

Targets standards in this area:**• Measurement & Data***For full description, see page 2.***What's Included**

- 10 activity folders
- 10 sets of tiles
- 10 storage pouches
- Reproducible assessment (on pages 3–4 of this guide)
- Reproducible tiles (on pages 5–13 of this guide)
- Reproducible answer cards (on pages 14–16 of this guide)

Before You Begin

- The tiles, pouches, and folders are color-coded. First, place the tiles (and answer cards, if needed) in the storage pouches. Then put the pouches inside the game folders in the storage box—and the games are ready to use!

About the Folder Games

These easy-to-use games help children strengthen essential math skills— independently! The 10 activity folders come with everything students need for hands-on practice with measurement and data. Plus, each folder includes simple three-step instructions.

Getting Started

- Before students play the games independently, invite volunteers to help you model how to play. Select a game folder and point out that the front of the folder shows the materials students will need. Next, read the instructions together, reminding students to look at the illustrations. Now have volunteers take turns playing the game, and prompt them to check their answers on the back of the pieces or with the answer card (if provided).
- Place the games in a math center and have students rotate through, or invite students to select games to play independently at their desks.

Note: If you lose a folder game tile or answer card, you can use the reproducible manipulatives and answer cards on pages 5–16 of this guide.

Assessment

A reproducible assessment is on pages 3–4 of this guide. The assessment can be used as a pre-assessment tool to identify which folders students should be able to work on independently. It can also be used to identify which skill sets students need to develop further before they play the games on their own. The reproducible can also be a post-assessment that allows you to check students' understanding and track their progress. Each question on the assessment corresponds to a skill covered in one of the folders. (A complete list of the games and the skills they cover is on page 2.)

**WARNING:**

CHOKING HAZARD—Small parts.
Not for children under 3 yrs.

Meeting Individual Needs

ELL

Invite students to pair up. You can also have competent students work with students who need extra support. Discuss any unfamiliar vocabulary before students play the game. Focus on terms such as *heavier*, *lighter*, *longer*, *shorter*, *taller*, *analog*, *digital*, *picture*, *graph*, *bar graph*, *data*, and *how many*. Finally, remind students to follow the illustrations as they play.

Reteach/Extra Support

Have students play folder games that target areas in which they need additional support. (The folder tabs and the list below show each game's targeted skill.) Guide students through the instructions or solve a few of the problems together, and then have students complete the activities on their own. Using the games for a small-group lesson or for individualized instruction is a great way to reinforce key concepts and skills.

Challenge

Invite students to create their own problems for the folders. For example, for the Great & Small game, have students find objects inside the classroom to label taller and shorter or lighter and heavier. Or, for the What Time Is It? game, students can write down digital times and then move the hands on the analog clock to reflect the same time. Similar to the Graph Factory game, students can survey other students (for example, how many students have dogs and how many have cats?) and then create a graph with pictures to show the results.

Assessment Answers

- | | |
|------|-------|
| 1. A | 6. A |
| 2. A | 7. A |
| 3. A | 8. B |
| 4. B | 9. A |
| 5. C | 10. C |

Folder Skills

Folder	Skill
1. Great & Small	Comparing Sizes
2. Field Fun	Comparing Weight & Height
3. Puzzle Fun	Ordering Objects by Size
4. Car Wash	Measuring Length with Nonstandard Units
5. Pine Trees	Measuring Height with Nonstandard Units
6. Animal Homes	Classify by Type & Count
7. Color Closets	Classify by Color & Count
8. What Time Is It?	Analog & Digital Time
9. Cuckoo Clocks	Telling Time
10. Graph Factory	Data & Graphing

Standards Correlation

Folder(s)	Measurement & Data
Great & Small; Field Fun	Describing measurable attributes of objects
Great & Small; Field Fun	Directly comparing two objects to see which one has more of or less of a measurable attribute
Animal Homes; Color Closets	Classifying objects into categories; counting the objects in each category and sorting categories by count
Puzzle Fun	Ordering three objects by length; comparing the lengths of two objects indirectly by using a third object
Car Wash; Pine Trees	Expressing the length of an object as a whole number of units by laying multiple copies of a shorter object (the length unit) end to end
What Time Is It?; Cuckoo Clocks	Telling and writing time in hours and half-hours using analog and digital clocks
Graph Factory	Organizing, representing, and interpreting data with up to three categories; asking and answering questions about the data points

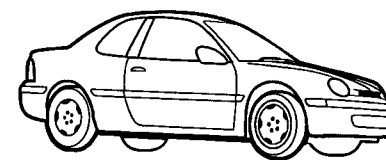
Name _____ Date _____

MEASUREMENT & DATA

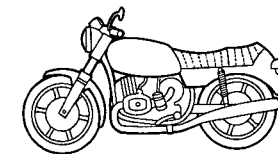
1

Which is longer, a car or a motorcycle?

- A. car
B. motorcycle



car



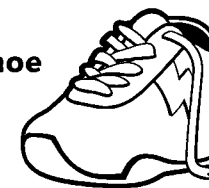
motorcycle

2

Which object is heavier?

- A. shoe
B. sock

shoe



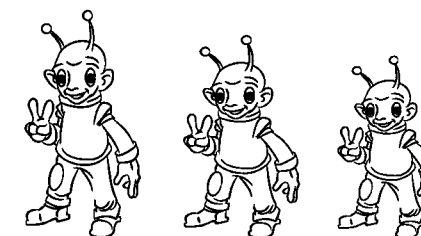
sock



3

Are these aliens in order from shortest to tallest or tallest to shortest?

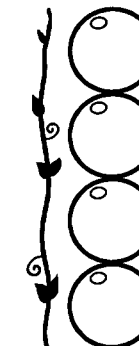
- A. tallest to shortest
B. shortest to tallest



4

How many grapes did it take to measure the vine?

