Tennessee Physical Activity Handbook Pre K - 12



Healthy Students Healthy Schools Healthy Tennessee







Tennessee Physical Activity Handbook Pre K - 12

Chapter No. 1001 PUBLIC ACTS, 2006

In accordance with Section 2 of this bill, as amended, it shall be the duty of each local education agency to integrate a minimum of ninety (90) minutes of physical activity per week into the instructional school day for elementary and secondary school students. Opportunities to engage in physical activity may include walking, jumping rope, playing volleyball, or other forms of physical activities that promote fitness and well-being.

http://tennessee.gov/education/schoolhealth/physed/doc/pubchpt1001CSHExpan.pdf

This law was created for the health of children.

"Every effort should be made to encourage schools to require daily physical education in each grade and to promote physical activities that can be enjoyed throughout life." (USDHHS)

2007

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www.tennessee.gov/education/schoolhealth

Several web sites are listed in this document. These sites are listed as service only to identify potentially useful ideas for teaching and learning. Tennessee Department of Education is not responsible for maintaining these external web sites, nor does the listing of these sites constitute or imply endorsement of their content. The responsibility to evaluate these sites rests with the user. Please note web site addresses were confirmed as accurate at the time of publication but are subject to change.

The primary audience for this handbook is Tennessee educators.

Every effort has been made to provide proper acknowledgement of original sources. If cases are identified where this has not been done, please notify Tennessee Department of Education so appropriate corrective action can be taken.

Acknowledgements

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What if your students have the top test scores but only live to be age 30 due to poor health? Have we really fully educated students without providing health education and physical activity?

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Section 1: Introduction

What is Daily Physical Activity?

"Physical activity in an educational setting is defined as a behavior consisting of bodily movement that requires energy expenditure above the normal physiological (muscular, cardiorespiratory) requirements of a typical school day" (TAHPERD 2007).

Tennessee's Physical Activity Law

"It is the duty of each local education agency to integrate a minimum of ninety (90) minutes of physical activity per week into the instructional school day for elementary and secondary school students. Opportunities to engage in physical activity may include walking, jumping rope, playing volleyball, or other physical activities that promote fitness and well-being" (TCA-PC 1001).

Tennessee Association for Health, Physical Education, Recreation and Dance (TAHPERD) Implementation Considerations

- Physical activity in an educational setting includes regular instruction in physical education, co-curricular activities and active recess.
- Physical education classes should be offered with moderate to vigorous physical activity being an integral part of the class.
- Co-curricular activities include physical activity integrated into areas of the school program—classroom, gymnasium and/or outdoor activity spaces.



For more information, visit National Association for Sport and Physical Education (NASPE) at www.aahperd.org/NASPE/difference.html.

For more information, visit Tennessee Association for Health, Physical Education, Recreation, and Dance (TAHPERD) at www.tahperd.us/.

Why is Daily Physical Activity So Important?

Coordinated School Helath

Based on Coordinated School Health pilot site data and Tennessee Department of Health data, 43% of all 18,500 students screened are either at-risk for overweight or are overweight. Overweight adolescents have a 70% chance of becoming overweight or obese adults. The 2007 Tennessee Youth Risk Behavior Survey (TN YRBS) reported 36.7% of high school students watched TV for at least three hours or more a day on an average school day compared to 37% nationally (2005 National YRBS Survey). In addition, 60.8% of high school students reported in an average week they did not attend any physical education classes (2007 Tennessee YRBS survey).

Quick Facts about Obesity and Cognition

- The first grade class of 2007-2008 is the first generation predicted to have a life expectancy less of than that of their parents.
- Obese children are at greater risk of chronic stress which has long term effects on learning & memory.
- Obese children have significant deficits in memory, learning, & vocabulary due to sleep apnea.
- Obese children are at a greater risk for learned helplessness, which can cause low self-esteem & a defeatist attitude towards learning & physical activity.

Tennessee Students and Physical Activity

"Schools should implement physical education programs that emphasize enjoyable participation in physical activity and that help students develop the knowledge, attitudes, motor skills, behavioral skills, and confidence needed to adopt and maintain physically active lifestyles".

Publication March 7, 2006 DHHS

Quick Facts about Tennessee Students and Physical Activity

YRBS Results

- In 2007, 36.7% of students watched three or more hours per day of TV on average school day compared to 41.4% in 2005.
- In 2007, 39.2% of students attended physical education (PE) classes on one or more days in an average week when they were in school compared to 37.2% in 2005.

• In 2007, 29.1% of students attended physical education (PE) classes daily in an average week when they were in school compared to 29.7% in 2005.

Tennessee School Health Data

Physical Education and Physical Activity

Coordinated School Health Annual Data Report 2006

- The average amount of time students spend per week in planned physical education was 79 minutes in 2006. Progress was made in the amount of physical activity at CSH sites from 2003 to 2006.
- The mile run/walk data reveals that Tennessee CSH students do not perform well when compared to the President's Council of Fitness Standards. The percentage of students who performed at or below one standard deviation below their peers, increased with each advancing grade level for all sites.
- CSH pilot site locations report a composite ratio of 1:395 certified physical education teachers during 2006 CSH. The recommended professional to student ratio for physical education is 1:500.

Tennessee School Health Profile 2006

- Among schools that require physical education, 54% require 2 or more physical education courses.
 - Among schools that require a physical education course, 57% of students can not be exempted from taking a required physical education course for one grading period or longer.
 - Among schools that require a health education course, 57% taught
 13 physical activity topics.
 - Among schools that require a health education course, 75% taught about developing an individualized physical activity plan.
- In 51% of the schools, the lead health education teacher received staff development during the past 2 years on physical activity and fitness.
- 60% of schools offer opportunities for students to participate in intramural activities or physical activity clubs.
 - Among schools that offer intramural activities or physical activity clubs, 12% provide transportation home for students who participate in after-school intramural activities or physical activity clubs.

Section 2: Teachers Planning for Implementation

Student Safety¹

Developing habits and routines early in the school year and reinforcing them throughout the year can help reduce the risk of injury. Consider the following when planning physical activities:

- Include age-appropriate activities in program preparations.
- Plan and continually reinforce safe practices.
- Use logical teaching progressions.
- Use common sense observation.
- Maintain a safe environment.

All activities, regardless of the complexity or simplicity of the action, have an inherent level of risk. Such factors as skill level, previous experience of the students and teacher, weather conditions, facilities and available equipment may all affect the level of risk of any activity. Schools should be familiar with and follow safety policy as defined by their school authority.

When considering the safety of your students, ask yourself²:

- ✓ Is the activity suitable to the age and mental and physical condition of the participants?
- ✓ Have the participants been progressively taught and coached to perform the activity properly and to avoid the dangers inherent in the activity?
- ✓ Is the equipment adequate and suitably arranged?
- ✓ Is the activity being supervised properly for the inherent risk that is involved?

¹ Reproduced with permission from Alberta Education, *Daily Physical Activity: A Handbook for Grades 1-9 Schools* (Edmonton, AB: Alberta Education, 2006), pp.14.

² Reproduced with permission from Alberta Education, *Daily Physical Activity: A Handbook for Grades 1-9 Schools* (Edmonton, AB: Alberta Education, 2006), pp.14.

Setting Class Expectations³

At the beginning of the year, a list of classroom rules for physical activities can be generated by teachers and students, then posted and reviewed on a regular basis. These may include expectations related to fair play, respectful changing room behavior and attitudes, treatment of equipment and facilities and safety considerations. Reinforcement of the established rules is important for maintaining a positive and safe environment.

Physical Activity and Recess

Recess in Elementary Schools

"Recess, while separate and distinct from physical education, is an essential component of the total educational experience for elementary aged children" (NASPE July 2001).

Unstructured Time in Middle and High School

"The Middle and Secondary School Physical Education Council (MASSPEC) of the American Alliance for Health, Physical Education, Recreation and Dance takes the position that unstructured time or recess is an essential component of education and that middle school children must have the opportunity to engage in regular, daily, unstructured periods of physical activity and play with their peers" (AAHPERD October 2002).

Linking Cross-curricular Outcomes⁴

The potential benefits of cross-curricular linking include:

- Enhancing and enriching students' learning and literacy skills
- Giving more meaning to what students learn
- Helping to make concepts more relevant and stimulating
- Helping to meet the different learning styles of children

³ Reproduced with permission from Alberta Education, *Daily Physical Activity: A Handbook for Grades 1-9 Schools* (Edmonton, AB: Alberta Education, 2006), pp.14.

⁴ Reproduced with permission from Alberta Education, *Daily Physical Activity: A Handbook for Grades 1-9 Schools* (Edmonton, AB: Alberta Education, 2006), pp.19-21.

- Increasing information retention
- Enhancing the possibility of success for students
- Facilitating the connections between information, experiences and skills in a child's daily life
- Adding an element of fun to your programs

Cross-curricular Approaches to Daily Physical Activity Delivery

Below are two approaches how daily physical activity can be delivered in conjunction with various subject areas.

Approach One: Cross-curricular Linking

Start with specific subject area outcomes and identify a theme, skill or concept that can be linked to a physical activity. For example, story starters can be used to address story writing outcomes in English language arts:

Story Starters

- 1. Give each student a piece of paper and choose a theme related to a topic covered recently in class.
- 2. Have the students begin writing a story (the first few lines).
- 3. After one minute, stop the student and have them crimple up their paper and throw it to the other side of the room. Students then move around the room, using a different locomotor movement each time, to find a new piece of paper.
- 4. On a signal, students pick up a paper that is close to them and read the story starter. They continue writing the story for the next minute.
- 5. Continue this for several rounds, then have the students share their stories in groups.

This activity can also be linked with other subjects, such as:

<u>Mathematics</u>: Instead of stories, have the students start a number pattern and continue adding to the patterns of the other students. Have the students create a song with actions about number operations.

<u>Science</u>: Have the students write stories about the life cycle of a plant, frog or butterfly; e.g., A year in the life of They could write a story that takes place in a science-related environment—tour of a factory that uses simple machines, a forest ecosystem, wetland ecosystem, outer space, etc.

<u>Social Studies</u>: Have the students write stories as witness to an historic event or the meeting of a historical figure or a person from another culture of the past or present.

General ideas for cross-curricular linking include:

Language Arts:

- Write and perform poetry, songs, rhymes, and role-plays as part of the physical activity.
- Review and practice punctuation, spelling, writing, verb conjugation, idioms, analogies, metaphors and similes, parts of speech and other skills and knowledge as parts of clues, trivia questions and challenges within the physical activity

Mathematics:

- Use equipment from physical activities as a manipulative to enhance the formation of sound, transferable mathematical concepts.
- Review and practice mathematics content, such as estimation and mental mathematics, counting, arithmetic operations, constructing/extending patterns and summarizing patterns as parts of clues, trivia questions and challenges within the physical activity.

Science:

- Explore and observe the environment during outdoor activities.
- Review and practice science content, such as buoyancy, magnetism, plant growth, ecosystems, chemistry and electricity as parts of clues, trivia questions and challenges within the physical activity.

Social Studies:

Use mapping skills in orienteering and obstacle course activities.

 Review and practice social studies content, such as historic dates and people, geography, cultural belief and values, and/or rights and responsibilities as parts of clues, trivia questions and challenges within the physical activity.

Health:

- Draw awareness to the physical affects of activity before, during, and after the activity, such as increased heart rate.
- Review and practice health content, such as nutrition as parts of clues, trivia questions and challenges within physical activity.

Approach Two: General Linking to Learning Activities

Start by thinking of how subject area curricular outcomes can be linked in general ways to physical activities. For example, links can be made to cross-curricular outcomes in the following ways:

<u>Language Arts</u>:

 Respond to physical activity experiences in journal writing, connecting to prior knowledge and personal experiences.

Mathematics:

- Develop and implement a plan for the collection, organization, display and analysis of data based on student participation and accomplishments.
- Solve problems involving perimeter, area, surface area, volume and angle measurement related to the space, playing area and equipment used.
- Explore and classify 3-D objects and 2-D shapes, such as equipment and playing areas used, according to their properties.

Science:

 Use equipment from physical activities to illustrate and explore scientific concepts, such as simple machines, aerodynamics, building objects, and structures and forces.

Social Studies:

 Encourage students working in groups to value the diversity, respect the dignity and support the equality of fellow students. • Encourage students participating in community-based physical activities to gain an evolving sense of identity and a sense of belonging to their communities.

Health:

- Describe the health benefits of physical activity and explore the connections among physical activity and explore the connections among physical activity, emotional wellness and social wellness.
- Use knowledge of a healthy, active lifestyle to promote and encourage family, peer and community involvement.
- Develop personal relationships and encourage inclusion of all students.
- Identify the steps of the goal-setting process, and apply these components to short-term and long-term goals.

Involving Parents/Guardians and the Community⁵

It is important to keep parents/guardians and others in the community informed about class daily physical activity events and to encourage them to participate. Some ideas for informing parents and the community include:

- Create a newsletter that defines and explains daily physical activity. Have parents/guardians/community members submit articles about how they are getting active to the school newsletter. Inform parents/guardians/community members monthly of new physical activities they can try at home.
- Invite parents/guardians/community members to an information evening with local events to explain what DPA is, what the school will be doing and how they can help their children at home. Encourage parents/guardians to model daily physical activity for their children and reinforce why it is important for everyone.

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⁵ Reproduced with permission from Alberta Education, *Daily Physical Activity: A Handbook for Grades 1-9 Schools* (Edmonton, AB: Alberta Education, 2006), pp.21-26.

Invite Parents/Guardians to Take an Active Role!

- Ask for volunteers to host walk to school events, bike clubs and noon hour fitness activities.
- × Invite parents/guardians to host a winter carnival with activities such as skating, snowshoeing and cross-country skiing.
- × Have parents/guardians organize a kite-flying event in which families come to school, make kites and then fly them.
- * Ask parents to volunteer for track and field, triathlon or play day circuit events.
- Host parent-student or guardian-student activity night with beanbag games, beach volleyball or other low-organization activities.
- * Ask parents/guardians to share their expertise with students during class time, an evening event or a Saturday activity.
- × Host a school assembly event in which parents/guardians can lead students in activities of interest, such as bowling, biking or walking.

