



Action Schools! BC



Instructional Example

# Healthy Bones

## Subject: Physical and Health Education (PHE) Grade Kindergarten

### OVERVIEW

The Government of Canada (2016) states that "children and youth aged 5 to 17 should get 60 minutes a day of medium to intense physical activity. Currently only 9% of this target group meets the recommendation." Schools can play an instrumental role in fostering mental well-being through increasing students' physical literacy (PHE Canada, 2016; Pritchard, 2016). This instructional example is designed to engage kindergarten students to be physically active through music, which will incorporate mathematical concepts (e.g., counting numbers of movement/step). This fun strategy will help students to strengthen their spatial cognition, hand-eye coordination, and arithmetic understanding during the music-chair strategy.

### BIG IDEAS

- Knowing about our bodies and making healthy choices helps us look after ourselves (e.g., helping students to develop muscles and build strong bones through active involvement in PA).
- Daily physical activity helps us develop movement skills (e.g., increasing students' coordination through hopscotch or skipping rope activity) and physical literacy, and is an important part of healthy living.

### CORE COMPETENCIES

#### Communication (C)

- Connect and engage with others (to share and develop ideas).
  - Students engage in informal and structured conversations where they listen, contribute, develop understanding and relationships, learn to consider diverse perspectives, and build consensus (e.g., teaching students to create a shared understanding about the importance of movements through physical activity).

## Thinking (CT)

- Novelty and value
  - Students get creative ideas that are both novel and have value. There are degrees of novelty—an idea may be new to that student or it may be new to their peers; it may be novel for their age group, or it may be novel to a larger community (e.g., inviting students to learn about movements/steps through using pedometers during a musical-chair physical activity and introducing students to skipping rope or hopscotch game, which aims to increase their interests in trying out different forms of physical activity).

## Personal and Social (PS)

- Well-being
  - Students who are personally aware and responsible recognize how their decisions and actions affect their mental, physical, emotional, social, cognitive, and spiritual wellness, and take increasing responsibility for caring for themselves (e.g., helping students to learn about how movements can energize their body and develop strong bones through physical).

## LEARNING STANDARDS

### PHE Curricular Competencies (What Students Will Do)

#### ***Physical Literacy***

- Develop and demonstrate a variety of fundamental movement skills in a variety of physical activities and environments (e.g., helping students to develop hopping and jumping skills through interactive physical activity).

#### ***Mental Well-Being***

- Identify and describe practices that promote mental well-being (e.g., engaging students to be physically active is key. For example, Liu, Wu, and Ming (2015) found that physical activity has shown to be a key factor in explaining children's and adolescents' increased self-concept and self-worth).

### PHE Content (What Students Will Know)

- Proper technique for fundamental movement skills, including non-locomotor (e.g., balancing and bending), locomotor (e.g., jumping and hopping), and manipulative skills.
- Practices that promote health and well-being (e.g., engaging students to participate in different forms of physical activity and having them share with their parents).

## COMPREHENSIVE SCHOOL HEALTH PILLARS

### Relationships and Environments:

- The quality of the relationships among and between staff and students in the school (e.g., showing students about non-locomotor and locomotor movements during a teacher-led activity, which aims to increase participation in physical activity).

### Teaching and Learning:

- Knowledge, understanding, and skills for students to improve their health and well-being and enhance their learning outcomes (e.g., inviting students to try out different non-locomotor and locomotor movements through fun, interactive physical activity such as skipping rope or hopscotch).

### Community Partnerships:

- Invite students to share their learned non-locomotor and locomotor movements with their parents, and encourage parents to practice with their children.

### School Policies:

- Adopt PA as a school-wide practice that encourages students' participation in non-locomotor and locomotor movements during class activities.

## CROSS-CURRICULAR CONNECTIONS

### Applied Design, Skills, and Technologies

- Sharing
  - Use materials, tools, and technologies in a safe manner in both physical and digital environments by guiding students how to create simple hopscotch patterns or use skipping ropes during a teacher-led physical activity.

### Science Mathematics

- Reasoning and analyzing
  - Model mathematics in contextualized experiences by having the class add up numbers and use the number to perform a musical-chair physical activity.

## FIRST PEOPLES PRINCIPLES OF LEARNING FOR ALL STUDENTS

- Learning requires exploration of one's identity (e.g., experiential learning has a particular value in traditional First Peoples cultures. Engaging students in experiential learning such as participation in skipping ropes or hopscotch allows students to think about their own physical activity goals and sense of being).
- Learning involves recognizing the consequences of one's actions (e.g., First Peoples culture emphasizes a strong commitment to learner-centredness, supporting students in developing their own personal learning, while encouraging a sense of personal responsibility for learning. The hallmark of this lesson is to encourage students to be physically active and support them in trying different forms of physical activity as a way to develop healthy bones).

## TIMEFRAME

- 30 minutes

## MATERIALS AND TECHNOLOGY

- A gym or a big classroom space (with plenty room for movement)
- Chairs
- A portable board and markers
- Painting tape (green colour) and chalk
- Blank papers and pens
- A CD/DVD player/iPod with speakers
- A piece of music (of teachers' choice)

## TEACHER TIPS

- Teachers are encouraged to use different physical activities.
- Teachers need to review the safety tips when inviting students to participate in the musical-chair activity.
- Teachers need to explain the safety rules for the music-chair physical activity.
  - Ensure proper footwear and tied laces.
  - Do not run fast or push classmates in front of each other when going around.

## STRATEGY

- Begin by having the chairs arranged in a big circle. Have the students pass a talking feather around the circle as they think about and share how they are currently physically active. Teacher can prompt students by giving the following examples: walking to school; running around; playing tag during recess, dance lessons, etc.
- The second time around the circle have the students think about and share why it is good for our bodies to be physically active. Physical activity includes how we use our muscles to create bodily movements. Ideas can include:
  - Movements help improve our hearts and lungs
  - Movements help develop healthy bones
  - Movements help us keep healthy weight
- If the students do not come up with the concept, share that physical activity helps us feel good about ourselves. Ask students to raise their hand if they feel good about themselves after playing a sport or finishing an exercise).
- Explain that they are going to participate in some activities that are good for our bones and muscles.
- Introduce the *Skipping Rope* learning activity (available from: [www.actionschoolsbc.ca/resources](http://www.actionschoolsbc.ca/resources)).
  - Skipping rope is a fun way to practice jumping and landing in different ways.
  - Benefits of skipping rope can include helping kindergarten students to build strong bones, develop strong muscles, and improve balance.
- Introduce the *Hopscotch* learning activity (available from: [www.actionschoolsbc.ca/resources](http://www.actionschoolsbc.ca/resources)).
  - The hopscotch learning activity is a creative, artistic means to help strengthen our bones. For example, teachers can ask students to create simple hopscotch patterns (e.g., using painting tapes/chalks to create lines, squares, circles, etc.), so that different students can hop and jump or travel up and down hopscotch patterns.
  - Benefits of the hopscotch game include helping kindergarten students to develop coordination and balance.
  - Have students share what they have learned with parents about healthy bones, skipping and hopscotch, and encourage them to practice these at home.

## ASSESSMENT

- Active Participation
  - Demonstrate a willingness to participate during the lesson and PA activity.

## ADAPTIONS/MODIFICATIONS

- Record how many steps the class as a whole has made, and post the recorded class steps on a bulletin board in the hall, which aims to motivate other grades to take a step to be physically active.

## RESOURCES/REFERENCES

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