- A. 10
B. 4
C. 3



5

How many paper clips did it take to measure the pencil?

- A. 11
B. 7
C. 4

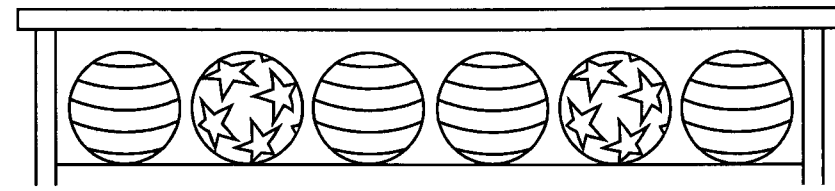


Name _____ Date _____

6

How many starred balls are there?

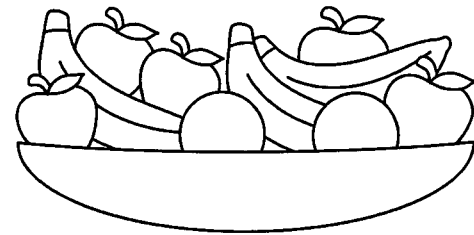
- A. 2
- B. 7
- C. 6



7

How many apples are in the fruit bowl?

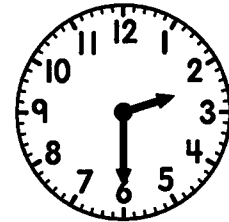
- A. 5
- B. 4
- C. 2



8

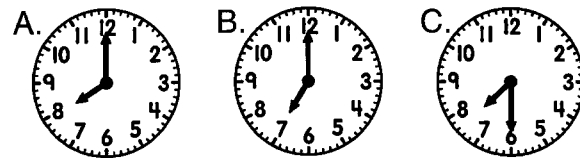
Look at the analog clock. Circle the correct digital time.

- A. 3:30
- B. 2:30
- C. 3:00



9

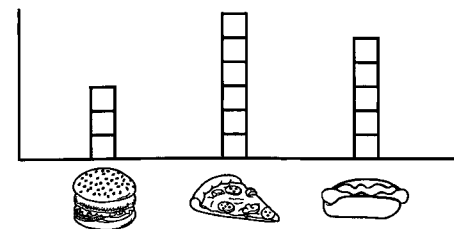
Which analog time is the same time shown on the digital clock?



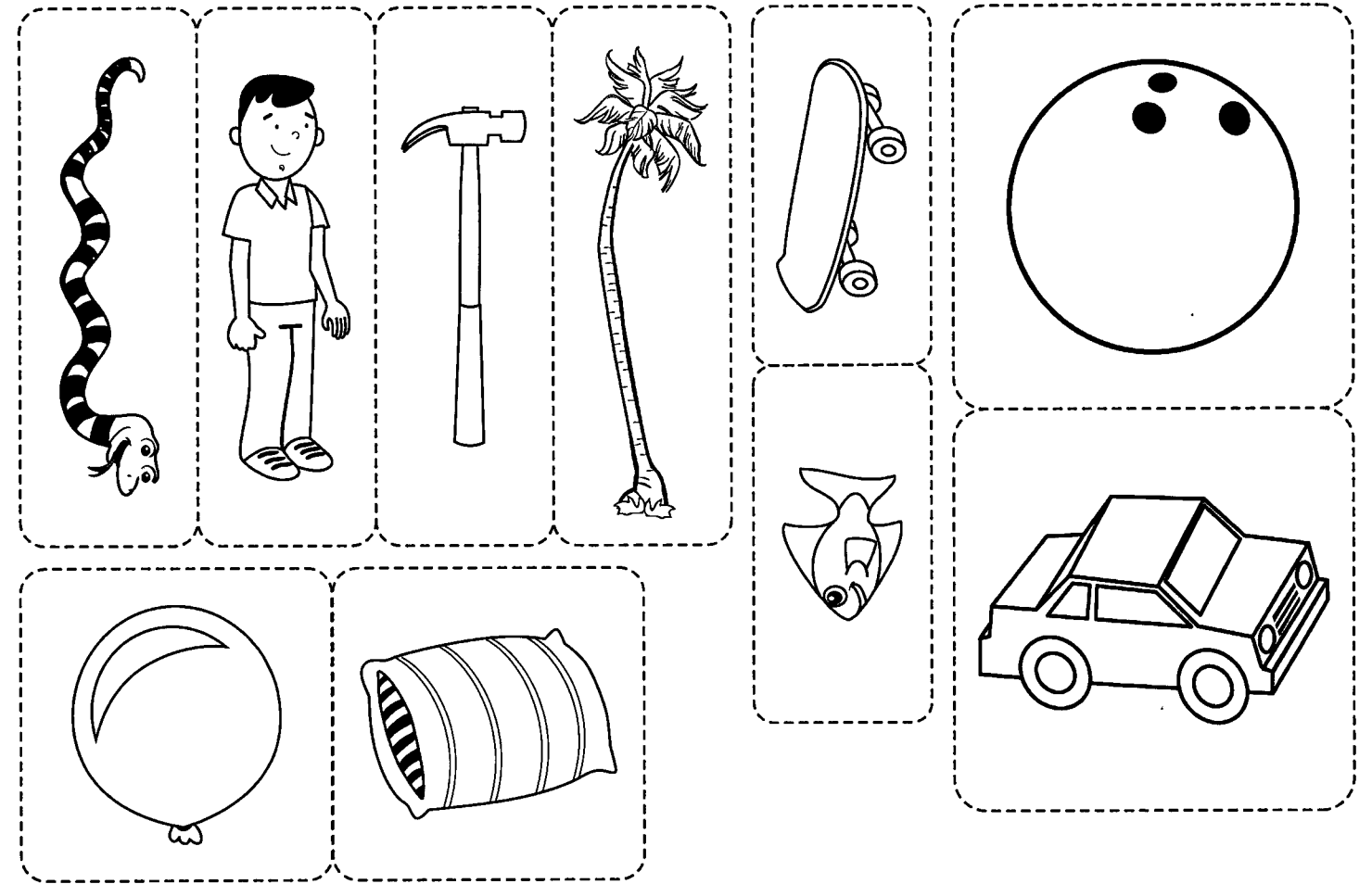
10

How many kids like hamburgers?