Ideas for Daily Physical Activity at Home

Set the Tone!

- Provide opportunities for your child to try new activities and have fun doing them.
- Reinforce the importance of physical activity through discussions and activities at home.
- Balance structured sports and activities with unstructured play opportunities.
- Praise your child when they participate in physical activities

Active Chores and Household Help

- Ask your child to help with household activities that require physical activity, such as mowing, raking, sweeping, vacuuming, gardening, washing the car, walking the dog or washing windows.
- Limit the time your child spends in front of the television or computer screen.





- Encourage your child to go outside and play instead.
- Encourage your child to help a neighbor with his/her chores.
- Give your child their own garden space to prepare, plant and tend.

Organized Activities

- Participate with your child in physical activities, such as skiing, snow boarding, biking, walking, running and badminton.
- Encourage your child to take public lessons to teach them the basics of new activities, such as golf, badminton, rock climbing or dance.
- Encourage your child to participate in active after school sporting events or clubs.
- Plan family outings that involve activities like hiking, cycling, skating or skiing.
- Make vacation plans that include physical activities, such as swimming, biking, hiking, golf or white-water rafting.

Daily Fun

- Take time to play catch, jump rope or hopscotch with your child.
- · Take your child on a bike ride.
- Go tobogganing, skating, swimming or inline skating with your child.
- Plan routes for your child to walk or bike to the neighborhood store, library, school or a friend's house and then encourage them to walk rather than you driving them.
- Make sure your child has access to equipment, such as bikes, balls, trampolines and swimming pools.
- Encourage caregivers (e.g., grandparents, babysitters) to include physical activities in their daily routines.





Activity Events and Challenges

- Include physical activities during birthday parties, such as skating, swimming, rock climbing or golfing.
- Include opportunities for physical activities, such as bocce, croquet or baseball at family gatherings.
- Participate in local charity fun walks/runs with the whole family.
- Turn off the television and do activities with your family, such as walking, biking or gardening.
- Record all physical activity done by your family and encourage them to increase their activity levels every week or month.



Ideas for Community Participation in Daily Physical Activity

Volunteers

- · Organize a walking school bus (walk to school program).
- · Build or maintain an outdoor ice rink.
- Advocate for increased child safety in neighborhoods, playgrounds, parks and on the roads.
- · Work on a "Communities in Bloom" campaign.
- Help students prepare a "Fitness Tip of the Day" for the school public announcement system, local radio stations and newspapers.
- · Volunteer to lead hikes in nearby nature areas and parks.
- · Volunteer to supervise activities at the local playground.

Participants

- Join school-organized activities, such as fitness, learn-to-run, bird watching and walk-to-school clubs.
- Participate in events at school, such as bike rodeos and play days.
- Participate in community physical activity challenges and encourage others in the community to get involved; e.g., Earth Day.
- Host charity walks or runs and advertise in school newsletters.





Sponsors

- Sponsor a particular event, for example by providing pedometers for a walking challenge or prizes for a bike rodeo.
- Build additional trails and bike paths to provide more opportunities for physical activity. Mark and maintain bike and walking paths in the community that schools can use.
- Provide bike racks for students to lock up their bikes.
- Donate items to be used as prizes for students who successfully meet a physical activity challenge.

Guest Speakers/Leaders

- Be a sports coach or leader of physical activities at the school or community level.
- Provide expertise in a particular activity to students and staff (e.g., gardening, bird watching or lawn bowling).
- Present your efforts to stay physically active at the school's activity fair.
- Demonstrate games from your culture at the school in International Language and Culture classes or at a multicultural fair.

Community Guest Speakers for Your School

Guest speakers are an engaging and inspiring way to get students and others in the school community interested in physical activity. Invite guest speakers to the classroom, an assembly or an open house and prepare a display of physical activity organizations and resources in the local community.

- Regional Health Authority
- Various Clubs
- Local Health Community Members
- Local Sports Participants
- Local Physical Activity Experts and Recreation Organizations
- Local Media Personalities and Celebrities





Community Activity Map

It is important for students to see and recognize opportunities for physical activity that exist in their school communities. One way to clearly illustrate these opportunities is by creating a community activity map.

Photocopy, draw or print a map of your community and mark various community facilities that offer physical activities for school and student access. Also determine the best routes for pedestrians and cyclists to take to school from the nearby neighborhoods and mark them on the map.

Include places on your map, such as:

aerobics facilities ice rinks (indoor soccer fields badminton clubs and outdoor) (indoor and · baseball/softball · martial arts outdoor)

fields studios · sports facilities bike courses · parks (hiking · swimming pools · tennis courts trails, playground bowling equipment, fields) (indoor & · community

· racquetball centers outdoor) · volleyball · dance studios courts golf courses (outdoor or · rock climbing

golf driving · skateboard parks indoor)

· walking/running · ski hills (snow ranges tracks

boarding, skiing, gymnastic

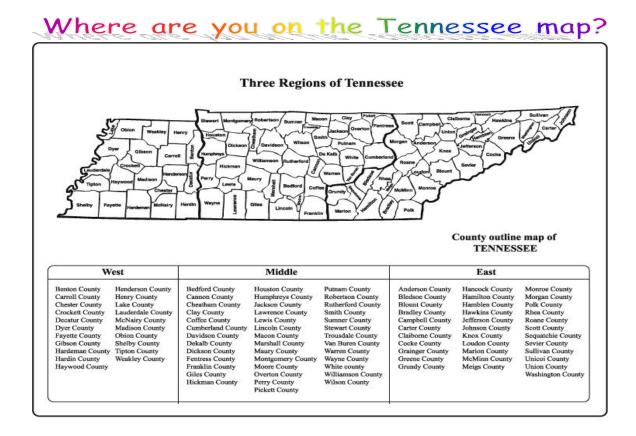
tobogganing) · weight rooms facilities yoga studios

When mapping the best routes for students to take on their way to school, consider:

- where most students live who are walking or riding their bikes to
- volume and speed of traffic on surrounding streets
- whether or not there are sidewalks and their condition
- pedestrian-crossing devices
- number and position of safety patrollers, if any
- types of buildings around the school
- location of public spaces near the school; e.g., parks, community centers

- Neighborhood Watch communities
- lighting on the streets, parking lots and other spaces near the school
- maintenance of walkways; e.g., snow or ice removal, muddy areas

Visit Tennessee's Department of Transportation for individual city and county maps. www.tdot.state.tn.us/maps.htm



Active Living for Staff⁶

Promoting Staff Health and Wellness is an essential component in the CSH model based on the frequently documented effect of adult role modeling influencing behavioral choices exhibited by students. Role modeling by adult teachers, staff, and other school personnel has been shown to influence youth behaviors⁷. The "Do as I say not as I do" mentality has a negating

⁶ Tennessee Coordinated School Health Report 2006

⁷ Atkins, L.A., Oman, R., Vesely, S.K., Aspy, C.B., McLeroy, K. Adolescent tobacco use: the protective effects of developmental assets. American Journal of Health Promotion. 2002;5(16):189.

effect on the messages of appropriate healthy living and lifestyle decisions. The old adage "Do as I say, not as I do" has never worked and certainly is counter productive in the positive influence of youth attitudes and behavior. A major component of CSH is the premise that teachers and staff impact students by example. School-site health promotion for school employees is an essential element of Coordinated School Health.

As the CSH wellness programs continue more faculty and staff participation should become evident. Role modeling is a known factor affecting adolescent health behaviors⁸.

CSH pilot sites reported that 38% of their faculty and staff were overweight in 2006. These findings are slightly lower than Tennessee norms, which estimate that 62% of adult Tennesseans are overweight. The four year CSH evaluation period has revealed that the trend for staff Body Mass Index (BMI) has improved over the past two years.

The percentage of faculty and staff who participate in wellness programs is a reflection of the commitment to a healthier school environment and the CSH model.

Physical activity has been found to contribute to:

- · better health and improved fitness
- better posture and balance
- · better self-esteem
- · weight control
- · stronger muscles and bones
- · feeling more energetic
- · relaxation and reduced stress
- · continued independent living later in life

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⁸ Atkins, L.A., Oman, R., Vesely, S.K., Aspy, C.B., McLeroy, K. Adolescent tobacco use: the protective effects of developmental assets. *American Journal of Health Promotion*. 2002;5(16):189.

Walking Ideas and Information9

One on the easiest ways to get physically active is walking. Daily walking can make a significant contribution to the 30 minutes of exercise needed as part of a healthy lifestyle.

The benefits of walking include:

- · improved health and well-being
- improving your fitness level
- strengthened bones and muscles
- the promotion of good posture
- the reduction in stress and tension
- strengthened heart and lungs
- · increased energy levels and reduction in fatigue
- an opportunity to meet friends and socialize
- maintaining and achieving a healthy body weight
- · improving your outlook on life

Walking is an easy way to add physical activity to a daily schedule, as it:

- does not require special clothes
- · does not need supervision or training
- does not require a gym membership
- · can be done alone or with friends
- · is inexpensive
- is convenient
- · can be done at almost any age

To incorporate walking into your daily routine:

- · take a walk once a day at lunch or after supper
- reduce time in front of the television or computer
- · walk short distances to the store, coffee shop or a friend's house
- · find out about walking trails in your neighborhood and use them

⁹ Reproduced with permission from Alberta Education, *Daily Physical Activity: A Handbook for Grades 1-9 Schools* (Edmonton, AB: Alberta Education, 2006), pp. 29-31.

Tips for Walking

Planning a Walk

- 1. Determine the safest route to walk.
- 2. Dress appropriately.
- 3. Consider whether or not water should be brought.
- 4. Invite a friend or family member!

Drinking Water

Staying hydrated is vital to keeping body temperature and electrolyte levels balanced. When dehydrated, fatigue, headaches, nausea and dizziness may be experienced. Heat illness and heat stroke may also result.

How much water should a person drink?

Divide a person's weight in half and that is how many ounces of water to drink per day to be adequately hydrated. An athlete with a high level of muscle mass should drink even more, about two-thirds of their body weight in ounces per day.

Drink about 8 ounces every 15 minutes while exercising. Drink smaller amounts (4 ounces) at a time to keep from getting that uncomfortable sloshing feeling.

Tips for Faster Walking

- 1. Stand tall and do not slouch the shoulders or lean forward from the waist or have an exaggerated arch in your back.
 - CUE: Keep eyes on the horizon.
- 2. Focus on quicker, not longer steps. Strides naturally become longer as the walk gets faster, so concentrate on taking faster steps.
 - CUE: Count how many steps are taken in a minute, trying to take over 135 steps per minute.
- 3. Bend at the elbow. Bend the elbows at a right angle, making quick, compact arm swings.
 - CUE: Hands should trace an arc from waistband on the back swing, to chest height on the up swing.
- 4. Push off the toes. Consciously push off the toes and generate as much boost as possible at the end of each step.
 - CUE: Walk as if showing the bottom of the shoe on every step.

Section 3

Physical Activities

Introduction¹⁰

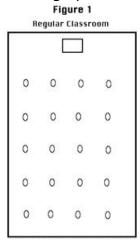
Best Practices for Physical Activity in the Classroom

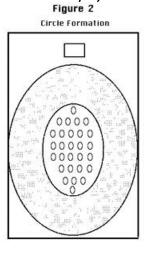
- 1. Provide a positive and active learning environment for all students.
- 2. Set boundaries from walls, furniture, and each other for safe movement.
- 3. Establish expectations and specific procedures.
- 4. Create a signal that refocuses students quickly. This will increase time on task and retention skills.

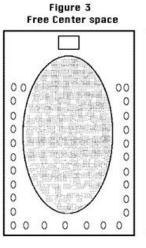
Suggested Signals:

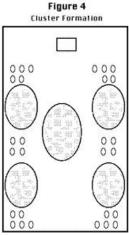
- a. Hand clap sequences
- b. Music
- c. Bell
- d. Timer
- 5. Encourage students to drink water during class. Research shows that attention and learning are positively affected when the brain remains hydrated.
- 6. Teachers and students should be prepared for moderate physical activity daily.

The following diagrams offer suggestions for how student can quickly rearrange your classroom for physical activity.









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¹⁰ TAHPERD Physical Activity Taskforce 2007

Class or Small Space 11

★ Aerobic Ripple (K-12)

Equipment: music and each row will perform an exercise in sequence, similar to singing a round.

- 1. Display a list of different exercises for all to see on the wall or board.
- 2. Divide the students into groups and provide each with a group number. All students will begin by marching in place.
- 3. Group number one will choose and perform a new exercise to begin every ten seconds.
- 4. A row of students will begin with one exercise. All doing one exercise.
- 5. The next row will begin the first exercise when the first row completes.
- 6. When the first row completes the first exercise and begins the second exercise the second.
- 7. Row 1 begins one exercise.

Language Arts Focus (K-6)

Equipment: index cards with the letters of the alphabet written on them

- 1. Have students stand in an open area of the classroom. Move around the area, giving each student a letter of the alphabet. Letters can be written on index-sized cards.
- 2. As each student receives their letter, they squat down.
- 3. Instruct students to listen carefully as you will be calling out different letters of the alphabet. When the letter on their index card (or a word that begins with their letter) is called, they "pop up" and then quickly squat or sit down again.
- 4. If the word *alphabet* is called, everyone pops up.
- 5. Once all students have had a turn to "pop up," try spelling some words. Choose words that are presently being defined and applied in spelling, reading and writing assignments and from all subject areas.

¹¹ Reproduced with permission from Alberta Education, *Daily Physical Activity: A Handbook for Grades 1-9 Schools* (Edmonton, AB: Alberta Education, 2006), pp.43-59.

Cross-curricular Linking

Mathematics

Assign each student a number rather than a letter. Call out or write down equations, e.g., " $3 \times 2 =$," and have the students "pop up" when their number is the answer to the equation. If "All Numbers" is called out, everyone pops up. Have the students take turns calling out or writing down equations.

