

Predict and Win

Grade 4

Lesson 409

Relevant Chapter in the *Digi-Block Comprehensive Teacher's Guide*:
Book III: Unit 2-3: Finding Sums, pages 54 - 58

Lesson Overview

Students will play a game where they predict the answer to an addition problem and then use blocks to get the answer to see if their prediction was correct.

Objectives

Thinking Skills: Students predict the answer to an addition problem.

Mastery Skills: Students learn to represent the numbers in an addition problem with blocks and use the blocks to find the answer.

Materials

Each group of four students needs:

- 1000 single blocks, 100 small holders, 10 medium holders
- 2 Predict and Win activity sheets
- Number cards made from blackline master

Class Introduction

(10 - 15 minutes)

Tell students the following: **You are going to play a game where the more accurately you predict the answer to an addition problem, the more points you will get.** Choose four students to help you demonstrate the game to the class and divide the students into two teams. Choose the team that will go first.

Explain the steps for playing the game.

- Have the team that goes first choose two number cards. Tell them, **Make an addition problem out of these two numbers and write it on the board.**
- Have them predict the answer to the addition problem and write the prediction on the board.
- Say, **All of you can work together to use the blocks to see what the answer is.**
- When you get the answer, write the answer on the board.
- If the answer is the same as the prediction, explain that the team that made the prediction gets one point.
- The teams will keep alternating turns for six rounds. The team with the most points at the end of six rounds is the winner.

Student Activity

(15 - 20 minutes)

Put the students into groups of four students in a group. Give each group of students a set of the materials listed above. **Your group is now going to play the game.**

- **Break your group of four into two teams of two.**
- Show the students the Predict and Win activity sheet and point out the places where students write the addition problem, the prediction of the answer, the actual answer, and the place to mark a point if the answer and the prediction are the same.
- **Each team in each group should choose one number card. The team with the highest number on their card goes first.**
- **Follow these steps to play the game.**
 - **The team that goes first draws two number cards.**
 - **They write an addition problem using those two numbers on their activity sheet.**

- They make a prediction of the answer and write their prediction on their activity sheet.
- Both groups work together to figure out the answer to the addition problem with blocks.
- Once they have the answer, the team that made the prediction writes the answer on the activity sheet.
- If the answer is the same as the prediction, they mark 1 point on their activity sheet.
- Alternate turns for six rounds. The team with the most points at the end of six rounds wins.

Closure

(5 - 10 minutes)

Bring the class together and ask the following questions.

- **How did you predict the answer to an addition problem?** Have the class describe different methods that they used to predict the answer.
- **Were some of the problems easier to predict than others?**

Assessment

As the class works, walk around the room observing student behavior.

- Are the students working collaboratively?
- Are they following directions correctly?

Observe students as they do the activity.

- Are students able to accurately predict the answer to an addition problem?
- What methods do students use to predict the answer to an addition problem? Do they guess? Do they estimate? Do they use an algorithm or partially written method?
- Do they predict by looking at the blocks-of-10 first and then adding up all the singles? (Note - This is a very effective method for mental math)
- Do students represent numbers with blocks correctly? Do they pack as much as possible to represent a number?
- Can students add numbers correctly using the blocks? Do they pack as much as possible to get the answer?

Extension

- Have students choose three number cards and use those numbers to form an addition problem when they play the game.
- Have students choose two number cards and use those numbers to form a subtraction problem when they play the game.