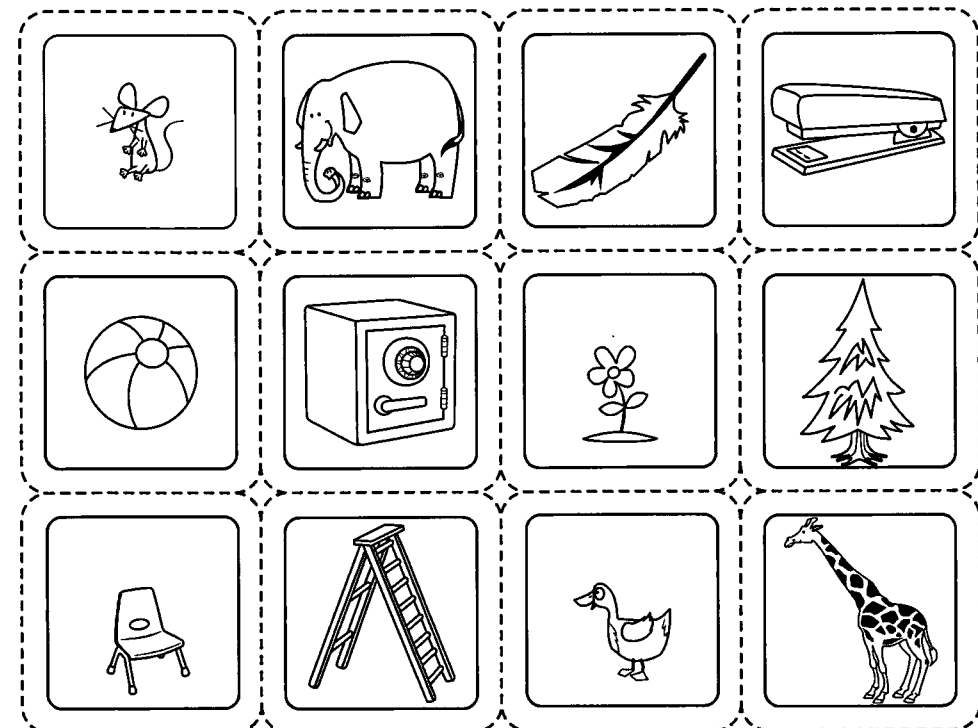
- A. 6
- B. 5
- C. 3



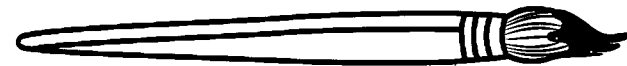
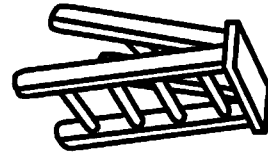
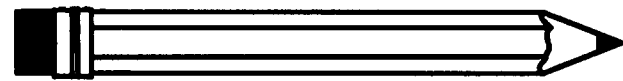
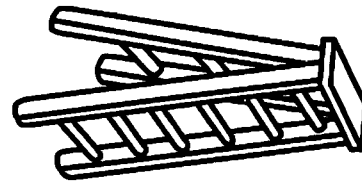
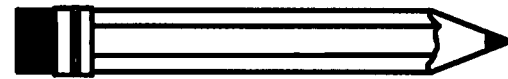
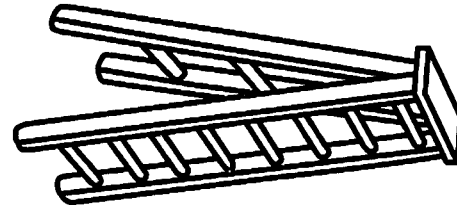
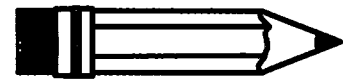
FOLDER 1 - GREAT & SMALL



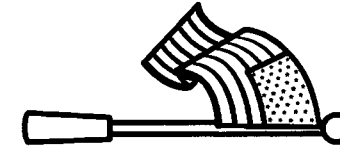
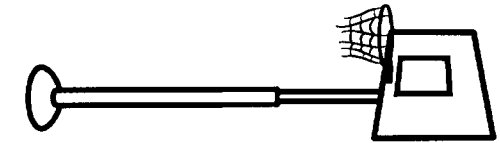
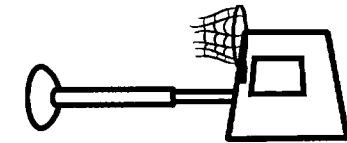
FOLDER 2 - FIELD FUN



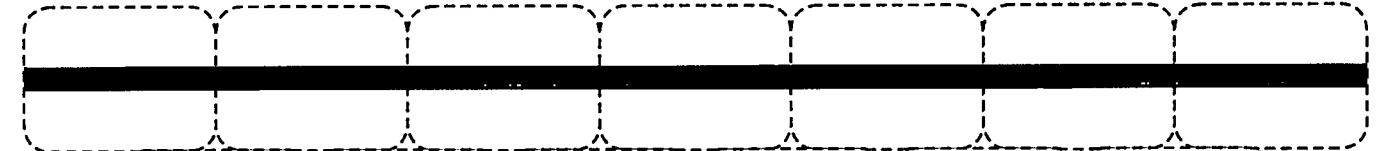
FOLDER 3 - PUZZLE FUN



FOLDER 3 - PUZZLE FUN (CONTINUED)