Equipment: whiteboard or flashcards with letters and vocabulary words

- 1. Starting with the letter "A," call out each letter of the alphabet and a corresponding word or phrase that begins with that letter. After identifying a word or phrase, ask the students to perform an action that incorporates this word or phrase. For example, call out or hold up a letter "A," saying the word apple and then ask the students to pretend they are picking an apple high up in a tree. "L" is for ladder, and they pretend to climb a ladder. "S" is for snake and they slither around like snakes.
- 2. After each movement, review the letter, the word and the letter sound and then ask students to call out the letter that comes next.
- 3. Continue through the whole alphabet, selecting certain letters each day from different points in the alphabet. Have students brainstorm words to use with each letter for this activity.
- 4. At the end of the activity, ask students to write or draw pictures of some of the letters and action words that were used to describe them.

Cross-curricular Linking

Science

Identify a topic in science. Call out a letter of the alphabet and ask the students to provide topic-specific vocabulary for that letter of the alphabet before they run to get an ice cream stick located on a table across the room. For example, the topic could be types of animals and the teacher calls out "d." The students spell out their answer, for example, "dinosaur." Other topics could include plants, reptiles or parts of the solar system. Once all the ice cream sticks are gone from the table, the activity ends.

Social Studies

Identify a topic in social studies. Call out a letter of the alphabet and ask the students to provide topic-specific vocabulary for that letter of the alphabet before they run to get an ice cream stick located on a table across the room. For example, the topic could be types of land features and the teacher calls out "p." The students spell out their answer, for example, "prairie." Other topics could include countries of the world, cities and rivers. Once all the ice cream sticks are gone from the table, the activity ends.

★ Beat Challenge (K-9)

Equipment: music and audio equipment, one object for every two students

- 1. Choose music suited to the grade level and interests of students. Have students sit cross-legged on the floor facing a partner a metre away. Place a beanbag or other object on the floor between them.
- 2. Start the music and encourage students to move to the beat of the music during the following activities:
 - tap hands on knees
 - tap hands on shoulders
 - clap hands
 - clap hands, tap knees, tap shoulders
 - clap own hands, partner's hands (right to right, left to left, both to both)
 - do crunches
 - alternate hands in a front support position
 - alternate feet in a front support position.
- 3. When the music stops, students try to grab the object on the floor before their partner does. After the eighth challenge, change partners.
- 4. Have students create their own eight challenges. To increase the challenge, have students throw and catch a beanbag or other object in time with the music.
- 5. Have half of the pairs demonstrate their sequences while the other half watches. Reverse roles and have the second half of the pairs demonstrate.

★ Body Spelling

Language Arts Focus (K-12)

Equipment: none required

- 1. Have students stand in an open area of the classroom.
- 2. Call out a letter and have the students form that letter by shaping their bodies into the letter. Letters that work well are: A, X, S, C, F, J, I, L, U, V, K, Z. Encourage students to stretch long and hold the stretch for a count of eight. Try counting in a different language.
- 3. Have students work with a partner to each form a different letter and then form a two-letter word. Suggestions for two-letter words include: on, it, of, to, oh, so, hi, do, go, no, by, is, ox, an, at, in.
- 4. In groups of three to four, have students form their bodies to spell a word; e.g., the name of an animal, a girl's name or a boy's name.
- 5. As a variation, have the students walk around in the shape of the letter called.

Cross-curricular Linking

Mathematic

Have the students form numbers instead of letters. Have older students form the answer to equations in groups, using decimals or fractions.

Bone Partners¹² (9-12)

Wellness and Science Focus

Equipment: none

- Students are scattered throughout the classroom. The teacher will name a bone.
- 2. Each student will walk briskly to find a partner and identify the specified bone. (e.g., Teacher states "phalanges" and students find a partner and points to their own phalanges.) This continues for three to five minutes.
- 3. As a review, the teacher can repeat the name of a bone and students will find their original partner relative to that bone.

Variations: Different movement to find a partner. Vary the number of bones. Use music as students are finding a partner. Time students (e.g., give students ten seconds to find a partner)

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¹² TAHPERD Physical Activity Taskforce 2007

Equipment: music, audio equipment

- 1. Have the students position their chairs so that they have enough room to stretch out their legs while sitting on the edge of their chairs and keeping their back straight.
- 2. Play music with a strong beat and have the students do the following actions:
 - Hiking: Students swing their arms and reach left and right while tapping their toes and lifting their knees.
 - Swimming: Students move their arms as if doing the front or back crawl and kick their legs in a flutter kick.
 - Cycling: Students hold on to the seat of their chairs and pedal their legs as if riding a bike.
 - Paddling: Students use an imaginary paddle to paddle a canoe (both sides).

Equipment: Object in the center of the circle for each person to touch (poster board, book, chair)

Formation: Students in a large circle with open space in the middle

- 1. Your objective is for everyone to switch places with a person on the opposite side of the circle as quickly as possible. You will be timed from the signal "Go" until the last person calls "Stop".
- 2. As you change positions each person must touch the object in the center with either a hand or a foot.
- 3. Give two minutes to discuss a strategy.

Trial #1 - Time

Now lets take two more minutes to develop your plan more effectively.

Trail #2 - Time

I'm going to give you time to think about this challenge and we will try this again another day.

Variations: Divide the class into two teams and challenge for the best time.

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¹³ Scott, Jamie, ETSU Graduate Student

% Classroom Physical Activity Calendar 14 (K-12)

Equipment: calendar

- 1. As a group, students will provide ideas for completing a monthly "Classroom Physical Activity Calendar."
- 2. Once the calendar is complete, the teacher will post the calendar in the room and/or provide each student with a copy of the calendar.
- 3. Students will participate in the classroom physical activities according to what is listed on the calendar.
- 4. The calendar will be completed based on the number of days the teacher plans to implement physical activity.

Variation: The number of activities, time allocated to activities, number of days per month can vary based on teacher preference.

Equipment: Three Signs (representing different types of physical activities)

- 1. The teacher will place a minimum of three signs, illustrating a type of physical activity (e.g., jogging in place, jumping in place, Tae Bo boxing jabs), in three different areas of the room.
- 2. Assign students to each of the three areas of the room.
- 3. Instruct students to perform the activity for one minute.
- 4. After one minute, students will rotate clockwise to a new area.

Variations: change type of physical activity, change duration, or add stations

Conga Line¹⁶ (K-12)

Equipment: CD player and calypso music

Instruction:

- 1. Conga Step: Left, right, left kick; Forward left, right, left kick with right foot; Right, left, right, kick with left foot; Repeat three to five minutes around the classroom.
- 2. Teacher forms groups of four to six. Each group stands in line formation.

¹⁴ TAHPERD Physical Activity Taskforce 2007

¹⁵ TAHPERD Physical Activity Taskforce 2007

¹⁶ TAHPERD Physical Activity Taskforce 2007

3. Students place hands on hips or shoulders of the student in front of them.

Variations: Divide class into two lines or entire class in one line. Teacher leads. Students make patterns with the lines as they move (e.g., move the line in a circle or square)

% Crazed Creative Dance (K-9)

Equipment: music, audio equipment, chart paper and marker to post the criteria, stretching posters (optional)

- Divide students into groups of four or five and give them a list of criteria for their dance. For example, their dance must have three locomotor movements (walking, hopping, jumping, leaping, rolling, skipping, galloping, sliding), two levels (high, middle, low), two pathways (zigzag, diagonal, circular), four nonlocomotor movements (turning, twisting, swinging, balancing, bending, landing, stretching, curling) and one change of direction (forward, backward, sideways).
- 2. With younger students, you may wish to give them a theme, such as pretending to be an astronaut and going to the moon. The dance can be broken into three parts: take off into outer space, the adventure of moving through space and the landing on the moon. Using concrete shapes or animals help link movement to an idea, such as stretch like a cat or walk like an elephant.
- 3. Review group expectations and give the students a time limit.

Allow time for students to perform for the class. If necessary, have two or three groups perform at once; e.g., two- or three-ring circus

Equipment: none

Instruction:

- 1. Students group together into 4 teams (easiest way may be to have them group together by rows.)
- 2. The teacher selects a list of vocabulary words or a set of questions from the end of a chapter.
- 3. The students must complete a series of movements to receive each question.
- 4. When each student in a group has completed the assigned movement they must sit down and raise their hands to receive each question.
- 5. The teacher will then approach the group to give them the next question.

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¹⁷ East Carolina University, Activity Promotion Laboratory

- To receive the first question, each student in the group must jump to the sky and slap the floor with their hand. Repeat 5 times.
- To receive the second question, the students must run in place for 30 seconds.
- To receive the third question, students must do imaginary jump rope as fast as possible for 10 seconds.
- To receive the fourth question, students must hop on one foot while turning in a circle 10 times.
- To receive the fifth question, students must complete all previous movements.

Variation: This activity can be used for sequencing, listening skills, auditory procession, and multiple intelligences.

M Deal or No Deal¹⁸ (K-12)

Equipment: a minimum of five envelopes with one exercise listed on the outside of each envelope

- 1. Suggested exercises for the outside of each envelope: seat crunches, pushups, elbow to opposite knee touches, jumping jacks, arm circles, jog in place, forearm jabs (Tae Bo moves)heel raises, toe raises, weight training with textbooks: arm curls, overhead press.
- 2. Inside each envelope, place repetition variations on separate pieces of paper or cardstock (e.g. One More, 5 more, 10 more, none, times 2, one less, -5, divided by, square root of 36)
- 3. Teacher chooses an envelope and states a feasible number of repetitions.
- 4. Teacher makes a deal with one student at a time. One student at a time is chosen by the teacher to make a deal for the class. All students participate in each deal.
- 5. Teacher: "My deal is 20 crunches. Deal or No Deal?" Student: "Deal the entire class perform the physical activity or exercise." OR "No Deal the student chooses a card from that exercise envelope and the students perform the new number."
- 6. Students are challenged to design a movement activity to integrate the concepts or vocabulary of the subject area

Variations: Use math quantities and terms from the current unit of study. Use vocabulary words or rhythmic expressions.

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 $^{^{18}}$ TAHPERD Physical Activity Taskforce 2007

M Deck of Fun¹9 (K-12)

Equipment: 5-6 decks of playing cards

- 1. Have the students assign an individual activity, representative of each component of fitness (i.e., cardiovascular endurance, flexibility, strength) to each suit of a deck of playing cards; i.e., hearts = bench step ups (cardio), clubs = wall sprints (cardio), spades = v-sit (strength), diamonds = hamstring stretch (flexibility).
- 2. Each group of 4-5 students is given half a deck of cards.
- 3. On the signal to begin, a group leader deals each group member one card and then remainder of the deck is placed on a bench or in a pocket. Simultaneously, everyone turns over his or her card.
- 4. Each student is then challenged to complete the activity on the card (jack of spades = v-sit for 11 seconds) before another group hand can be dealt.
- 5. Once your required activity is completed, help teammates compete their activities to be able to deal another hand more quickly. The group challenge is to deal all of the cards and complete all activities.
- 6. Aces are bonus cards, if one group member turns over an ace, all other activities do not need to be completed all group members travel together to touch all four walls and then deal another hand.

Variation: Consider having autistic students or those with ADHD work with only one partner to decrease the distraction of working with a large group. Where possible, provide a picture of each activity. Try Full House! Have groups of 4-5 students travel through an obstacle course or complete laps of the field at their own pace. With every completed lap, every student receives a playing card. Groups must communicate throughout the activity as they try to build a full house (3 of one card, 2 of another, i.e., 3 kings, 2 aces).

 $^{^{19}}$ Adapted with permission from Everybody Movel Daily Vigorous Physical Activity, CIRA Ontario.

★ Desk Wake Up (K-6)

Equipment: none required

- 1. Have the students sit comfortably and place their hands on their desks in line with their shoulders, fingers pointing slightly inward.
- 2. Students then rest their foreheads between their hands and inhale deeply, feeling their breath flowing into the body like a fountain of energy.
- 3. Students slowly lift the forehead first, then the neck and torso so that they are sitting in an upright position, keeping their shoulders and lower body relaxed.
- 4. Students then exhale while tucking in their chins to their chests to pull the head forward, lengthening the back of the neck.
- 5. Have students relax and breathe deeply as their foreheads are brought back to rest on their desks. Have them repeat this three times.

Equipment: A posted list of activities for each letter of the alphabet

- 1. Post an activity for each letter of the alphabet a sample list is included below. Ensure that all students are able to perform each activity.
- Challenge students to spell the entire alphabet by completing all activities, or have partners practice spelling words while the other partner guesses each word, or have a leader assign each pair of students a word that they will then complete the activity for each letter in the word.
 - A Alternate knee lifts 20x
 - B Balance on 5 body parts for 20 seconds
 - C Calf raises 20x
 - D Dips 10x
 - E Energizer bunny hops 20x
 - F Free dance your favorite moves for 30 seconds
 - G Gluteal kicks 10x each leg
 - H Hand jive
 - I Intense marching on the spot
 - J Jumping Jacks 20x
 - K Kick your heels together 10x

 $^{^{20}}$ Adapted with permission from Everybody Movel Daily Vigorous Physical Activity, CIRA Ontario.

- L Lunges on each leg 10x
- M Mountain climbers 15x
- N Note your heart rate
- O Hop on each foot 10x
- P Push ups 5x
- Q Quench your thirst
- R Run on the spot 15 seconds
- S Squats 10x slow and controlled
- T Tae Bo kicks front and back 10x each leg
- U YOU stretch it reach high and low
- V V-sit 20 seconds
- W Walk around the room once
- X Cross-over steps 10x each direction
- Y Yodel for 10 seconds with your best voice
- Z Zig zag jumps from side to side 20x

Variation: Post letters and activities throughout the activity space encouraging students to move to each letter before completing the action. Have students create new activities or themed activities for each letter of the alphabet. Provide variations to ensure that all students are able to complete each movement - a student in a wheelchair could do tricep extensions over their head instead of dips. Students with visual impairments could work with a partner.

