

Properties of Water Shuttle Run

Pillar: Active Living

Division I

Grade Level: 2

Core Curriculum Connections: Science

I. Rationale: This activity integrates the shuttle run with a simple science lesson to infuse physical activity and reinforce the properties of water. Children demonstrate their understanding of the different states of water: solid, liquid, and vapor by identifying examples of in which water is changed from one form to another.

II. Activity Objectives:

- Explore and experience locomotor motor movements
- Compare the physical properties of ice, liquid water, and water vapour
- Describe the relationships between the three states of water

III. Curriculum Outcomes: Grade 2 Science

Unit A: Exploring Liquids

General Learner Expectations

Students will:

2–5 Describe some properties of water and other liquids, and recognize the importance of water to living and nonliving things.

5. Demonstrate an understanding that liquid water can be changed to other states:

- recognize that on cooling, liquid water freezes into ice and that on heating, it melts back into liquid water with properties the same as before
- recognize that on heating, liquid water may be changed into steam or water vapor and that this change can be reversed on cooling
- identify examples in which water is changed from one form to another.

IV. Materials: tape measure, signs and pictures describing the properties of water.

V. Procedure:

- After introducing students to the properties of water and discussing them in class, explain the shuttle run to the students. They will run to the written sign (frozen water, liquid water, or water vapor) at the other end of the gym or play area, where there are visual examples of each (snowflake, pool, and steaming pot).
- Split the students into teams. Be sure to explain that they can ask their teammates for help in determining which sign goes with the particular example of the property of water.

- Demonstrate the shuttle run prior to having students participate in the activity.
- After the students have correctly placed the words with the pictures, briefly review with them the various signs ensuring they have put them in the correct place.

VI. Source:

- lesson idea adapted from [PE Central](#).