FOLDER 4 - CAR WASH



3

lengths

4

lengths

5

lengths

6

lengths

9

lengths

10

lengths

FOLDER 5 - PINE TREES



2

pinecones

3

pinecones

4

pinecones

5

pinecones

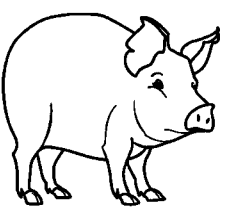
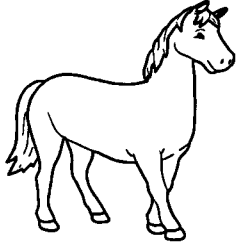
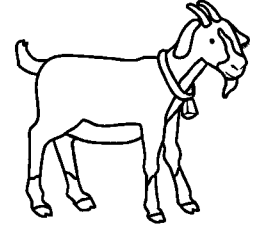
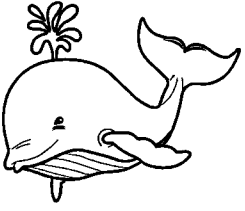
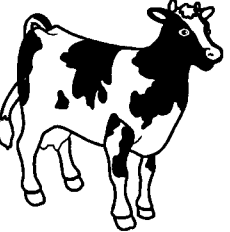
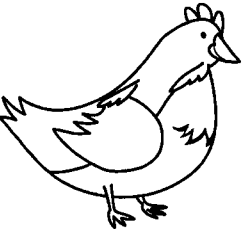
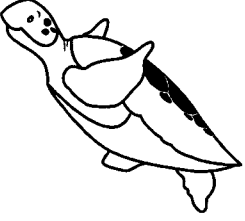
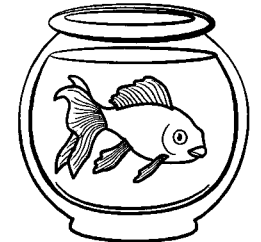
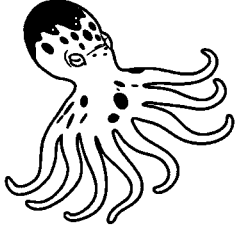

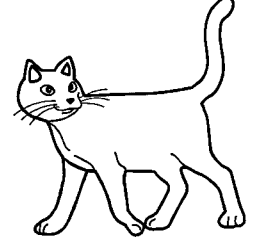

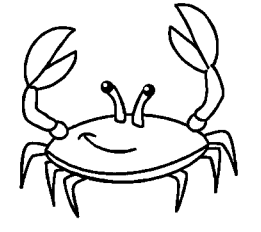
6

pinecones


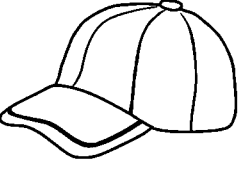
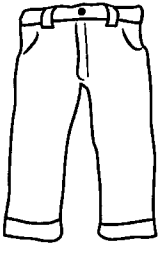

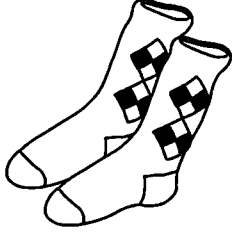


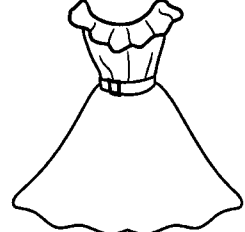
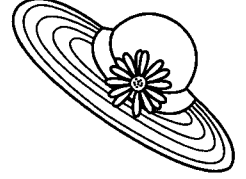
7

pinecones

FOLDER 6 - ANIMAL HOMES

4	5	6	8	
				
				
				
				
				

FOLDER 7 - COLOR CLOSETS

6	4	7	9	
				
				

Teacher: Please color the above clothing pieces to correspond to the tiles in the game. (Most clothing items appear in more than one color.) The color distribution is as follows:

- red:      
- blue:    
- green:       
- purple:         

FOLDER 8 - WHAT TIME IS IT?

12:00

1:00

4:00

10:00

9:00

3:00

11:00

5:00

12:30

2:30

FOLDER 8 - WHAT TIME IS IT? (CONTINUED)