Equipment: paper

- 1. Provide each student with pieces of scrap paper.
- 2. Ask the students a review question and have the students quickly write their answers on the paper.
- 3. Call out "3-2-1 Flash Up!" and have the students jump out of their desks and show their answers to the front of the class.
- 4. Call out "Flash Down!" and the students sit while you review the correct answer to the question.

Cross-curricular Linking

Language Arts

Use the activity to reinforce spelling skills and use words from the weekly spelling list. As an extension, students could create sentences using the words from the activity.

Social Studies

Have the students answer questions, spell or define vocabulary on a topic recently covered.

Science

Have the students answer questions on a topic recently covered; e.g., creating color, five senses, magnetism, plant growth, chemistry, heat and temperature, weather patterns, aerodynamics, animals, seasonal changes, electricity, mechanical systems, chemical change, tectonic plates.

Equipment: music, audio equipment

- 1. Divide students into partners and have them determine who will lead first.
- Review various locomotor movements (skip, leap, hop), changes of direction (forward, backward, sideways), shapes, levels (travel upright, bend down low), pathways (straight ahead, zigzag, curved, diagonal) and speeds (fast, slow). Pay particular attention to body awareness and spatial awareness.
- 3. Have the leader perform various movements as the follower mimics the leader's actions. When the music stops, both strike a pose and freeze.
- 4. When the music resumes, the follower is now the leader and vice versa.

Equipment: several soft balls or throw able objects (balls of recycled paper work great)

Note: Group Juggle works best with groups of 8-12 students

- 1. First round
 - Arrange students in a circle, include yourself in the circle
 - Explain that you are going to pass the ball around the circle, and that you should try to pass the ball to someone on the opposite side of the circle. The teacher should be the last person to receive the ball.
 - throw a ball to someone pick someone out & ask their name, then say

²¹ TAHPERD Physical Activity Taskforce 2007

- "Hi X , my name is Y ...here you go!" [underhand throw a ball to X]
- X then says: "Thank you Y ", picks another student and says "Hi Z , my name is X ...here you go!" [throw]....they say "Thank you, Z " and on we go.
- If you're not trying to learn names, skip the naming part & just throw in a random order
- The challenge from here is simply to toss the ball around to everyone in the circle, and finally back to the teacher.

2. Second round

- "Well done, now let's see if we can do that again making sure we use the same order, and use each other's names. Remember to say the name of the person you are throwing to, and thank the person, by name, for throwing it to you."
- On the second round, some students will be challenged to remember who to throw it to, and the names of the other students! Take it slow, help the group out, so that each person has a successful second round.

3. Third round

- "OK, that looked way too easy for you. Let's try it again, but this time, we'll see how fast we can do it, OK? Here we go..."
- It should go pretty fast this time, and the group will probably feel guite pleased with themselves.

4. Fourth round - introduce more balls

- "That's great, but I still think that was too easy for you. This time I'll add an extra ball and see how fast you can do it."
- After the first ball has passed through a few hands, add one or more balls to the mix. Make sure the 1st student is paying attention before you throw the ball and keep track to make sure the balls go in the same order.
- If balls are being dropped, hitting students, flying around the room, etc. stop the activity and ask the class: "We seem to be having a difficult time with the extra balls, how can we as a group work together to make sure all of the balls make it around the circle as quickly as possible?" Students should respond with answers such as: not dropping the ball, paying attention.... Discuss solutions as a class then try again.

If/when your class is successful, you can introduce even more balls or add random (and soft) objects to further challenge the class, or just end their and discuss how much the class improved after talking about and listening to the solutions to problems they were having with multiple balls.

Equipment: any light hoop or stick: a hula hoop, broom handle, etc. and an area large enough for 8-12 students to form a small circle

This is a deceptively simple but challenging activity that focuses on teamwork and communication.

- 1. Groups of about 8-12 students work best, have enough hoops/sticks for each group.
- 2. For a hoop, have each group form a small circle. If using a stick, have each group divide in half and form two lines facing each other.
- 3. Introduce the Helium Hoop, if you like you can tell a story about filling the hoop with helium....
- 4. Ask students to hold their arms out about waist high and point their index fingers.
- 5. Lay the Helium Hoop down on their fingers. Get the group to adjust their finger heights until the Helium Hoop is horizontal and everyone's index fingers are touching the hoop. To slightly increase the challenge you can apply slight downward pressure on the hoop while your students are getting adjusted and keep the pressure consistent until you start the activity.
- 6. Explain that the challenge is to lower the Helium Hoop to the ground (if you like to come up with a story such as telling your students that this can be done by using the static electricity formed by everyone's contact with the hoop).

7. Rules:

- Each student's fingers must be in contact with the Helium Hoop at all times.
- Pinching or grabbing with the index finger is not allowed and no other finger, body part, or object may contact the hoop. The hoop must rest on top of index fingers and index fingers must remain straight and horizontal (no hooking your finger around the hoop).

²² TAHPERD Physical Activity Taskforce 2007

- If you catch anyone illegally touching the hoop (pinching, grabbing, etc.), take the hoop away and restart the activity.
- Start the activity but be aware that the hoop has a tendency to quickly float up and away from the group. If this happens jump up and grab the hoop and restart the activity.

Believe it or not, this can be a very challenging and frustrating activity for some groups (even adults). As each student tries to keep contact with the hoop, the group as a whole will push the hoop up.

Try to let your students discuss the difficulties of the activity and form a plan. If your students become too frustrated you may need to stop the activity or give some direct instructions to get them back on track.

Equipment: hoops, benches, dynabands, pylons, paper, music (optional) *Around the Room*

- 1. Set up a variety of stations around the classroom that will help students develop strength, target, agility and cooperative skills. For example:
 - Station 1: hoops (throwing, jumping)
 - Station 2: beanbags (throwing, balance)
 - Station 3: dynabands (strength, flexibility)
- 2. Have students work through the stations, allowing a set amount of time for each station. Students can work individually or with a partner. Play music to provide additional motivation for the students.

Mission Possible Circuit

- 1. Prepare a list of several different missions or activities related to a subject area (one for each station) and divide the students into groups of six or seven. Assign each of the groups to a station.
- 2. On a signal, have one student read out the task for their group and then have them work together to perform the activity.
- 3. Students complete as many of the tasks as possible within a set amount of time or until a song has finished playing.

Social Studies

With the left toe, touch five objects in the room that are a color found on the United States flag. Do one jumping jack for each letter in the name of a state's capital city. Choose a Great Lake and spell it on the floor using all group members' bodies to form the letters.

Mathematics

Incorporate number operations, variables or equations into the stations; e.g., recite times tables while spinning the hoop or solve an equation and toss beanbags into baskets labeled with possible answers.

Science

Line up in single file and pass a binder over the head, then through the legs until the binder has been passed once for every letter in the word "photosynthesis."

Language Arts

Incorporate grammar or vocabulary into the stations; e.g., conjugate verbs while spinning the hoop or toss beanbags into baskets labeled with adverbs.

★ Language Lights (K-9)

Equipment: none required

- 1. Assign students consonants or vowels, adjectives or verbs, masculine or feminine nouns, and so on and then assign different movements to each word type.
- 2. Call out a color of a streetlight and have students move as the color dictates. For example, red light means stop and yellow light means jog on the spot. When you call out "green," students must move according to their word type; e.g., vowels do jumping jacks, consonants bend over and touch their toes.
- 3. If you call out "Pit Stop," students stop and complete a stretch, holding it for eight seconds.

Mathematics

Assign numbers instead of word types and have the students move based on whether their number is odd or even, whole, decimal or fraction, tens, hundreds or thousands, a square root or not, or it is divisible by a particular number.

Science

Assign animals, plants, simple machines, weather or types of rock instead of word types and have the students move to simulate the vocabulary they have been assigned.

Lego Moves (K-6)

Equipment: none required, sticks or musical instruments optional

- 1. Bang two sticks together, clap your hands, use a tambourine or keep a strong rhythm in another way while the students move around the room in a manner that reflects the beat.
- 2. Call out "Lego" and students must stop and make an interesting shape with their bodies. Encourage the students to make the shapes wide, narrow, twisty, curvy or round in a high, medium or low body position.
- 3. Start the beat again and call out "Lego" and a number to indicate the size of the grouping, e.g., "Lego 2," "Lego 3," "Lego 4" and so on, and have the students make shapes in pairs, threes or fours.

⋈ Minute Masters²³ (9-12)

Equipment: minute timer

- 1. Display a list of different exercises for all to see on the wall or board.
- 2. Set the timer for the designated time and at each minute the students perform an exercise of choice.
- 3. Each student may choose different exercises or stay on the same one each minute. Let the choice be the student's. This will help give the student ownership and they will be more likely to perform the activity.

Some suggested exercises: Jumping Jacks, Marching, Knee Lifts, Jogging in Place, Alternating Lunges, Twisting, and Stationary Jumping. This is an activity that can be used periodically throughout the year. Playing music during this time may be nice.

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 $^{^{23}}$ TAHPERD Physical Activity Taskforce 2007

Variations: See how many repetitions students can do with the above exercises. Record their scores individually or as a class at each 1-minute interval. Challenge the students to improve their repetitions the next time. This is goal setting.

*** Memory Match**

Language Arts Focus (K-9)

Equipment: cards or paper plates

- 1. Write rhyming words, homonyms or other matching words on the bottom of paper plates or cards and divide students into groups of two.
- 2. Scatter half the paper plates or cards turned upside down around one side of the classroom. The matching paper plates or cards are scattered on the other side of the playing space.
- 3. Have each group start at a different spot and, using a specific locomotor pattern (e.g., hopping on one foot, skipping, twirling), move to one side to pick a paper plate or card. Then they move, using the same locomotor pattern, to the other side of the playing area to find their matching word. If they turn over a card that matches, they bring it back. If it doesn't, they place it back on the floor upside down for the other teams to find. Partners must stay together and can only turn over one card at a time.

Cross-curricular Linking

Mathematics

Write equations on the paper plates or cards and have the students match them with the correct solution.

Social Studies

Tape pictures and their matching words or dates (e.g., countries, cultures, historic figures, historic events) to the paper plates or cards and have the students match the pictures to the words.

Moving Body Parts (K-6)

Equipment: music, audio equipment

1. Students move in groups of three throughout the play space, starting and stopping with the music. While moving together, the group follows challenges provided by the teacher:

- feet touching the ground with hands on ankles
- five body parts on the ground
- some body parts at medium level and some at a low level
- making noise without using feet or mouths
- three students with their backs touching
- using body parts to look like a spider.
- 2. After players successfully accomplish a specified number of challenges, try increasing the number of players in each group. To add to the challenge, introduce various pieces of equipment for use in accomplishing a challenge. For example, players, without use of their hands, hold a rope and move in a curvy pathway. Vary the distance and pathway groups must travel to add to the challenge.

Ask students to create new challenges

⋈ Musical Hoops

Language Arts Focus (K-9)

Equipment: one hoop per student, clipboards, markers, index cards with letters written on them, music

- 1. Place one hoop per student randomly on the floor of a cleared area of the classroom. Place a clipboard with a blank sheet and a marker inside each hoop.
- Play music and have students move about this cleared space using a specific locomotor skill (e.g., skip, hop), or have students walk in a variety of ways (e.g., baby steps, backwards, crab walk, side step, quick steps, long strides).
- 3. When the music stops, have the students move to the closest hoop. Using the paper and clipboard, students write the letter, word or shape that is currently indicated on the front board or is called out by the teacher. Alternatively, teachers orally ask a question and the students write the answer. For example, "In what part of the body will you find a "chamber?" For younger students, place beanbags in the

hoops with numbers, letters or shapes marked on them. When students get to the hoop they write the shape they see on the beanbag on the paper. Give students time to finish and while waiting they can perform a stationary skill, such as marching or jogging on the spot.

4. Upon a signal, the students place the clipboard down in the hoop and move again to continue the activity with a new letter, word or shape that will be indicated.

Cross-curricular Linking

Mathematics

Have the students answer simple equations, write out long numbers, finish a pattern, answer a word problem or describe the characteristics of 3-D and 2-D shapes as they arrive at each hoop.

% Over Under

Language Arts Focus (K-9)

Equipment: a small, sturdy object for passing

- 1. Have students stand in a row, one behind the other in groups of five or six.
- 2. Have the students pass a rubber chicken, beanbag, ball or chalkboard eraser down the line, alternating over the head and between the knees
- 3. When the object gets to the end of the line, the last person runs to the front and starts passing it again.
- 4. After students practice passing the object, add alphabet challenges. Have students say a letter of the alphabet as they pass the object. Students say a word that starts with each letter of the alphabet; e.g., first person says "apple," second person says "banana," third person says "cat," fourth person says "dog." Another variation is saying a two-letter word and when the person runs to the front of the line, the group must say a three-letter word, then a four-letter word. Continue to the appropriate level of skill.

Cross-curricular Linking

Mathematics

Have the students create and continue a pattern; e.g., counting by twos, threes or fours.

Health

Have the students identify healthy and nutritious foods for breakfast as they pass the object down the line. Do the same for lunch and dinner.

Equipment: Several sheets of **large** paper - chairs and tables should be available around the room but should not be pointed out to the students.

- 1. Split the class into groups of four or five. Place a piece of paper in front of each group and tell them they have five seconds to get off the floor (groups automatically jump onto paper).
- 2. Then tell the group that you want them to fold the paper in half and they then have another five seconds to get off the floor...repeat this until they have folded the paper 6 or more times. The idea of the game is that the students will automatically fold the paper and stand on it using each other as supports when all they actually had to do was fold the paper as instructed then get off the floor (they could sit on a chair or table in the room!!!)

% Predictions²⁴ (K-12)

Equipment: pencil and paper

Instruction: Teacher will explain task to students, and students will record their prediction on a sheet of paper. Students will then perform the task. Record the results on the paper next to their prediction.

