Overview

Numbers and statistics are everywhere in the sport of hockey. From height and weight measurements to jersey numbers to goals scored, there is plenty to count. This lesson uses jerseys to represent players on the team to encourage students to count, add, subtract, and think critically.

Materials

- Washington Capitals Handouts: Players on the Ice, Missing Players
- Writing utensils, scratch paper

Essential Question

Why does the number of players on the ice matter in hockey?

Standards

CCSS 1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

CCSS 1.OA.B.4 Understand subtraction as an unknown-addend problem. For example, subtract 10-8 by finding the number that makes 10 when added to 8.

CCSS 1.OA.C.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

Warm Up

1. Project the image above (or a paused video of a hockey game in action).

2. Tell students that there are many numbers involved in hockey. For instance, you could count the number of goals scored or the number of skates. Ask students to come up with all the numbers they can associate with the projected image. If necessary, prompt them with more ideas.

3. Have the students (in pairs or groups) come to the board to count the players on the ice in the image. Encourage the class to come to agreement about how many players are on the ice.

4. Tell the students that they will be figuring out some math problems using the number of players on the ice.
**Activity**

1. Explain that hockey players play the game in small groups, like the groups you sometimes have in class. Today, you will be counting the number of players in different situations.

2. Tell students that successful teams have players that work together and they can help each other during this activity.

3. Distribute the handout *Players on the Ice* and lead a discussion about the information on the handout. What does the handout show? (The handout shows two hockey teams, each consisting of 5 skaters and 1 goalie — or 6 players — on the ice at a time.)

4. Review your addition strategy with the students. If needed, answer the first few questions together, as a class.

5. Give the students enough time to complete the activities on the *Players on the Ice* handout. Then have them compare answers with a partner and come to agreement about the correct answers.

6. Distribute the handout *Missing Players* and lead a discussion about the information on the handout. What does the handout show? (The handout shows player counts during a Power Play — when a player has received a penalty — and overtime.)

7. Give the students enough time to complete the activities on the *Players on the Ice* handout. Then have them compare answers with a partner and come to agreement about the correct answers.

8. Review the answers as a class.

**Assessment**

1. Check the completed handouts: *Players on the Ice* and *Missing Players*.

2. Lead a class discussion about what happens when you ADD or SUBTRACT players from the ice. Revisit the essential question: “Why does the number of players on the ice matter in hockey?”

**Differentiation**

**Support**

- Use purposeful groupings to provide extra social or academic support, as needed
- Provide small cards with the answers pre-printed, so students only need to select the correct card to answer the questions

**Challenge**

- Tell students that most teams have 4 lines (groups) of forwards, 3 pairs of defense, and 2 goalies; have them count and add to determine how many players would be on the full roster

**Extensions**

- Have students discuss which position they would sacrifice if they had to SUBTRACT one player from the team
- Have students debate whether an equal number of players means the game will be evenly matched
COUNTING AND ADDING

How many **players** are on each team? _____

How many **players** are on the ice? _____

How many **skaters** (don’t count the goalie) are on each team? ______

How many **skaters** (don’t count the goalies) are on the ice? _____

How many **goalies** are on each team? ______

How many **goalies** are on the ice? _____
MISSING PLAYERS

PENALTY KILL: When a player breaks a rule, he has to sit in the Penalty Box.

How many skaters (don’t count the goalie) are on the Capitals in this diagram? ______

How many skaters are missing from the Capitals? ______

Complete these equations:  
5 - _____ = 4  
4 + _____ = 5

OVERTIME: When a game is tied at the end, the teams play overtime.

How many skaters (don’t count the goalie) are on the Capitals in this diagram? ______

How many skaters are missing from the Capitals? ______

Complete these equations:  
5 - _____ = 3  
3 + _____ = 5