9:30

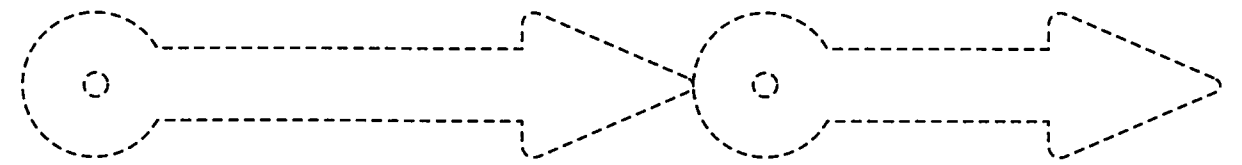
6:30

3:30

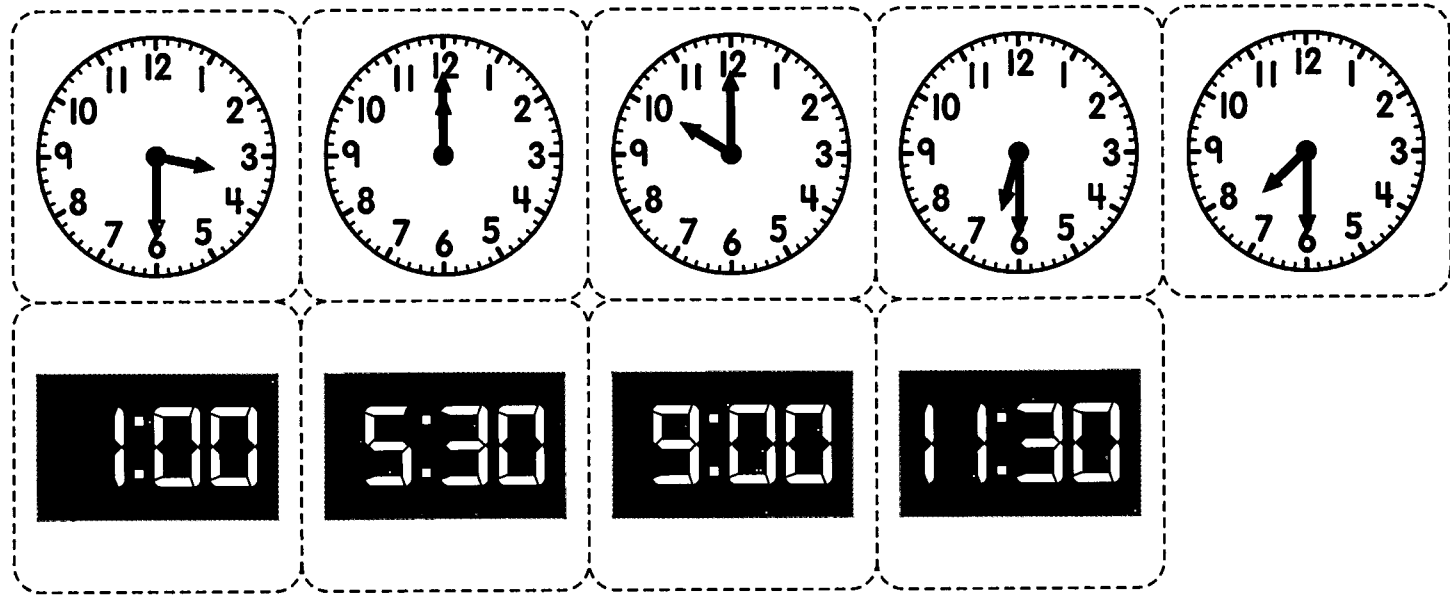
11:30

8:30

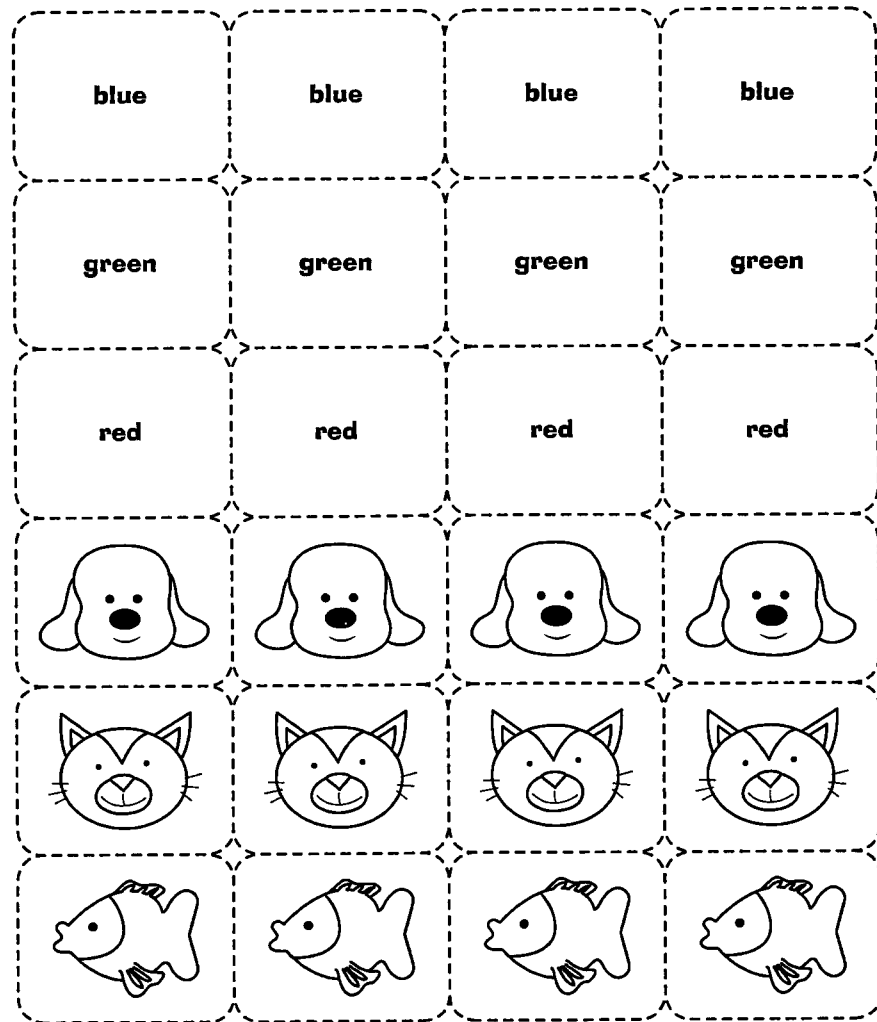
5:30