Examples:

- 1. How long will it take you to walk the length of the football field?
- 2. How many steps will it take you to walk the length of the football field?
- 3. How many steps are there between the gym and our classroom?
- 4. How long will it take our class to walk around the school building?
- 5. How many steps are there to the top of the bleachers in the stadium?

River Crossing²⁵ (K-12)

Equipment: 5-8 sheets of paper per group (recycled paper is great), masking tape or something to make two boundaries, at least 10 feet of open space This activity is best with groups of 10-12 students.

1. Make 2 banks of your river using tape, a row of books, etc.

²⁴ TAHPERD Physical Activity Taskforce 2007

²⁵ TAHPERD Physical Activity Taskforce 2007

- 2. Your shores need to be at least 10 feet apart (longer adds more challenge).
- 3. Then, tell your students that they need to get across this "river" using only teamwork and 5 marshmallows (sheets of paper).
- 4. No student can touch the "water" (area between the shores).
- 5. If they do, that student must start over.
- 6. If they leave a marshmallow in the river (i.e. on the floor without touching it) then it gets washed downstream (take it away), and there is NO jumping allowed.
- 7. Once everyone is across, the group wins.

After your students have easily mastered this task, add additional challenge, by giving your students a few extra sheets of paper but, make your "river" at least 20 feet wide, maybe longer. Give the same instructions as above but tell your students that they have only one chance to make it across (everyone must go together as one group). The students will quickly realize that this is not an easy task. In order for them to be successful, they will have to spread the "marshmallows" out on the "river" and pair up on each "marshmallow." They can then pass a "marshmallow" from the back of the line up to the front, lay it down and continue closer to the other bank of the river. This may take your students a few minutes to figure out so you may need to guide the group discussion, being careful not to give away the solution.

Equipment: music, audio equipment

- 1. Have students line up one behind the other to create several short lines (four to eight students each). Have students place their hands on the shoulders of the person in front of them.
- 2. Play music and have the students sing and dance together in their lines as they move around the classroom.
- 3. When the music stops, a leader (the student at the front of each line) faces another leader and plays Rock, Paper, Scissors until a winner is decided. The loser of this encounter joins the winner's team and the next in line of the losing team becomes the new leader. The music continues until the next stoppage.

★ Scarf Juggling (K-9)

Equipment: scarves or plastic grocery bags

- 1. Demonstrate the cascade pattern of juggling: Pinch one scarf in the middle and let the rest of the scarf hang down. Raise one arm across the chest and throw the scarf as high as it will go. With the other arm, catch the scarf palm down in front of the body below the waist. The scarf makes a figure eight pattern. Throw across, catch down, throw across, catch down. With a scarf in each hand, toss the first one across and when it gets to the top, look at it briefly and throw the second scarf across the body in the opposite direction. The scarves will make an "X" as they cross in front. With both scarves in the air, catch the first scarf straight down in front and then catch the second one in front with the other hand. The first one thrown will be the first one caught, but caught with the opposite hand.
- 2. Have the students follow along and work to establish an even rhythm with the two scarves.
- 3. Demonstrate juggling with three scarves: Hold two scarves in the dominant hand, one deep in the hand and the other one loose at the fingertips. Hold one scarf in the non-dominant hand. The one in the fingertips of the dominant hand is the first scarf to throw. When it gets to the top, throw the second one from the non-dominant hand. As the hand goes down from throwing the second one, it quickly catches the first one. Then, throw the third scarf from the dominant hand. As the hand comes down from throwing the third one, it quickly catches the second one, and then throw the fourth one (which is really the first one). Keep alternating hands right, left, right, left working to develop an even rhythm.
- 4. Have the students follow along and work to establish an even rhythm with the three scarves. Have the students juggle with a partner with two and three scarves.

Cross-curricular Linking

Language Arts

One student stands in the middle of a group of 3 to 4 students, holds a scarf and is the "dropper." When the student in the middle is ready, he or she says a letter and drops the scarf. The other students say a word that begins with the letter called out by the dropper and try to catch the scarf before the other students do or before it drops to the floor. The student

who says the word and catches the scarf takes the place of the student in the middle and calls out the next letter. Vary the body part that the scarf must be caught with, such as a finger, head, foot or shoulder.

Health

The student in the middle says a food group and the other students call out a food that is an example of that food group and tries to catch the scarf before it drops to the floor.

Mathematics

The student in the middle says an equation and the other students call out the answer and try to catch the scarf before it drops to the floor.

★ Scarf Juggling Circle (K-9)

Equipment: scarves or plastic grocery bags

- 1. Students form a large circle facing inwards while holding a scarf.
- 2. Say "to the right throw and go" and everyone throws their scarves straight up in the air and takes one step to their right and catches the other person's scarf. This is repeated until the students get a rhythm going.
- 3. Then say "to the left throw and go" and everyone throws their scarves straight up in the air and takes one step to the left.
- 4. Vary the level of difficulty by having the students face clockwise in the circle and toss their scarves straight up over their heads, taking a step forward to catch the scarf of the person in front of them.

Equipment: index cards with the letters of the alphabet written on them, chart paper, markers

- 1. Divide the class into small groups of two or three.
- 2. Using index cards with letters of the alphabet on them, spread the cards face up on one half or quarter of the playing area.
- 3. Have the students stand in their groups an equal distance from the cards and spread out in a safe manner. The first student in each group will start.
- 4. On a signal, students hop, jump or skip one at a time to collect one card and bring it back to their partner or group. Students alternate turns in getting the letters. Once each student in the group has a

- card, the students try to form words from the cards they have brought back (they don't have to use all of them).
- 5. Once a word is formed, the students have the teacher verify that it is indeed a word. If it is a word, the students write it on a piece of paper or chart paper posted on the wall, gather all the letters and spread them back out on the floor at the other end of the playing area. All words less than four letters score one point for each letter in the word. All words with five or more letters are worth two points per letter. Total the points for a class total. Allot bonus points for using vocabulary words posted around the classroom or words from weekly spelling lists.

Languages Arts

Use the activity to reinforce vocabulary and spelling skills.

Social Studies

Use places instead of letters and have the students arrange them from closest to farthest away from their community or use events and have the students place them on a time line.

Science

Use animals or plants instead of letters and have the students place them in a food chain or order the steps in a process or a life cycle.

Health

Use foods and have students design a healthy meal for a school lunch.

Equipment: cards, whiteboards or chart paper, markers

- 1. Divide students into groups of four to six and have them line up at one end of the classroom. Place a pile of eight to ten activity cards in line with each group at the other end of the classroom.
- 2. Have one student from each group jog or skip to their group's cards, choose one and return to their groups to begin drawing the activity word or phrase from the card on a whiteboard or chart paper.

- 3. The group must then guess what activity is drawn and then perform the activity ten times; e.g., jumping jacks, hops, leg lifts, lunges, toe touches, arm circles.
- 4. The next person from the group then goes and the game continues until all team members have had a turn drawing.

Speed Circle²⁶ (K-12)

Equipment: a stopwatch, any object to be touched, tagged or stepped on (a sheet of paper will work) and an area large enough to form a large circle with your class; define the circle with tape, desks, chairs, etc.

- 1. Have your students form a large circle. Instruct students that the objective is to trade places with the person on the opposite side of the circle as quickly as possible. All students must touch the object in the center of the circle as they pass to the other side. Students may not run (speed walking is OK). Students may not contact/touch one another. Any contact made will result in a 5 second penalty (add on to the final time). Time will start when I say go and will end when the last person steps out of the circle.
- 2. Give the students two minutes to develop a plan before their first attempt or try activity without time for planning, record the time. Then give students a few minutes to develop a plan and try again, record the time. The second time (after developing a plan) should be considerably quicker discuss the importance of thinking before acting, developing a plan, etc. Allow more time to refine the plan and try again.
- 3. Give two minutes for the group to discuss a plan and then start the activity. After the first attempt discuss as a class what challenges the group had while performing the activity. Then allow two more minutes of planning and try again. The students should be able to improve their time with each new attempt.

Suggested Dialogue:

"Your objective is to trade places with the person on the opposite side of the circle as quickly as possible."

"As you trade positions, you must enter the circle, touch the object in the center and end up in your new position."

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"While in the circle you may not come into contact with anyone for any reason."

"This will be a timed exercise; any contact will result in a 5 second penalty for each offense."

"Time will start when I say go and will end as soon as everyone is in their new position."

"Are there any questions?"

"I will now give you two minutes to come up with a plan and to set a goal for how quickly you think you can accomplish this task"

★ Spelling Relay

Language Arts Focus (K-9)

Equipment: ice cream sticks

- 1. Divide the students into teams and assign each team an equal number of ice cream sticks, which are placed on a table across the room.
- 2. Call out a vocabulary word for the teams to spell.
- 3. On a signal, the first players in each team run to their piles, grab a stick and bring it back to their teams.
- 4. Upon returning, the runners tag the next students and they run and collect another stick. Meanwhile, the teammates work together to spell out the words with the sticks. Students are not allowed to break the sticks. To shorten the duration of this activity, students could bring back two or more sticks at one time.
- 5. As a variation, have students work in rows and walk down the row or round the classroom to the pile of ice cream sticks and bring one back to their team.

Cross-curricular Linking

Mathematics

Instead of words, call out an equation. Students complete an action such as hopping, stretching and bending the same number of times as the answer to the equation. For example, call out "2 + 2" and the students do four jumping jacks.

Science

Identify a topic in science. Call out a letter of the alphabet and ask the students to provide topic-specific vocabulary for that letter of the alphabet before they run to get an ice cream stick. For example, the topic could be

types of animals and the teacher calls out "d." The students spell out their answer, for example, "dinosaur." Other topics could include plants, reptiles or parts of the solar system.

Social Studies

Identify a topic in social studies. Call out a letter of the alphabet and ask the students to provide topic-specific vocabulary for that letter of the alphabet before they run to get an ice cream stick. For example, the topic could be types of land features and the teacher calls out "p." The students spell out their answer, for example, "prairie." Other topics could include countries of the world, cities and rivers.

★ Sponge Games (K-9)

Equipment: one sponge per student and one hoop for every two or four students

- 1. Lead students through the following sequence of activities:
 - Squeeze sponge, flip it from fingers and catch it, then try the other hand.
 - Hold sponge between two hands at eye level, elbows at sides. Drop sponge and catch it before it hits the floor. Repeat, adding a clap before catching the sponge.
 - Drop sponge, roll both hands forward around each other before catching. Drop sponge, roll both hands backward around each other before catching.
 - Drop sponge and spin around once before catching it.
- 2. With a partner, take turns dropping the sponge for your partner to catch. Repeat this activity, taking turns dropping two sponges at the same time for your partner to catch.
- 3. Partners challenge each other to drop-kick sponges over a line on the floor or into a hoop.

% Stepping Around the World Game (K-9)

Equipment: "Stepping Around the World" game board, dice, calculators, scrap paper, player markers and pedometers.

- 1. Divide students into groups of two to four. Have students put on a pedometer, if available, and reset it.
- 2. All groups place their player markers at space number 1 of the "Stepping Around the World" game board.

- 3. Choose a group to go first, and then they roll the dice and move their marker along the game board. The group attempts to answer the question on the space and then performs the activity described. If they get the question wrong, they are to be active for 20 seconds in addition to the activity that is to be performed.
- 4. The next group has a turn and so on until a group reaches Gatlinburg and is declared the winner (space number 35).

Mathematics

Create a game board that incorporates mathematics problems, questions or equations. Have the students work in groups to create game boards and trade them with another group.

Health

Create a game board that incorporates health questions. Have the students work in groups to create game boards and trade them with another group.

Science

Create a game board that incorporates science questions. Have the students work in groups to create game boards and trade them with another group.

Social Studies

Create a game board that incorporates social studies questions. Have the students work in groups to create game boards and trade them with another group.

% Story Starters

Language Arts Focus (K-9)

Equipment: paper, pencils

- 1. Give each student a piece of paper and choose a theme related to a topic covered recently in class.
- 2. Have the students begin writing a story (the first few lines).
- 3. After one minute, stop the students and have them crumple up their paper and throw it to the other side of the room. Students then move around the room, using a different locomotor movement each time, to find a new piece of paper.

- 4. On a signal, students pick up a paper that is close to them and read the story starter. They continue writing the story for the next minute.
- 5. Continue this for several rounds, then have the students share their stories in groups.

Mathematics

Instead of stories, have the students start a number pattern and continue adding to the patterns of the other students. Have the students create a song with actions about number operations.

Science

Have the students write stories about the life cycle of a plant, frog or butterfly; e.g., A year in the life of They could write a story that takes place in a science-related environment—tour of a factory that uses simple machines, a forest ecosystem, wetland ecosystem, outer space.

Social Studies

Have the students write stories as a witness to an historic event or the meeting of a historical figure or a person from another culture of the past or present.

Equipment: none required

- 1. Divide students into groups of six to eight and have them stand in a circle.
- 2. Have one student start by performing a stretch and holding it.
- 3. One at a time, moving in a clockwise direction, the other students perform the same stretch.
- 4. Once it has been passed around the circle, the student to the left of the first student performs a different stretch and the wave continues.
- 5. Cool down after the activity to allow the heart rate to slow to a resting rate.

Equipment: none required

Note: Perform while lying down or sitting down.

- Have the students make their whole body as tight and stiff as possible. Hold this for a count of five and release. Breathe in and out slowly. Tighten one body part at a time in the following order: one hand, both hands, one arm, both arms, one leg, both legs, buttocks, whole body.
- 2. Conclude this stretch by repeating the activity, this time releasing one body part at a time in the following reverse order: whole body, buttocks, both legs, one leg, both arms, one arm, both hands, one hand. Breathe in and out slowly through the nose.

% Student Presentations on Physical Activities²⁷ (K-12)

Equipment: varies based on student presentation

- 1. This small group project will fulfill your physical activity requirement for several weeks. Teacher will organize students into small groups (three to four students in each group).
- 2. Students will develop physical activity presentations based on class academic content. Allow students three to five minutes for four class periods to prepare and practice their presentations.
- 3. Presentations should begin on day five with one group per day.
- 4. All students will participate in each group presentation.
- 5. Presentations could last three to five minutes
- 6. Students could choose to deliver their presentation live to their class or by video.

