Cover That Number!

Grade Level: K-2

Number of Players: 2-3

Materials Needed:
Game board, three dice, and markers to cover all numbers

Mathematical Understanding:
- Students will think flexibly about number combinations in order to create the numbers they need to cover all the numbers on their game board.

Object of the Game: The first player to cover all of the numbers on their game board wins the game.

Directions:
Players each rolls one die and the highest roll begins the game. Play moves clockwise.

Player 1 rolls the three dice and uses one or more of the numbers by adding, subtracting, or using a combination of both operations to make numbers that help him/her cover their numbered ovals with a marker. Each number on a die may only be used once and not all die numbers must be used. A player may cover up to two numbers on a single turn if both numbers can be made without using the rolled numbers more than once.

Example: Player rolls a 2, 5, and 6. These numbers can be used as they stand or in many different combinations using addition and/or subtraction. Examples below:

2 & 11 (6+5)	2 & 5 (6 is not used)	2 & 1 (6-5)
5 & 8 (6+2)	13 (2+5+6)	5 & 4 (6-2)
9 (5+6-2)	6 & 7 (5+2)	6 & 3 (5-2)

…plus many other possible variations. Players use the numbers created to cover the numbers on their game board with a two-color counter (recommend yellow side up).

Blocking: By using one of their rolled numbers or combinations a player may also choose to cover a number on an opponent's game board to block them from winning. Only open spaces may be blocked. A player may block a number on an opponent's game board even if that number is not covered yet on their own gameboard.

To unblock a number that has been blocked, a player must roll or make the given number to remove the two-color counter from their gameboard. They must also make the given number again to re-cover the number on their own game board. A Player is allowed to both

unblock one of his/her numbers and cover another number in a single turn, if both numbers can be made in a single roll without using any die more than once. (A Player may want to leave blocked numbers on his/her game board showing, so they know what numbers have to roll or make to unblock ovals on their game board!)

Optional:
Players should decide at the beginning of the game which operations will be used. For example, players may choose to use only addition, only subtraction, or a combination of the two operations. Many variations are possible.

Guiding Questions:
What do you know?
Where do you think you will begin?
Where are you stuck? What is confusing? What are you wondering about?
What are you going to try?
What did you think about to come to your answer?

Differentiation:
Players may decide beforehand whether they will use only addition or only subtraction of the dice to create numbers needed to pop bubbles. Players can make the numbers needed using only 1, 2, or all 3 of the dice rolled.

Optional game boards with numbers from 1-16 may be used to differentiate levels of the game.

Players may also write the equations they are using to get to their numbers.

Game Trajectory:	**Clean up Checklist for Game Bag:**
Pre K-2: Players use 1 dice to cover the numbers 1-10 on a game board.	Laminated Master of the Cover That Number directions
K-2: Players use addition or subtraction of numbers on 3 die to cover given numbers on a game board within numbers 1-16**.**	Game boards (extras)
3-5: Gameboard includes numbers 1-18. Players use operations of addition, subtraction, and multiplication. Play may include division.	Two-color counters
5-6: Gameboard includes numbers 1-18. Players use the operations of addition, subtraction, multiplication, and division. Play may include exponents, square roots or fractions as determined by players.	Three dice per group

10

9

6

8

8

9

8

7

7

1

10

10

9

2

10

6

5

3

4

1-10 Game Board

10

11

9

12

8

16

13

15

1

7

10

10

14

2

6

3

5

4

1-16 Game Board

WCSD Family Math Night   (K-2 – green)   NVACS Strand: OA and NBT