

GRADE ONE-CONTENT STANDARD #9 ACTIVITY A

Permission Granted

TOSS AND MAKE

MATHEMATICS FOCUS

Comparing Numbers

Any number can be represented with objects in many different ways. Numerals are a way to record *how many*. The ten frame is a tool for exploring how numbers relate to 10.

Children explore how numbers relate to 10 as they play a game, tossing a 0-9 die and showing the number with LinkerCubes on a ten frame. They make each new number rolled from the number they just made.

MATERIALS For each pair

- o 20 LinkerCubes (10 each of two colors)
- o 0-9 die

PREPARATION For each pair, make a copy of the Ten Frame (page A.50). To prevent the dice from falling on the floor, you can put each die in a box with a clear lid (such as a stationary box) for shaking.

TIME 1 session

WRITING FOCUS

Reporting Experiences

Answering the questions *Who, What, When* and *Where* is helpful for recalling and reporting experiences.

Children discuss newspapers and the *who, what, when, and where* of newspaper writing. Children write and illustrate articles about their math game and publish them in a bulletin board newspaper.

MATERIALS

- o newspaper
- o chart paper
- o writing paper

PREPARATION Create a bulletin board for the class's news reports.

TIME 1 session

How to Play Toss and Make

- Partners need a ten frame, a 0-9 die, and 10 cubes each.
- In turn, each player throws the die and shows that many cubes on the ten frame, putting on cubes from his pile if the number is larger, or taking off cubes and adding them to his pile if the number is smaller. If the die shows 0, the player may add or take off any number 1 to 10.
- The game ends when a player runs out of cubes.
- For variation, the game could be played without the ten frame.



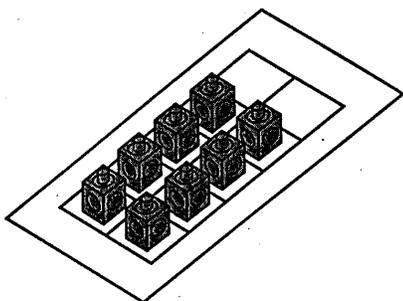
A.48

[Source: [Writing Mathematics • Grade 1](#), Creative Publications, Inc.]

Comparing Numbers

Playing this game helps us see relationships between numbers.

LEARNING THE GAME



PLAYING THE GAME



1. Distribute copies of the Ten Frame and dice to the pairs of children. *Let's look at the game board for today's game. What do you notice about it?* Children should see there are 5 spaces and 5 more spaces.
2. Throw a die and say the number. Have each pair show that number of cubes on their ten frame. Then roll the die again. *Think of a way to make the new number on the ten frame.*
3. Toss the die several more times to get the children used to the idea of making the number on the die. Emphasize this by saying for example, **Make 5**, for a roll of 5.
4. Introduce the children to the rules of the game, and have them play in pairs.
5. While the children play the game, observe one pair at a time, asking them to explain their thinking when they make a move.

You'll notice a wide variety of strategies. Some children will feel they need to take all the cubes off the ten frame in order to make a new number, others will count on or back from the number that is there. For example, if 4 cubes are already on the frame, they know they can add 2 more to make 6 or remove 1 to make 3. You may notice that children's strategies change as they play the game.

6. At the end of math time, discuss the game.
 - *How could you tell when to put more cubes on the ten frame or take some off?*
 - *How does the ten frame help you know how many cubes there are?*
 - *How could you know, without counting from 1, if 10 are on the ten frame? What about 9? 8?*

TEN FRAME

To the teacher: Permission is granted to reproduce this page.

A.50

[Source: [Writing Mathematics • Grade 1](#), Creative Publications, Inc.]