Variations: Size of group, length of presentation, and type of physical activity

★ Textbook Aerobics (4-9)

Equipment: hardcover books

- Have the students take out their textbooks or dictionaries and use them to do the following exercises:
 - **Bicep curls:** Hold the book in one hand and bend at the elbow to raise the book toward the shoulder.
 - Triceps dips: Hold the book in one hand and lean forward over the desk with the other hand holding the desk. Hold the arm with the

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²⁷ TAHPERD Physical Activity Taskforce 2007

book parallel to the body, bend the elbow to 90° and raise and lower the book extending backward up to shoulder level.

- Overhead lifts: Hold the book in one or two hands and lift it above the head in one smooth motion.
- Twists: Hold the book to the chest with both hands and twist slowly from side to side.

% Traffic Jam Activity²⁸ (9-12)

Mathematics Focus

Equipment: Stepping stones (several sheets of recycled paper works great)

Group size: 6-12 (smaller groups are easier, larger groups are more challenging)

Here's the problem: One more stepping stone should be present than there are students in each group. If an odd number of students exists in one group it is OK, it will just be an added challenge for that group. Divide each group in half and have the students stand on the "stones" leaving an empty "stone" in the center.

1. The Challenge: Exchanging Places

Everyone must move so that the people originally standing on the right-hand stepping stones are on the left-hand stones, and those originally standing on the left-hand stepping stones are on the right-hand stones, with the center stone again unoccupied (the groups must trade places).

2. The rules:

- Only one person can move at a time.
- You can only move onto an empty stone or you may "jump" another person if there is an empty stone on the other side.
- You may not "jump" more than one person.
- After each move, each person must be standing on a stepping stone.
- If you start on the left, you may only move to the right. If you start on the right, you may only move to the left. You can not back track.
- If you get in a "traffic jam" you must start over.

3. Introducing the Activity

Large movement experience:

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 $^{{\}color{red}^{28}} \ {\color{red}^{mathforum.org/alejandre/frisbie/student.jam.html}}$

- Each group of 6 students is given 7 sheets of paper to use as stepping stones. Areas of the room are assigned to each group and the activity begins.
- · Allow enough time for groups to try to find the minimum number of moves necessary to complete the task.

4. Using Manipulatives

- Simulating the activity:
 - Once the activity has been experienced as large movement, students use what has been learned to try it on a smaller scale.
 - Each group is given 6 small plastic figures or other objects with which to simulate the activity. As groups try to find the fewest number of moves necessary to complete the exchange of places, the teacher circulates among them to monitor the activity.

5. Revisiting the Activity

- At this point, students have investigated the problem using large manipulatives (their bodies), small manipulatives (plastic figures), and technology. Some students will discover the minimum number of moves for 6 people because they successfully complete the activity using the Java applet, and the computer tells them they are correct! Other students will not master the activity, but may have a better understanding of the task.
- Once more have the students assemble in their groups of six and repeat the activity using their bodies and the paper stepping stones. As they repeat the activity, observe groups that are successful and ask them to think of some "rules" to account for their success.

6. Extending the Activity - Looking for Patterns

- Have the students sit down and think in terms of a pattern:
 - · What if there are only 2 people and 3 spaces?
 - · How many moves does it take for the two people to exchange positions?
 - · What if there are 4 people and 5 spaces?
 - · How many moves does it take for 4 people to exchange positions?
 - · What about 6?
 - What about 8?
 - · What about 10?
 - · Can you find a pattern for any number of people?

- 7. Writing the Answer Algebraically
 - Students can first make a data table using the information gathered so far. There might just be columns for the number of pairs, the number of people, and the first 3 entries for the minimum number of moves.

number of pairs number of people minimum number of moves

1	2	3
2	4	8
3	6	15
4	8	
5	10	
6	12	

- Ask students: What patterns do you see? Are there any relationships among the numbers in any of the three columns? Consider just the first and third column. What if we let n equal the number of pairs? Can we generate any of the numbers in the minimum number of moves column?
 - Does $1^2 + 2(1) = 3$?
 - Does $2^2 + 2(2) = 8$?
 - Does $3^2 + 2(3) = 15$?

The completed table might look like this:

number of	number of	min. number of	another view
pairs	people	moves	1^2 + 2(1) = 3
1	2	3	2^2 + 2(2) = 8
2	4	8	3^2 + 2(3) = 15
3	6	15	4^2 + 2(4) = 24
4	8	24	5^2 + 2(5) = 35
5	10	35	6^2 + 2(6) = 48
6	12	48	
•••	•••		n^2 + 2(n) = n(n +
n	2n	n^2 + 2(n)	2)

% Travel the Globe

Social Studies Focus (K-9)

Equipment: numbered cards, map of United States/World overheads

- 1. On an overhead of an unlabelled map of the United States, number the states.
- 2. Identify five to six students as taggers. These students are "it" and try to gently tag the others. All other students travel around the play space while hopping on one foot or crab walking, trying not to get tagged.
- 3. When someone is tagged, the tagger calls out "state" and the person tagged chooses a number of a state and answers with the capital city. If the answer is correct, the tagged student is now a tagger and the one who tagged them joins the group moving around trying not to be tagged. If the answer is incorrect, the tagged student goes back to moving around, trying not to be tagged.
- 4. Adapt the map for other topics, such as countries of the world, regions of the United State or continents of the world.

Cross-curricular Linking

Social Studies

Review social studies vocabulary and have the students spell them in groups. Have the students "travel the globe" by moving around the classroom using historic transportation methods covered in class; e.g., the railway, pioneer wagons, portaging fur traders, sailing explorers.

Equipment: trivia cards, paper, markers

- 1. Divide the students into groups and have them line up at one end of the classroom. Place a pile of trivia cards in line with each group at the other end of the classroom.
- 2. Have one student from each group jog, skip, hop, side-step, walk backwards or walk on tiptoes to their group's cards, choose the top one and write the answer on the front board.
- 3. The student then checks his or her own answer and, if correct, marks a check on the board and returns to tag the next person on the team. If the answer is incorrect, no check mark is awarded and the student does 10 jumping jacks and returns to tag the next person on the team.

4. The next person in line takes a turn and the game continues until they have accumulated the required number of check marks.

Cross-curricular Linking

Mathematics

Have the students draw shapes (2-D and 3-D) or illustrate concepts, such as transformation. Use word problems and have the students show the number operations during the trivia relay.

Social Studies

Have the students ask trivia questions related to social studies content, such the geography of the United States and Tennessee's history.

Equipment: none required

- 1. Choose a student to lead the class as Simon.
- 2. Have the leader say "Simon says...," then give an activity suggestion, such as:
 - If water is a healthy drink, skip around your desk.
 - If skateboarding is a strength activity, touch the front white board.
 - If stretching is a good stress management technique, reach for your toes.
- 3. If the answer is true, the students complete the suggested activity. If the answer is false, they stand still.

Cross-curricular Linking

Language Arts

Use the activities to reinforce vocabulary and grammatical elements.

Social Studies

Ask true and false questions related to the social studies curriculum.

Science

Ask true and false questions related to the science curriculum.

Walkie-Talkie Break²⁹ (K-12)

Equipment: none

- 1. Teacher will organize students into small groups (two to three students per group).
- 2. The teacher will assign an academically related topic that students must discuss during a three to five minute walk.
- 3. Upon returning to class, students will report on their discussion.

Variations: size of group, discussion topic, or duration of the walk

Warp Speed³⁰ (K-12)

Equipment: a stopwatch, several soft balls or throw able objects (balls of recycled paper work great). This is a great follow up to the Group Juggle

- 1. Warp Speed is a Group Juggle spin-off activity to add more focus on problem-solving and teamwork.
 - Follow the format of the Group Juggle to get started.
 - Ask the group how fast they can pass the ball to everyone using the same order as the group juggle. Groups can set a goal and then try to beat it. Push them to go even faster.
 - Challenge the group to see how fast it can juggle one ball around the whole group using the same order (you can also include saying names, etc. if you like).
 - Allow the class time for discussion and planning.
 - Then ask the class to set a goal. Start the activity and time the group.
 - If they beat their goal as them to set a new one and try to beat that one.
 - If they don't beat their goal, ask the class to discuss why they were not able to beat it, after the discussion set a new goal if needed and try again.

You can also incorporate even more group problem solving by saying "OK class, now lets try to beat your best time. The only rule is that everyone must "possess" the ball in the exact same order. You now have two minutes to come up with an idea that will beat your best time."

Allow the group time to come up with ideas such as changing the size of the circle, change the order of the circle or breaking the circle to make a line

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for the ball to travel down. Encourage them to "think outside the box" but try not to give them ideas. You can allow the group several tries using several ideas as long as everyone "possesses" the ball in the same order.

If you give the group several attempts and allow discussion between attempts this could take up to 30 minutes. Another option is to stretch the activity out for a week. Start the activity on Monday and give the class one attempt. Then ask the class to think of some ideas that they can share with the class tomorrow before another attempt. The class can then try to improve their time each day.

Equipment: pencil and paper

- 1. Students group into pairs at their desks.
- 2. Partners face each other (one facing the board and the other facing the back of the room)
- 3. The teacher writes a series of professions on the board which could include:
 - Teacher
 - Basketball Player
 - Hockey Player
 - Doctor
 - Fireman
 - Chef
 - Truck Driver
- 4. The student facing the board must act out the entire list in 2 minutes while the student facing the back of the classroom attempts to write down which profession his/her partner is acting out.
- 5. After the 2 minutes has ended, the students facing the back of the classroom turn around and see if their lists match that on the chalkboard.
- 6. Students in each group switch places (the writer becomes the Actor and visa versa).

Note: entire game could be played silently

Variation: Create a different list of professions for each group.

 $^{^{31}}$ East Carolina University, Activity Promotion Laboratory

% Who, What, When and Where 32 (9-12)

Equipment: none

- 1. Students group together in 4 teams (e.g., by rows)
- 2. The teacher selects a list of vocabulary words or questions for review.
- 3. The students must complete a series of movements in order to receive each question. When each student in a group has completed the assigned movement, they must sit down and raise their hands to answer the question.
- 4. The teacher will then give the group their question.
- 5. Movements for questions one through five:
 - Each student in the group must jump up toward the ceiling then touch the floor five times.
 - Students must hop on one foot while turning in a circle ten times.
 - Students jog in place for 30 seconds.
 - Students do imaginary jump rope for ten seconds.
 - Students must combine previous movements.

Variations: Review for all subject areas and grade levels

Gym or Open Space³³

The activities included in this section can be completed in any gym or open space. If gym access time is limited, consider using an empty classroom, other open indoor space or the playground. These activities often require some equipment and set up. Consult with your school's physical education teacher about the equipment available and consider organizing an equipment sign-out system for teachers.

Although these activities may require more work on the part of teachers in terms of set up and organization, they offer students greater benefits in terms of physical fitness.

Tips for the Gym or Open Space

Consider joining up with another class.

³² TAHPERD Physical Activity Taskforce 2007

³³ Reproduced with permission from Alberta Education, *Daily Physical Activity: A Handbook for Grades 1-9 Schools* (Edmonton, AB: Alberta Education, 2006), pp. 75-83.

- Have students keep a log of their progress and improvement over time.
- Take turns with other teachers setting up the room for a weekly activity.
- Consider moving these activities outside if the weather is nice.
- Set a goal to organize one or more gym or open space activity every week, several weeks or month.
- After students participate in a physical activity, ask them to modify the activity or re-invent a game to help encourage student engagement and interest.
- Encourage students to recognize fair play and sportsmanship as essential components of physical activity. Students should learn to play by the rules and show respect for themselves and others.
- Have students volunteer to teach the rest of the class a game from their own cultural backgrounds. Make a class collection and share it with the rest of the school.

% Action Stories

Language Arts Focus (K-6)

Equipment: none required

- 1. Tell a simple story that contains many different types of actions and characters and have the students act out the characters and their actions, such as:
 - Animals: elephant, gorilla, kangaroo, horse, bird, alligator, rabbit
 - Machines: cars, planes, helicopters, spaceships, robots, elevators, toasters
 - Nature: trees, grass, growing flowers, lightening, wind
 Themes to use for story lines include:
 - a trip, or traveling to a destination
 - a visit to the zoo, factory
 - a quest or adventure
- 2. As a variation, have students act out walking conditions and respond to safety obstacles as they walk to the school or park, for example, walking in long grass, stopping at a crosswalk, walking slowly in front of bakery while enjoying the smells, looking both ways before crossing street.

Science

Have the students imagine the feeling of flight during a lesson on flight and aerodynamics. Have the students imagine that they are astronauts exploring the moon or various planets. Have the students write action stories that describe processes in nature or how machines work.

Mathematics

Instead of action stories, have the students create action word problems.

★ Balloon Activities³⁴ (K-12)

Location: Preferably inside. Balloons are susceptible to even the slightest wind which can be frustrating. Plus, there are fewer accidental balloon bursts inside.

Equipment: Ideally, start with 2 to 3 assorted round 9 to 12 inch (medium to large) round latex balloons per person (deflated). The actual number needed depends on group size, the specific activity, and whether it involves bursting balloons. Sports equipment, permanent markers, and slips of paper are optional. To purchase the ideal balloons in bulk, see <u>Balloon Activities Kit</u>.

Hygiene: Only one person inflates each balloon.

Hyperventilation: Can occur following quick, deep breaths from the top of the chest when blowing up balloons, leading to a lack of CO2 (Carbon Dioxide) in the blood. Symptoms include lightheadedness. Encourage anyone experiencing this to sit down and to breathe slowly.

BALLOON ACTIVITY	DESCRIPTION
Balloon History	Balloons - in one form or another - have fascinated human beings for centuries. Ask participants to guess who invented the modern balloon and when it was invented (Answer: In the mid-1800s by Michael Faraday). However, it wasn't until 1931 that there was mass production of modern-day blow-up-by-yourself colored latex balloons.

