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| **Subject:** | Science |
| **Title:** | Temperatures in an Arena |
| **Grade Level:** | 5 |
| **Purpose:** | * Students predict where, in a hockey arena, the temperature is the warmest and coolest, and determine if this is a controlled environment or if it has to do with air movement. |
| **Curricular**  **Connections:** | * Predict where, within a given indoor environment, one is likely to find the warmest and coolest temperatures. * Describe patterns of air movement, in indoor environments, that result when one area is warm and another area is cool. |
| **Materials:** | * Create a worksheet entitled: “Temperature in an Arena.” * Technology – SmartBoard, Chrome Books, Ipads etc. |
| **Activity:** | 1. Talk about the “environment” in an arena with specific reference to temperature changes. Draw on their personal experiences – perhaps playing hockey themselves, or watching a hockey game at a local arena. 2. Plan an activity sheet for students to use entitled “Temperatures in an Arena”, to identify warm areas, cool areas, and types of air movement in an arena setting. 3. Use a SmartBoard to project an image of a local arena to help the students sketch. Or, alternatively, provide students with technology – Ipads, Chrome Books, computer lab, for research. 4. Students work in partners to sketch a local arena and discuss different areas in the arena that have varying temperatures. 5. In their sketch, students label the areas of the arena and predict which are hot, warm, cold, and cool in temperature. Have students draw, using arrows, the patterns of air movement that result in the various temperature differences. |
| **Extension:** | Students research hockey equipment, more specifically the fabrics used for clothing, and determine why those fabrics are used. Extend this investigation to temperatures for outdoor hockey. |
| **Assessment:** | * Observation and participation during discussion and group work. * Well-informed completion of “Temperatures in an Arena.” |