

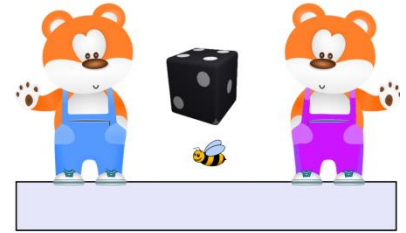
Intro to Doubles and Near Doubles

Instructions

Intro to Doubles

Materials:

- “Intro to Doubles and Near Doubles” Smart Notebook file
- 12 “bee” counters for each student (unifix cubes, bingo chips, etc)
- 2 dice per student group (don’t handout until game time)
- Student Handout (1 per student)
 - Double side the student handout so that the front side is the handout at the end of these instructions and the other side is the first doubles game from “Intro to Doubles and Near Doubles – Bears Handout”



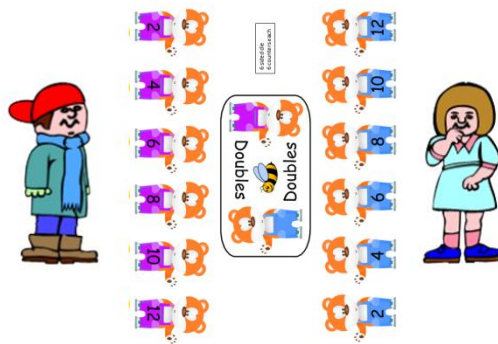
Instructions:

1. Load the Smart Notebook lesson and display the first slide
2. Handout the student handout:



3. Give each student 12 bingo chips.
4. Explain that you have two bears who love bees because they make honey. I’m going to roll the dice to see how many bees each bear will get.
5. Roll dice. Example: 3
6. I rolled a 3 so each bear gets 3 bees.
 - a. On Smartboard, drag 3 bees to each bear.
 - b. Students use bingo chips as their bees and give each bear 3 bees.
7. Say “I gave this bear 3 bees and that bear 3 bees. How many bees did I give out all together? (6) Ask students to
 - a. figure out how many in their head.
 - b. Whisper to a seat partner.
 - c. Say to me.
8. The bears send away all their bees to make some honey. Have students remove the bingo chips quickly.

9. Roll dice again. Repeat process. You always say "I gave this bear # bees and that bear # bees. Altogether, There are ## bees."
10. After you've run through the numbers on the dice several times,
 - a. Roll the die
 - b. Ask students to build it in their minds first
 - c. Ask students to build it to check
 - d. Ask "Did you get right? Great job! Give yourself a pat on the back."
 - e. Ask "Where you close? Good job! It's ok. You're still learning!"
11. Repeat several times.
12. Explain the "Doubles game" on the back.
 - a. Students partner up.
 - b. They only need ONE gameboard.
 - c. Place the gameboard between them so that each has a set of numbers.



- d. Player 1 (boy) rolls a die. Ex. He rolls a 3. He uses a bingo chip to cover (3+3 = 6) 6. He can use the bears in the center to check.
- e. Player 2 (girl) rolls. She rolls a 4. She covers 8 on her side.
- f. They repeat back and forth until someone has all 6 bears covered.
- g. If the boy rolls a 3 again, he loses his turn because he already covered it.

Teacher Suggestion: When you see someone has only one number left (ex. 10), ask them "What number are you hoping to roll? Why? (5 because 5 + 5 is 10).

Journal:

Have students write out: This bear gets 6 bees and that bear gets 6 bees.. Altogether, they have 12 bees.

Then tell them that mathematicians don't like to have to write all of that out.

Teacher writes	Teacher says
6	This bear gets 6 bees
+	And
6	That bear gets 6 bees
=	Altogether, they have
12	12 bees

Repeat the mathematical equation with another example, such as $4 + 4 = 8$.

Have students record all possibilities for equations in their journal.

Increasing complexity:

Give them the 10 sided dice game. This will have them practice up to $10 + 10$. Use a 10 sided dice but make the 0 into 10.

Intro to Doubles + 1

Materials:

- Same materials except you use the “Doubles + 1” slides and gameboards

Instructions:

- This time, when you roll a 3, you give this bear 3 bees and that bear 3 bees but there’s also an extra one in the center on your sheet so let’s count that one. So $3 + 3 + 1$. How much is that?
- Repeat, rolling several times to practice.
- You can play the doubles +1 games.
- Once they are comfortable, you can have them give that extra bee to one of the bears. For example, I rolled a 4. So each bear gets 4 bees but one of them gets an extra one. Who should I give it to? (ex. Students say “blue bear”) So, how many does blue bear have now? (5) So this bear has 5 bees and that bear has 4 bees. How many altogether? (9)
- Repeat with other rolls.

Increasing complexity:

Give them the 10 sided dice game. This will have them practice up to $10 + 10 + 1$. Use a 10 sided dice but make the 0 into 10.

Intro to Doubles -1

Materials:

- Same materials except you use the “Doubles + 1” slides and gameboards

Instructions:

- This time, when you roll a 3, you give this bear 3 bees and that bear 3 bees but one of them flies to the center on your sheet so let’s remove that one. So $3 + 3 - 1$. How much is that?
- Repeat, rolling several times to practice.
- You can play the doubles -1 games.
- Once they are comfortable, you can have them remove that extra bee from one of the bears. For example, I rolled a 4. So each bear gets 4 bees but one of them loses one. Which bear? (ex. Students say “blue bear”) So, how many does blue bear have now? (3) So this bear has 3 bees and that bear has 4 bees. How many altogether? (7)
- Repeat with other rolls.

Increasing complexity:

Give them the 10 sided dice game. This will have them practice up to $10 + 10 - 1$. Use a 10 sided dice but make the 0 into 10.