^{34 &}lt;u>www.wilderdom.com/games/InitiativeGames.html</u>

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Balloon Inflation	Each person blows up a balloon. Balloons work best for games at about 85% of inflation capacity. Keen participants often over-inflate which leads to higher burstage. Less confident participants may under-inflate. You can turn the ideal inflation into a game and demonstration. Show the ideal inflation and walk around coaching people. 85% inflation also allows a handy distance for tying a thumb-knot in the neck of the balloon. Some participants may need a hand to tie the balloon off - encourage cooperation amongst participants rather than doing it yourself.
Balloon Juggle & Sort	Challenge participants to keep all balloons (1+ per person) in the air. This gets the group moving and cooperating. Once they've got the hang of it, make it harder by adding in more balloons or placing restrictions e.g., no hands to keep balloons up. Ask participants to keep juggling the balloons, but to sort them into colors (works best with large groups).
Two to three inflated balloons per person are needed and a stopwatch. Each person has a balloon, with the rest in a nearby pile. Everyone begins bouncing their balloons in the air. Every five seconds, another balloon is added. See how long the group can keep the balloons bouncing before receiving six penalties. A penalty is announced loudly (to create stress!) by the leader when a balloon hits the floor, or once on the floor, if is not got back into play within five seconds. The leader keeps a cumulative score be shouting out "one", "two", etc. When the leader gets to "six", time is stopped. After some discussion, the group tries to better its record with another attempt.	

Catch the Balloon	A handy name game. Stand in a circle. Toss a balloon in the air and call someone's name. That person must catch the balloon before it touches the ground. If the person succeeds he/she then tosses the balloon up and calls the next name.
Balloon Bop	An extension of Catch the Balloon. Now the balloon is not caught, but kept in the air. As well as calling out someone's name, also call out a body part which that person has to use to keep the balloon in the air until he/she calls another person's name and body part.
Balloon Blow	Divide into teams. Each team stands in a small circle. See which team can keep a balloon aloft the longest using only breath. Watch out for hyperventilation!
Balloon Help	Start off with everyone in a circle, facing inwards, hands behind back. The objective is for everyone to be in the center keeping all balloons afloat. Put between zero and three balloons in people's hands behind their backs. Participants should not let on to others how many they have. The leader starts by trying to keep three balloons afloat in the center. When it becomes difficult, the leader calls somebody's name and says "X, I need your help!". That person comes in with all their balloons and helps until it becomes difficult and then they call "Y, I need your help!". If a balloon falls on the ground, it must be picked up by someone in the center and kept afloat.
Balloon Finger Balance	Try balancing a balloon on the end of your finger. Have a competition to see who can do it for the longest. The balloon must not be held, only balanced, and it must not be tapped. The finger must be in direct contact with the balloon at all times. Good for focus, concentration and

	physical movement.
Balloon Ball Games	Ball sports take on a new dimension when a balloon is used instead, e.g., get people into pairs, 1 balloon between them. Get them to play a series of 1 on 1 sports e.g., soccer, volleyball, table tennis, etc add equipment if you want, but without equipment people will improvise wonderfully. On a soft surface there can be dramatic diving. Variation: Ask participants to play some points in slow-motion.

Equipment: music and audio equipment

- 1. Choose music with a strong 2, 4 or 8-beat rhythm. Selections such as "In the Jungle," "Mission Impossible" and "Holiday" work well, as do many movie soundtracks.
- 2. Divide the class into groups of three or four. Each group needs to find a space and stand in a triangle (three people) or a diamond (four people). If there is a group of five, have them stand in a diamond shape with the fifth person in the middle.
- 3. Have one student in each group be the first leader and create a sequence of moves. Establish the criteria, for example, two levels (high, middle, low), two pathways (zigzag, diagonal, circular) and one unique move or step (step, hop, skip), for a total of 16 counts. Leaders lead their groups through their dance sequences. The last move is a rotation of the group, establishing a new leader.
- 4. Have groups flock by travelling throughout the classroom while keeping in time with the music. Encourage groups to listen and move to the music with smooth, flowing transitions from leader to leader. Sometimes groups may pass directly through other groups during their sequence.

Equipment: feathers, music with a strong beat, audio equipment

Note: Space and safety must be considered for these activities.

- 1. Give each student one feather and have them take it to an open space. Remind students to place the feather in their palm and cover it with the other hand to keep it secure when walking around and to keep their eyes on it during the activity. For some students, consider using a larger or brightly colored feather.
- 2. Have the students practice balancing activities, such as:
 - Balance a feather in the palm of the right hand, then the palm of the left hand.
 - Balance the feather on the index finger of the right hand, and then repeat with the left hand.
 - Balance the feather on each finger and on other body parts; e.g., elbow, shoulder, wrist, knee, nose.
 - Transfer the feather from one body part to the other without letting the feather touch the floor.
 - Transfer the feather between partners using different body parts.
 - Have the students create their own balancing activity and share it with the class.
- 3. Have the students practice feather challenges, such as:
 - Toss the feather into the air and catch it.
 - Toss the feather into the air and catch it with various body parts.
 - Hold the feather up high, release it and keep it aloft by fanning it with hands or other body parts.
 - Hold the feather up high, release it and try to imitate its falling motion with the body.
 - Hold the feather up high, release it and punch it with a fist or foot as it falls.
 - Hold the feather up high, release it and spin around two, three, four or more times, catching the feather before it lands on the floor.
 - Blow the feather up high, then maneuver underneath it so it lands on the nose or face.
 - Release the feather, then quickly lie down and move into position to catch the feather on the stomach.

4. Divide the students into teams and have them blow their feathers into the air. Each team tries to keep their feathers aloft. A goal line can be designated and teams attempt to get their feathers across the line first. If the feather falls to the floor, the team must begin again.

Equipment: masking tape or skipping ropes to mark the area

- 1. Have students work in pairs to lay out a four-square pattern on the floor using skipping ropes, lines on the floor or masking tape.
- 2. Demonstrate and have the students practice the following jumping patterns:
 - Regular jump: jump with feet together on the spot, five times.
 - Side-to-side (square 4 to square 3 and back) five times, feet together.
 - Up and back (square 4 to square 1 and back) five times, feet together.
 - One foot jump up and back (square 4 to square 1 and back) five times each foot.
 - Side to side one foot (4 to 3) five times, each foot.
 - Triangle (square 1 to square 2 to square 4) five times, feet together.
 - Four square (1-3-2-4) five times, feet together.
 - *Some students may need to use a wall for guidance and balance.

 Instructional posters with clear graphics may enhance understanding for students.
- 3. Have one partner try to complete the jumping patterns in order, doing as many jumps as possible. Then the other partner takes a turn. Encourage quick jumps for each pattern and verbal support for one another.
- 4. Once completed, challenge students to create their own patterns of jumps.

Cross-curricular Linking

Language Arts

Divide the students into groups and have them create a game based on the four-square, write up their instructions and share them with another group.

Mathematics

Show equations to the class and have the students jump on the number that represents the correct answer.

Science

Instead of numbers, mark the 4-square with classes of animals. Call out an animal and have the students jump to the correct class. Consider using other types of categories, such as simple machines, seasons, recyclables or plants.

Social Studies

Instead of numbers, mark the 4-square with continents. Call out a country and have the students jump to the correct continent.

Equipment: none, but you will need a fairly open area

- 1. Have your students form a circle (you can divide your class into two groups to make it a little easier). Have your students put their right hand into the circle and grasp a person's hand across from them.
- 2. Once everyone has found a hand instruct them to keep hold of that hand until the end of the activity. Then have them reach across with their left hand and choose another's hand from across the circle. Make sure each student is holding hands with two other students.
- 3. You can then instruct the group to untangle the knot to form one big circle without letting go of anyone's hands unless directed by you. Supervise the group to make sure everyone is comfortable with the situation and be sure everyone is working together. If anyone is in an uncomfortable position you can direct the student to break his/her grip, move to a comfortable position and then rejoin with his/her original partners.

Equipment: a number of playground or indoor soccer balls, pylons (optional), benches or lines marked on the gym wall

 Divide students into groups of three. Have them stand one behind the other behind a cone, with all groups positioned along one side of the activity area. The student at the front of each group holds an indoor soccer ball.

³⁵ TAHPERD Physical Activity Taskforce 2007

- 2. On a signal, the first student in each group uses his or her feet to dribble the ball to the opposite end of the gym. Students decide how close to get to the wall before attempting to kick the ball at the wall. Remind students about the key points of kicking a soccer ball. Some students who are unable to kick may throw the ball instead to be successful. For some students the start and finish line may require adjustment.
- 3. If the ball goes above bench height, it is worth one point for their team; if the ball goes above a higher line on the wall, it is worth three points.
- 4. Each team keeps a running total of their own points. After the kick, students pick the balls up and run them back to their groups, placing them on the floor in front of the next student in line. Students are only allowed one kick each time.
- 5. Continue the relay for about five minutes. The faster the group works, the more kicking chances each person receives. At the end of the activity have teams report their scores, which they will try to better next time.
- 6. Each group of three students sits three to five meters apart. The first student in each group lies on his or her back, holding the indoor soccer ball with both hands and stretching it above the head. Slowly, they sit up, reach forward with their legs extended and roll the ball to the next student, who repeats the same stretching movement before rolling the ball to the third student. Have the students pass the ball along the line twice.

Languages

Mark the targets on the wall with vocabulary words or parts of a sentence. Call out a word (homonym, synonym, adjective, verb or adverb) and have the students hit the correct target.

Mathematics

Mark the targets on the wall with numbers or mathematics vocabulary. Call out a number or show an equation (equivalent numbers, shapes, measurements) and have the students hit the correct target.

Science

Mark the targets on the wall with science vocabulary. Call out a definition or show a picture (parts of plants, chemical compounds, aerodynamics) and have the students hit the correct target.

Social Studies

Mark the targets on the wall with the continents, provinces or cultural groups. Call out a place name or a value/belief and have the students hit the correct target.

Equipment: two pieces of paper or beanbags for every student

- 1. Have students stand beside their desks or in their own space and crumple one piece of paper into a paper ball.
- 2. Have them toss and catch the paper ball with two hands and repeat 10 times. Toss the ball without making a sound. Toss the ball with one hand and catch it in two hands. Repeat 10 times.
- 3. Have students toss the ball up, clap once and catch it in two hands. Toss the ball up and clap two times. Toss and clap three times. Use the other hand to toss and repeat the pattern.
- 4. Have students toss and catch the ball with their right hands, then their left hands. Toss with one hand and catch with the other.
- 5. Have students toss, touch their shoulders and catch. Toss, touch their knees and catch. Toss, turn around and catch. Practice other ways of tossing and catching the ball.
- Have students throw the ball to a spot on the wall, ceiling and floor, toss and catch with a partner and use the other piece of paper as a second ball and juggle. Have students invent their own tricks with partners.
- 7. Divide the teaching space in half and create two teams. Each student has two paper balls, one in each hand. At the command "GO," have students throw the balls to the other half of the activity area. After one minute, students freeze and the balls are counted. The team with the fewest paper balls on their side is declared the winner.

Equipment: sheets of recycled paper or tin plates

- 1. Distribute two sheets of recycled paper to each student.
- 2. Have students put the paper on the floor and place one foot on top of each sheet, making sure their feet are firmly anchored on the paper.
- 3. Challenge students to move around the activity area and "skate." Students skate forward, backward, jump and turn to change direction. For children with small feet, tin pie plates may be used. Students use their arms to "ski" around the space, cross-country style, tuck or schuss. Students can change movement patterns upon a signal; e.g., hockey or ringette, speed skating
- 4. (long strides, one hand on back, body bent forward).
- 5. Have the students try the following moves:
 - Twist: Twist back and forth on the paper.
 - Wax on, wax off: Brush one foot in a circle, then the other.
 - Scissors: While standing in one place, slide one foot forward and one foot back in a continuous motion.
 - Spin out: Stand in place and spin on one foot.
 - Moon walking: Move backwards on the paper without lifting your feet.
 - Scooter: Slide on one foot and push with the other.
 - **Slide step:** Slide your right foot first, then your left foot, moving to the right (then switch directions).
 - 180°: Jump in the air, rotate 180° and try to land on the paper.
 - 360°: Jump in the air, rotate 360° and try to land on the paper.

Equipment: scooter boards, pylons (optional)

- 1. Have the students lie face down on the scooter boards, holding their feet off the floor while moving forward using their hands only. Next, have them move forward using their feet only. Finally, have them move forward using both their hands and feet. Have the students roll onto their backs and repeat the movements. Have the students kneel on the scooter and pull themselves forward, backward, in a circle and develop a new pathway.
- 2. In lines, form equal teams and give each student at the front of the line a scooter board. Place a pylon at one end of the playing area to identify a turning point.

- 3. On a signal, each player takes a turn performing a specified action to propel them around the pylon and back before giving the scooter to the next person in line and then joining the end of the line.
- 4. Have students place one hand on the scooter to move it forward with the other hand behind their backs while they run to the pylon. Upon reaching the pylon, have them switch hands and run back to pass the scooter to the next player in line.
- 5. Have students kneel on the scooter (or sit cross-legged) and pull themselves forward using their hands only.
- 6. Have each student sitting on a scooter. The first students in line move forward and around the cone using their feet only. Upon returning, the first students grasp the wrists of the next students in line and repeat the relay with this next student. Upon returning, they add a third student. This continues until all the team members are linked and have gone around the pylon and back to the start line.
- 7. Have students find partners and give them one scooter between them. The students on the scooter boards get into a front support position and the partner grasps their legs, holding above the knees, and pushes their partners in different directions. Partners then switch roles.
- 8. Have the students create and play games using the scooter boards, such as scooter board tag or dodge ball scooter.

Cross-curricular Linking

Language Arts

Have the students write simple instructions for a new game using the scooter boards.

Mathematics

Create a graph on the floor of the gym and have the students go to specific intersecting points on their scooters; e.g., (4, 7), (2, 9).

