


In-Class Game

Shut the Box (Lesson 11-5)

● Get Ready!

Separate the class into groups of two or three.

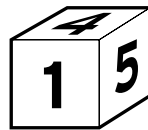
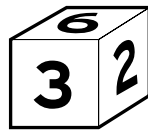
- Shut the Box master, p. 32
- Box and Chips master, p. 33
- number cubes 

● Get Set!

Make a copy of the Shut the Box master on page 32 and the Box and Chips master on page 33 for each student. Each pair of students will need a pair of number cubes.

● Go!

- The first player rolls the two number cubes and then decides which boxes he or she will cover with chips. Any two boxes that have the same sum as the numbers showing on the number cubes may be covered. For example, if the number cubes show 4 and 6 the sum is 10. A sum of 10 allows the player to cover 1 and 9, or 2 and 8, or 3 and 7, and so on. The diagram shows a sample play.



1
2
●
4
5
6
●
8
9

$6 + 4 = 10$ thrown
 $7 + 3 = 10$ covered

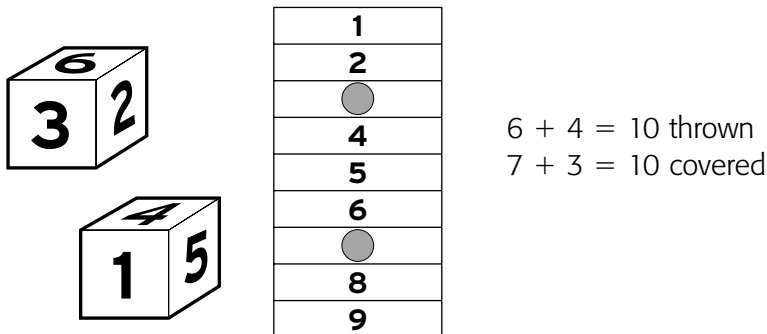
- The same player then rolls the two number cubes again and tries to cover two other boxes. The player is not allowed to use combinations involving numbers that are already covered. Encourage students to think of the probability of rolling a needed sum when determining which boxes to cover.
- Once boxes 7, 8, and 9 are covered, a player rolls one number cube on a turn, but he or she must still cover two boxes at a time.
- A player's turn continues until he or she is unable to make use of a sum. Then the player's final score is the sum of all of the numbers in the uncovered boxes. Play passes to the next player.
- The winner is the player with the lowest score.

In-Class Game

Shut the Box (Lesson 11-5)

Work in groups of two or three.

- The first player rolls the two number cubes and then decides which boxes he or she will cover with chips. Any two boxes that have the same sum as the numbers showing on the number cubes may be covered. For example, if the number cubes show 4 and 6 the sum is 10. A sum of 10 allows the player to cover 1 and 9, or 2 and 8, or 3 and 7, and so on. The diagram below shows a sample play.



- The same player then rolls the two number cubes again and tries to cover two other boxes. The player is not allowed to use combinations involving numbers that are already covered. As you choose which boxes to cover, think of the probability of rolling numbers with a sum that allows you to cover the numbers that you are leaving uncovered.
- Once boxes 7, 8, and 9 are covered, you may only roll one number cube on a turn, but you must still cover two boxes at a time.
- A player's turn continues until he or she is unable to make use of a sum. Then the player's final score is the sum of all of the numbers on the uncovered boxes. Play passes to the next player.
- The winner is the player with the lowest score.

In-Class Game

Box and Chips (Lesson 11-5)

1
2
3
4
5
6
7
8
9

