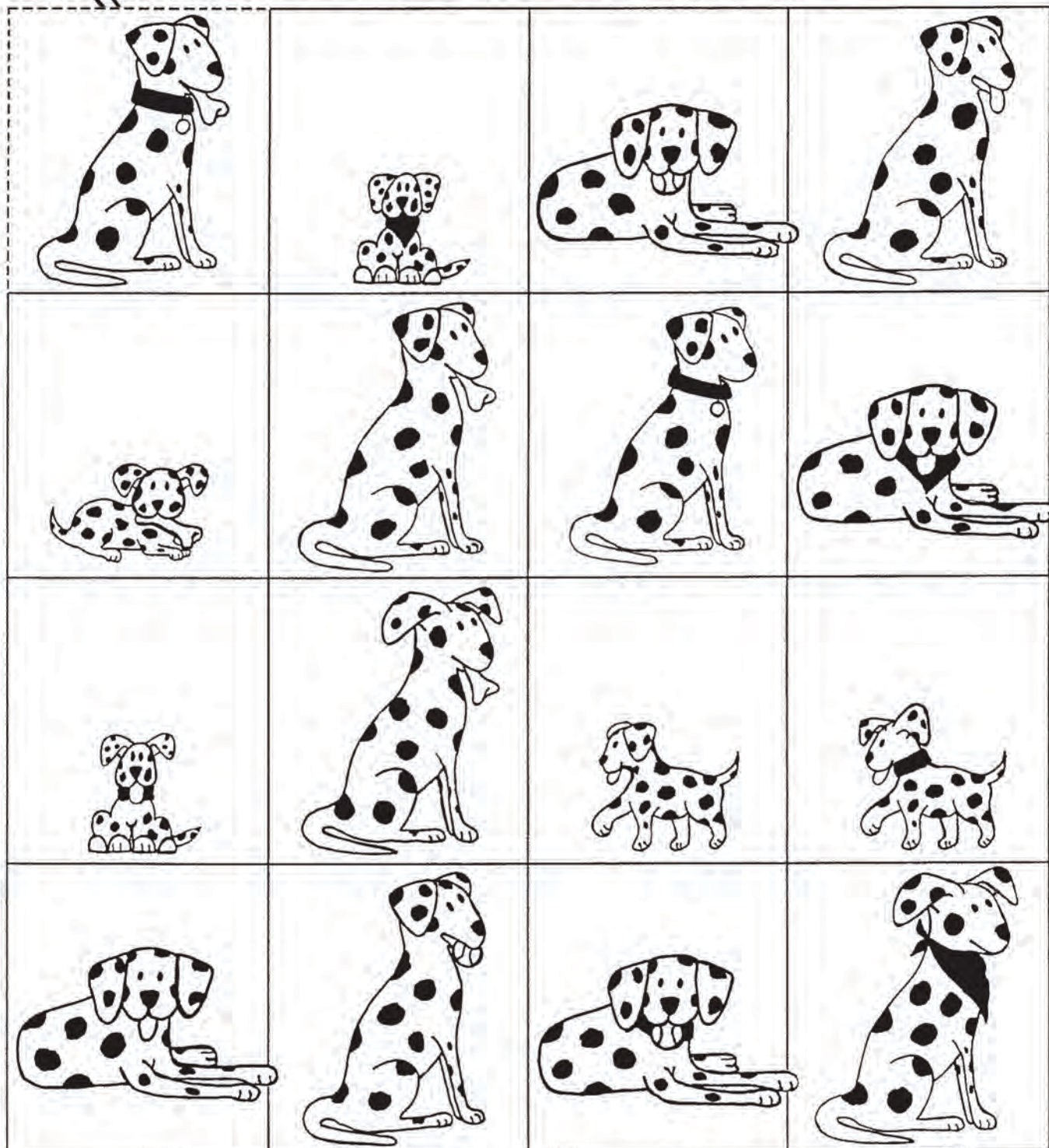
5 hours

5 seconds





Dalmation Station



Punch-Out Money Match

Take out your Punch-Out Money. Look at the pictures of coins below. Find the coin that matches the picture and place it on the dotted lines. Then I will tell you how much each coin is worth.



=



=



=



Place your coin
here

Penny

1¢



=



=



=



Place your coin
here

Nickel

5¢



=



=



=



Place your coin
here

Dime

10¢



=



=



=



Place your coin
here

Quarter

25¢