Social Studies

Have the students create a map of the gym along with instructions using cardinal directions. Mark the walls with the four directions and have the students exchange maps and follow them.

% Snap, Crackle, Pop

Language Arts Focus (K-9)

Equipment: lettered beanbags or letter cards

- 1. Divide the students into groups of three and have them sit down, one behind the other in a circle formation. The entire class creates a wheel and each group acts as a spoke of the wheel.
- 2. The students closest to the centre are "Crackle"; the middle of the spokes are called "Snap" and the back are called "Pop."
- 3. Place lettered beanbags or letter cards in the centre of the circle. Call out one name (i.e., Snap, Crackle or Pop) and all the students of that name stand up and run (skip, gallop, crab walk) clockwise around the outside of the wheel.
- 4. The other two students remaining in each group then stand up, face each other, hold hands with arms straight and form a bridge.
- 5. When the running student has finished running around the wheel, they run under the bridge, retrieve a letter and all three sit back down with their group.
- 6. Continue until all the letters are gone from the centre circle and challenge each of the groups to come up with as many words as possible using their retrieved letters.
- 7. Challenge the students to spell specific types of words (e.g., adjectives, verbs, adverbs) or to create a class poem with all the words the groups spell.

Cross-curricular Linking

Mathematics

Use numbers instead of letters and have the students create equations. Also have the students write word problems based on the equations they created.

Science

Instead of letters, use parts of a system (e.g., animal and plants in an ecosystem) and have the students create a flow chart that shows the relationships between them.

Social Studies

Instead of letters, use dates and events and have the students organize them in a time line.

* Travel Your Name

Language Arts Focus (K-9)

Equipment: alphabet cards, music (optional), pylon

- 1. Create a set of alphabet cards. On the bottom of the laminated letter, write a type of locomotor movement (skipping, hopping or jogging) or specify a fitness skill to practice (10 wall stretches for flexibility or 10 wall sits for muscular endurance and strength). Tape alphabet cards to the walls around the gym.
- 2. Play music and have the students skip in a straight pathway to the first letter of their name.
- 3. Have them touch the letter and then travel to the next letter using the kind of locomotor specified. They continue until the music stops or they have spelled their name. For double letters, e.g., Shannon, they must travel to the pylon in the middle of the gym, do the locomotor movement specified there and then head back to the letter. For children with very short names, ask them to continue spelling a pet's name or the school name.
- 4. For older students, have the students spell various spelling words or use the events in a story and have students travel to them in the order in which they happened.

Cross-curricular Linking

Mathematics

Have the students travel to numbers in order of smallest to largest (use fractions and decimals for older students). Instead of calling out a number, show an equation and have the students form a group the size of the number that is the solution to the equation.

Science

Have the students spell science vocabulary words or go to a series of events in the order in which they occur (life cycles, weather patterns, seasonal changes).

Social Studies

Have the students spell social studies vocabulary, identify events on a time line or identify places from nearest to farthest away.

% Vowel Catcher

Language Arts Focus (K-6)

Equipment: pinnies or foam balls

- 1. Divide the class into two equal groups. Have the groups line up on an end line at either end of a playing area.
- 2. Assign each student a vowel and identify two taggers (they can wear a pinnie or hold a small foam ball). Have the taggers stand in the centre of the playing area.
- 3. Call out a word. If a student's vowel is contained in that word, they try to move across the gym using a specific locomotor movement (skipping, side steps, galloping, walking) without being tagged or hit with a foam ball. If the vowel runner is tagged or hit, they become a tagger and the previous tagger becomes the vowel. If vowel runners cross the line on the other side without being tagged, they continue to be vowel runners.
- 4. Change the game by using content, such as parts of a sentence, story or paragraph.

Cross-curricular Linking

Mathematics

Use content, such as types of shapes or numbers represented in multiple ways.

Health

Use content, such as food groups or parts of the body.

Outdoors³⁶

Winter Outdoors Tips

Frostbite and hypothermia are the most serious threats from exposure to cold. Frostbite occurs when so much heat is lost that water in tissue close to the skin freezes. The ears, face, fingers and toes are most susceptible. Early signs include tissue that is waxy, white, numb, tingly and cold.

Hypothermia is a potentially fatal condition in which core body temperature falls dangerously below the normal 37° C. The earliest signs include numbness in the hands and feet and slight shivering. Continued exposure to

³⁶ Reproduced with permission from Alberta Education, *Daily Physical Activity: A Handbook for Grades 1-9 Schools* (Edmonton, AB: Alberta Education, 2006), pp. 119-126.

the cold can lead to more intense shivering, slurred speech, drowsiness and feeling of exhaustion.

When any of the above symptoms appear, it is crucial to seek shelter, get into dry clothing and have a snack (preferably a hot drink). Serious cases require immediate medical attention.

- Dress for the weather. Layers of loose-fitting clothing trap air and provide good insulation. The inner layer should be absorbent wear: the middle layer(s) warm and the outer layer water repellent and wind resistant.
 - hat (warm, close-fitting and covering ear lobes; not a "fashion" hat or baseball cap)
 - mittens (gloves do not keep hands warm as effectively as mittens)
 - loose layers (an absorbent synthetic fabric next to skin, a warmer middle layer and a water resistant/repellent outer layer)
 - socks (a single pair of socks, either wool or a wool blend with silk or polypropylene is better than cotton, which offers no insulation when wet; avoid extra thick socks, as they can cause cold feet by restricting blood flow and air circulation around the toes)
 - o **boots** (be sure boots are dry and not too tight)

Children should get out of wet clothes and shoes as quickly as possible as they are the biggest factors in frostbite. Jackets should be zipped up. To avoid strangulation during play, use tube-shaped neck warmers instead of scarves. If scarves must be used, tuck them into jackets. Remove drawstrings on hoods and jackets, as they are also a safety hazard.

- Get set. Warm up and stretch indoors before going out in the cold.
- Beware of the wind. Take the wind chill factor into account, and plan routes so that the wind is at your back near the end of the session.
- Watch for fatigue. Do not push yourself in extremely cold weather.
- Use the buddy system. Try to be active with a companion, and keep your eye on one another.
- Do not dally. When activity is finished, come in from the cold and change into dry clothing as soon as possible.

When is it too cold to walk or play outside?

- If the temperature falls below -25° C (-13° F), regardless of the wind chill factor.
- When the wind chill factor is reported as -28° C (-15° F) or greater (this is the temperature at which exposed skin freezes in a few minutes).

Being Sun Safe

Even in winter, you can still get a sunburn. Reduce sun exposure when the sun is highest in the sky.

- Find shade or create your own shade.
- Wear a wide-brimmed hat or toque and sunglasses with UVA and UVB protection.
- Wear sunscreen with minimum SPF 15 or higher with UVA and UVB protection (higher for individuals spending extended periods of time out of doors).

Tips for the Outdoors

- ✓ Have students log their progress and improvement over time.
- ✓ Use equipment that is part of your existing playground in your
 activities
- ✓ Consider moving these activities indoors during inclement weather.
- ✓ Have the students bring water bottles out with them or provide refreshments so that they do not become dehydrated.
- ✓ Review safety issues and rules specific to playing outdoors before the activity. Students should also be positioned so they do not have the sun in their eyes, backs to the wind or a distraction within their range of vision while directions are being provided.
- ✓ Students should be instructed on the use of sun screen and hats to reduce sun danger.
- ✓ After students participate in a physical activity, ask them to modify the activity or reinvent a game to help encourage student engagement and interest.
- ✓ Encourage students to recognize fair play and sportsmanship as essential components of physical activity. Students should learn to play by the rules and show respect for themselves and others.
- ✓ Have students volunteer to teach the rest of the class a game from their own cultural backgrounds. Make a class collection and share it with the rest of the school.

% Alphabet Walk/Run/Wheel (K-9)

Equipment: paper and pencil/pen for every pair of students

- 1. Divide students into pairs and give them each a sheet with the letters of the alphabet or ask them to write the letters down the side of the page. You may want to exclude the letters Q, X and Z.
- 2. Have the pairs work together to find objects during their walk, run or wheel that begin with each letter of the alphabet, or each partner may complete half the alphabet. Some students may be asked to cover the area closest to the school. Some students may require the assistance of a buddy who can scan the area for debris or safety hazards. Set ground rules to increase the challenge for students.
- 3. Have the students check their heart rates and record them on sheets of paper every two to three minutes while participating. Speed should be adapted to ensure appropriate working heart rates are maintained.
- 4. While students stretch their ankles, calf muscles, hips and low back, discuss their ability to maintain their working heart rates during the walk, run or wheel.

Cross-curricular Linking

Language Arts

Challenge students to complete the alphabet walk/run in another language.

Science

Have students search for evidence of learned concepts in the environment, e.g., mechanical change, simple machines, or look for and classify living and nonliving things.

★ Capture the Flag (4-9)

Equipment: flags, rubber chickens or colored snowballs, snowshoes (optional), two sets of different colored pinnies, pylons

- 1. Divide students into teams and review the rules for the game:
 - Two teams spread 10 flags out around the field (a different colored flag is used for each team). Rubber chickens or colored snowballs could be used for flags.
 - Each team is on their side of the field wearing different colored pinnies.

- Each team makes a small area with pylons called a "snow hut" somewhere on their side.
 - Increase the challenge for older students by having one player guard the snow hut.
- Students must try to locate and obtain their opponent's flags; however, if you are touched on the other team's half of the field, you must go to their snow hut as a prisoner. Students could also play the game wearing snowshoes or with a partner tied to their legs.
- To be set free, a teammate will need to enter the opponent's snow hut and tag the teammate that is being held prisoner.
- The game is over once a team captures all 10 flags from the opponents. Use fewer than 10 flags if time is limited or if the participants are young.
- 2. Organize a challenge to other classes. The students could also challenge the staff of the school during outdoor lunch intramurals.

Cross-curricular Linking

Mathematics

Write equations or other number problems on the flags and have the teams find the correct solutions to each flag they capture (all answers must be correct to win).

Science

Write science trivia on the flags and have the teams answer the questions on each flag they capture (all answers must be correct to win).

Social Studies

Write social studies trivia on the flags and have the teams answer the questions on each flag they capture (all answers must be correct to win).

Equipment: master map of the school, controls (pieces of tape with letters), student score cards, colored pinnies

 Place several markers (controls) with letters or symbols on them throughout the field and school yard. Each control is given a point value depending on its distance away from the starting point and its accessibility.

- 2. On a map of the school grounds, accurately mark where the symbols are located to create a master map called the control map. Provide each pair of students with a scorecard. During the game, upon arriving at a control, students record a description and the clue letter or symbol of each control on their scorecard before moving on to find the next control. Make sure there are many more controls than students could possibly locate in the given time period.
- 3. On the signal to start, students study the control map and memorize as many different locations as possible before setting out to find the controls. Students can choose to start with any of the controls so they do not need to be located in a specific order. Staying together, pairs locate as many controls as possible and return to the start before the predetermined time limit is up (20 minutes). Pairs can return to the start to review the control map at any time.

Cross-curricular Linking

Language Arts

Use a word or phrases at each control with the goal of finding as many words and phrases as possible. The more controls the students get to, the better their chances are at completing the story. Partners could then act out the "story line" to the rest of the group, or create their own story line from the clues they have located.

Mathematics

Post a mathematics problem on each control for students to solve and record.

Science

Post a science trivia question on each control for the students to answer and record.

Social Studies

Post social studies trivia questions on each control for the students to answer and record.

Equipment: small red flag, whistle, clue sheet, treasure (pencils, snacks, stickers), snowshoes (optional)

Note: This activity can be completed on foot or on snowshoes.

- 1. Hide a small red flag somewhere on school grounds.
- 2. Give verbal or written clues that lead students throughout the school grounds. Every three to four minutes, blow a whistle to provide a clue. Encourage students to move quickly when following clues. Each clue directs students closer to the flag.
- 3. After each clue, have students place their hands over their chests to feel their hearts and take note of their heart rates. Emphasize that their hearts should be beating faster than when they started (be sensitive to students' differing fitness levels). A modified course on the tarmac may be offered or an additional flag may be hidden in a more accessible location for some students.
- 4. The student who finds the flag brings it to the teacher and wins a treasure for the entire class.
- 5. As an extension, challenge students to create or follow a map of the walking trails in the community.

Cross-curricular Linking

Language Arts

Address language arts skills and content in the clues; e.g., solving riddles, comprehension or editing.

Mathematics

Address mathematics skills and content in the clues; e.g., cracking a code using patterns or number operations.

Science

Address science skills and content in the clues; e.g., solving riddles using content such as flight and aerodynamics, chemistry, hearing and sound, or mechanical systems.

Social Studies

Address social studies skills and content in the clues; e.g., solving riddles using content such as communities around the world, physical geography of the United States, Renaissance Europe or economic systems.

Equipment: one paddle and ball for every student, a variety of balls suitable for rallying, 40 hoops

- 1. Have students hold paddles with a handshake grip, where the thumb and forefinger form a 'V' as they grip the paddles. Challenge students to complete the following skills using the paddles and balls:
 - 1. walk with a ball or beanbag balanced on the paddles
 - 2. strike the ball in the air and catch the ball between the paddle and hand
 - 3. strike the ball in the air and let the ball bounce before catching it
 - 4. rally the ball in the air using a forehand and backhand grip.
- 2. Have students try to set personal goals for the number of times they can rally the balls continuously. Provide appropriate feedback, demonstrate proper technique and use student demonstrators when appropriate. Some students may benefit from using a beanbag instead of a ball or by tethering a whiffle ball to a paddle bat. Some students may benefit from sitting so they can better concentrate on the task at hand.

Cross-curricular Linking

Science

Ask multiple choice questions and for each response have students bounce balls against targets marked A, B, C and D to identify the correct answer.

Social Studies

Ask multiple choice questions and for each response have students bounce balls against targets marked A, B, C and D to identify the correct answer.

Health

Ask multiple choice questions and for each response have students bounce balls against targets marked A, B, C and D to identify the correct answer.