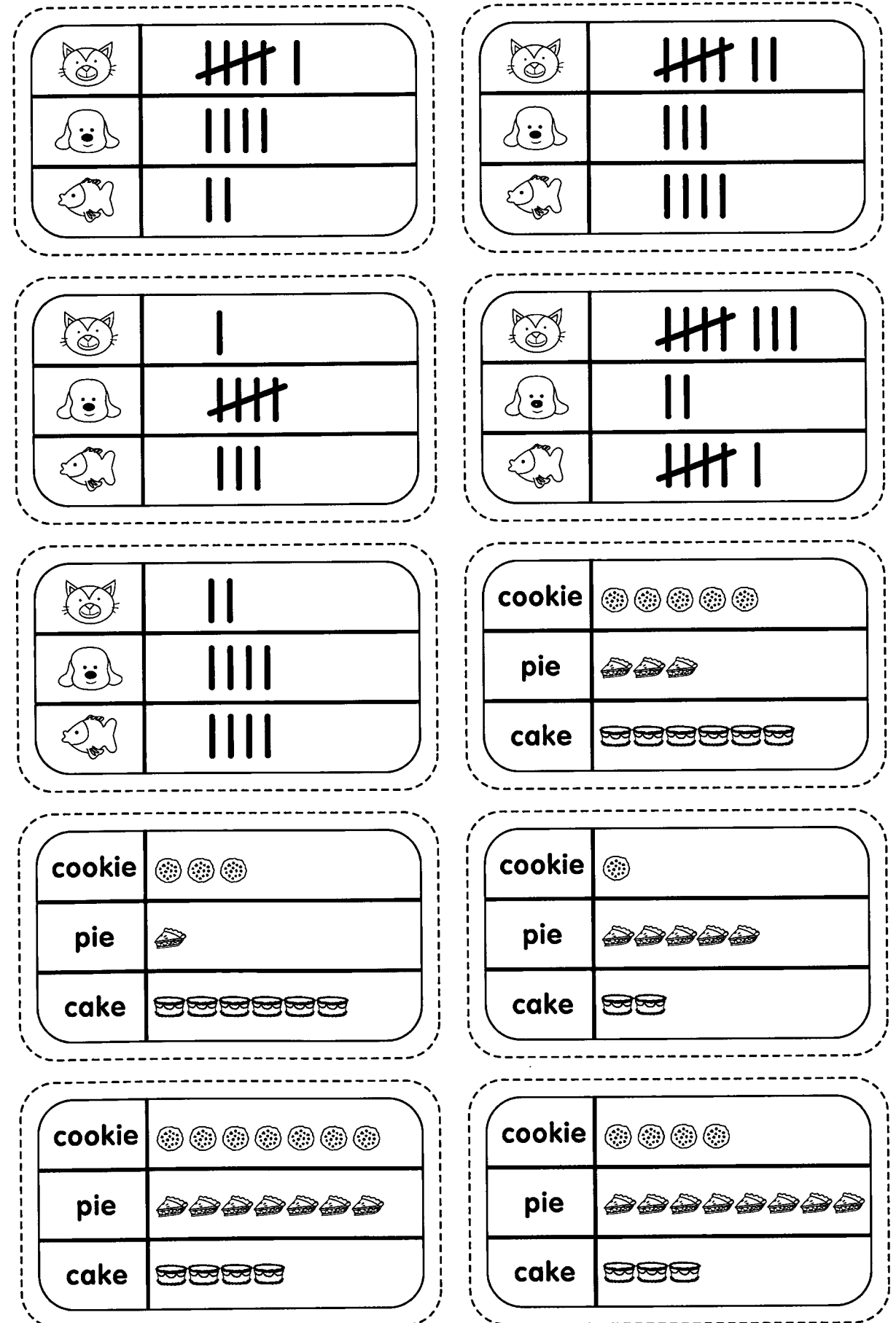
FOLDER 9 - CUCKOO CLOCKS



FOLDER 10 - GRAPH FACTORY

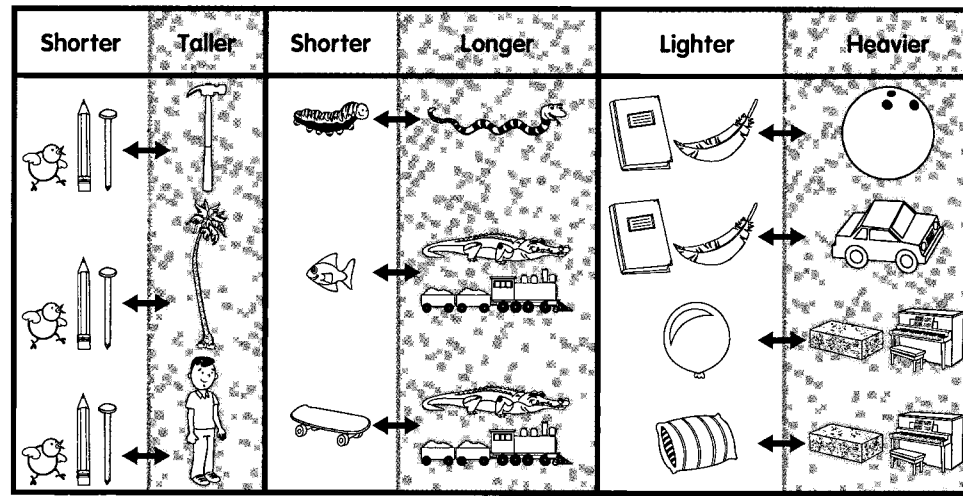


FOLDER 10 - GRAPH FACTORY (CONTINUED)

