

Domino Effect

Physical Education



At School Activities



Small Space Activities

7-12

Grade Level

Equipment	One ball per student, 5-6 objects that can be knocked over per pair (e.g., empty soda cans, empty water bottles, bowling pins, etc.)
Learning Outcome	Demonstrate problem-solving skills and identify the appropriate force and pathway to underhand roll a ball for accuracy.
COVID-19 Safety Precautions	Remind students to keep a safe physical distance from each other. Ask students to use their own ball throughout the activity. Clean or sanitize the equipment before and after the activity.

Flipped Classroom Strategy (Optional)

A flipped classroom is an instructional model where direct instruction is delivered to students outside of and before instructional time. Students are introduced to content that supports the introduction, comprehension, and recall of content and then instructional time is utilized to apply, analyze, synthesize, or evaluate content.

Before implementing this activity during instructional time, create a video or written instructions to share with students providing an overview of considerations for underhand rolling for accuracy to knock over target objects. Share with students the importance of considering force, pathway, hand-eye coordination, and relation to other target objects. Encourage students to utilize a safe space and equipment (e.g., pair of socks and plastic cups) available to them and practice underhand rolling for accuracy.



Activity Description

If utilizing a flipped classroom approach, remind students to apply the movements they learned or reviewed in the video or document. If not utilizing a flipped classroom approach, review the concept of bowling and dominos, and how the two will be combined to succeed at this activity. Encourage students to find a safe place away from others to practice required skills and movements.

Divide students into pairs and provide each pair with a ball and at least five target objects (e.g. empty soda cans, empty water bottles, bowling pins, etc.).

Invite pairs to arrange the target objects in a way that if they underhand roll the ball to knock over the first target, create a domino effect and knock over the other targets. Encourage students to arrange their targets in various ways to consider which ways best facilitates success and which ways are the most difficult. Share with students that in order to be successful the first target must be knocked down by the force of the ball and the rest of the targets must be knocked down as a result of a domino effect. This means that to be successful targets cannot all be knocked down from the force of the ball hitting them.

Consider challenging students by asking all pairs to set their target objects up in the same way and trying to be the first pair to successfully create a domino effect to knock over their target objects. Continue this process and change the way the target objects are set up each round.

Physical Education Competencies



MOVE

Develop psychomotor skills, tactics, and strategies that facilitate a variety of physical activities across diverse environments.



THINK

Develop cognitive skills and strategies for a variety of movement contexts that facilitate critical thinking, decision-making, and problem solving.



FEEL

Develop affective skills and strategies that facilitate healthy and safe relationships with themselves, with others, and with their environment.



ACT

Practice behaviour skills and strategies that facilitate movement competence and confidence.



Reflection Questions

Reflection is important to support learning during physical education. Consider asking students the reflection questions below and discuss the answers together.

- *What was the easiest set-up for you and your partner? Hardest?*
- *How could you modify the activity to make it more challenging?*



Inclusion Considerations

Modifications can be made to a variety of activity components to ensure inclusion. As you plan activities, consider how everyone can be involved and how to modify or adapt the activities to ensure the full inclusion of all. The STEP framework provides modifications to the following activity components — space, task, equipment, and people.

S Space	T Task	E Equipment	P People
Divide students into different areas to complete the activity where they can still be supervised (e.g. half of the students in the hallway and half in the classroom).	Students use one target object and try to knock it over by underhand rolling the ball.	Students sit in a chair to roll the ball towards the targets.	Provide verbal cues to support students with where to aim the ball.

Observing Learning Outcomes

Consider the following when observing student learning.

- Is the student able to successfully identify how to adjust force and pathway in order to be successful?
- Is the student able to successfully demonstrate problem-solving skills to create different set-ups with their target objects?

Connecting to PHE At Home Learning

The following PHE At Home Learning activity can be utilized by students at home or modified for use during instructional time in order to extend learning.

[Flip the Yard](#)