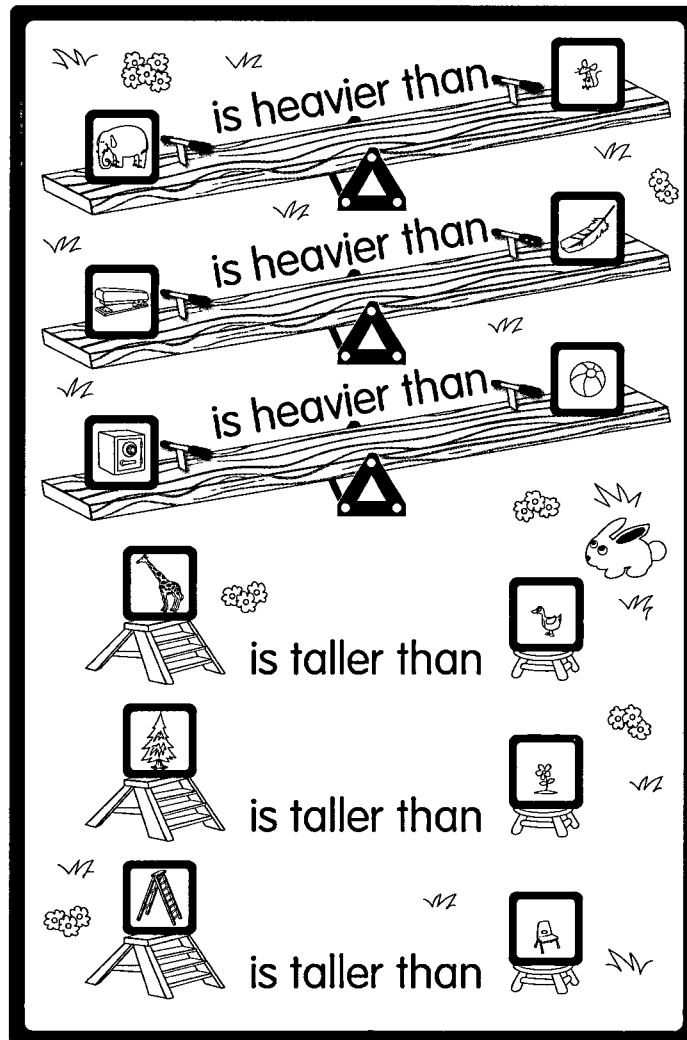


ANSWER CARDS

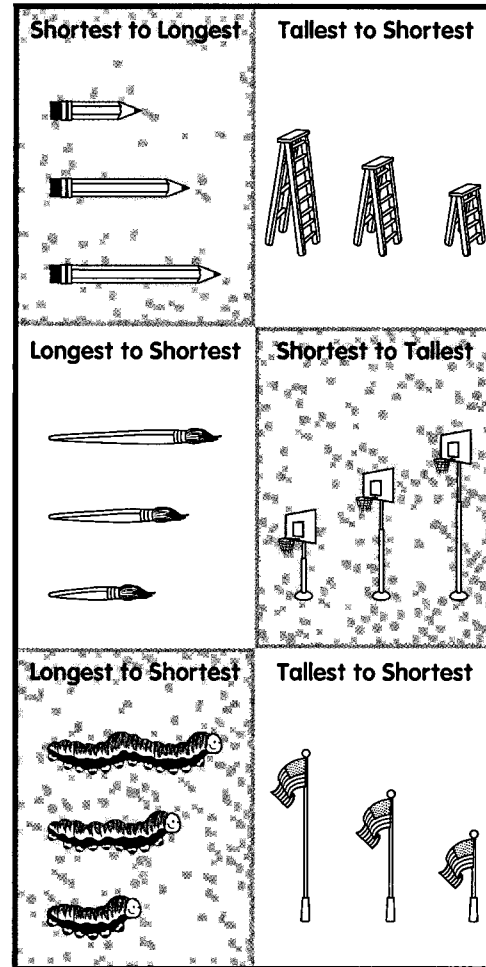
FOLDER 1 - GREAT & SMALL



FOLDER 2 - FIELD FUN

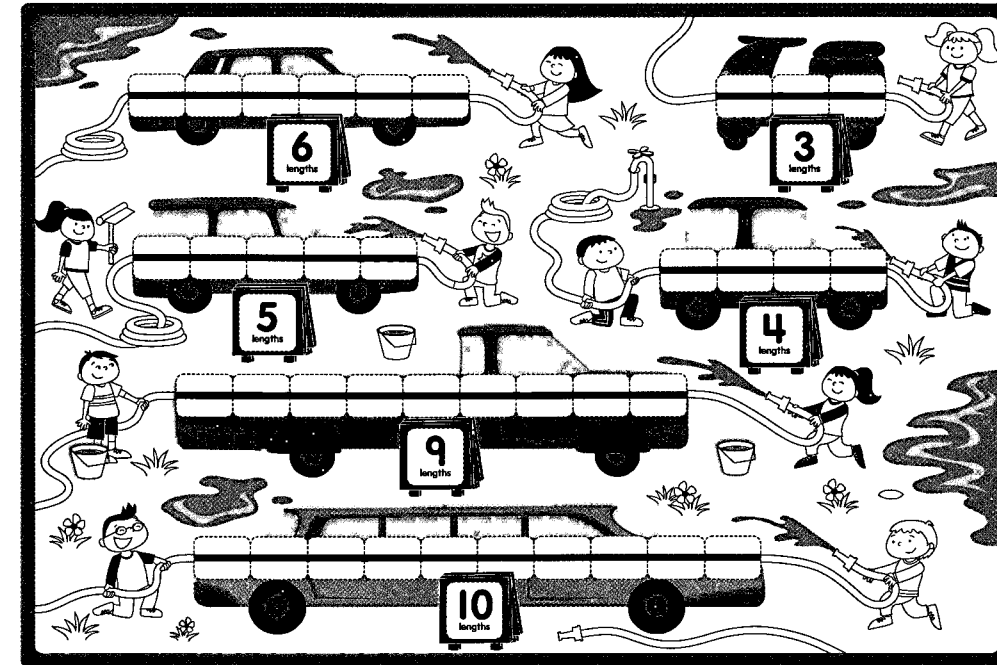


FOLDER 3 - PUZZLE FUN

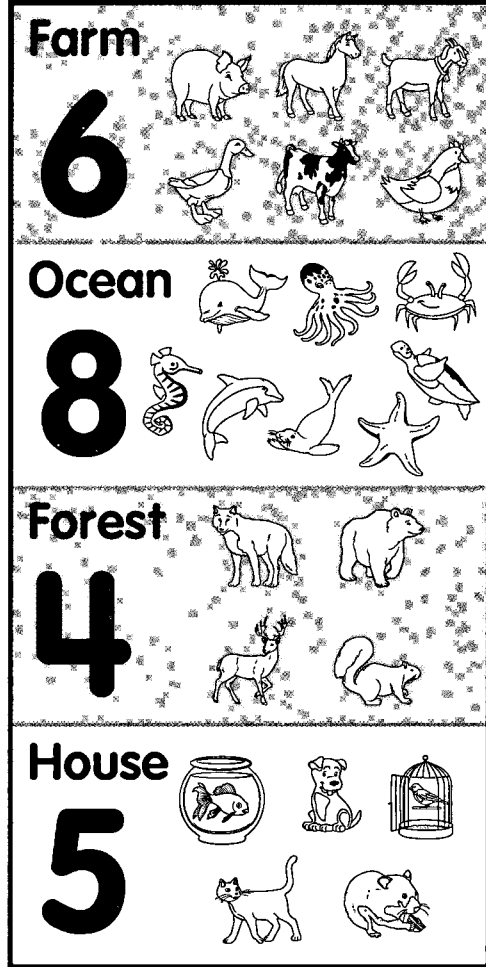


ANSWER CARDS (CONTINUED)

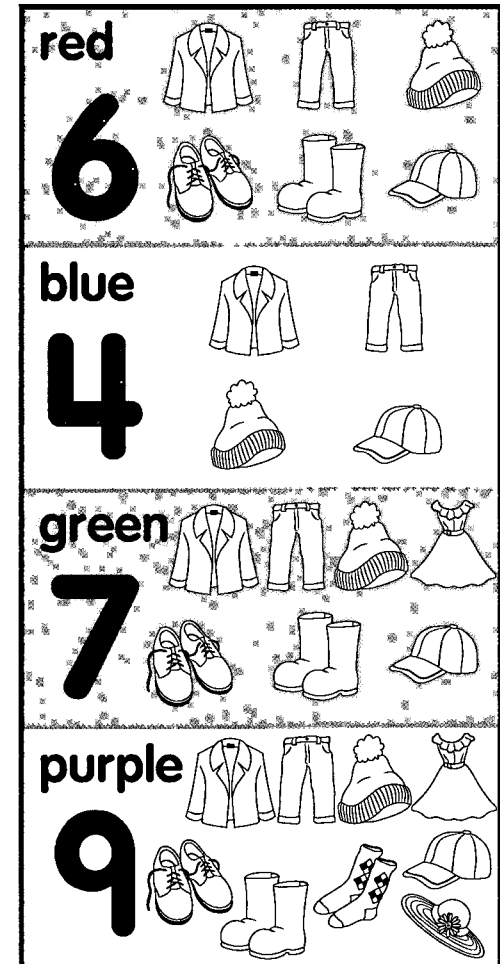
FOLDER 4 - CAR WASH



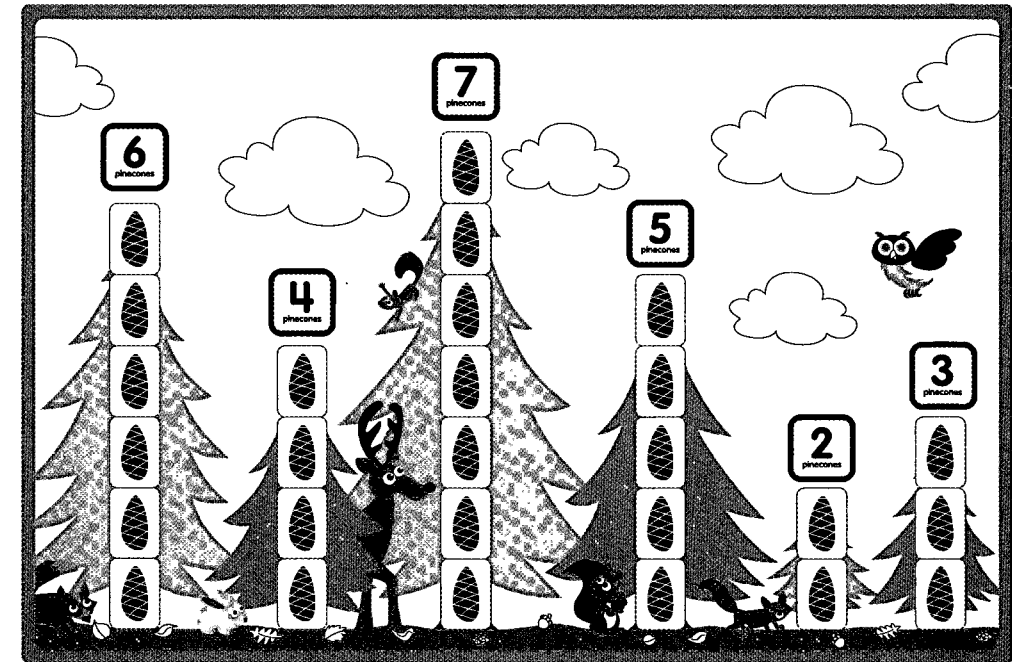
FOLDER 6 - ANIMAL HOMES



FOLDER 7 - COLOR CLOSETS



FOLDER 5 - PINE TREES



ANSWER CARDS (CONTINUED)

FOLDER 8 - WHAT TIME IS IT?

1:00		2:30	
3:00		3:30	
4:00		5:00	
5:30		6:30	
8:30		9:00	
9:30		10:00	
11:00		11:30	
12:00		12:30	

FOLDER 9 - CUCKOO CLOCKS

3:30		1:00		10:00	
	7:30		12:00		5:30
9:00		6:30		11:30	

FOLDER 10 - GRAPH FACTORY
