

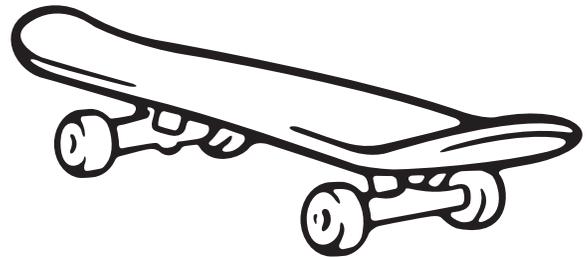
APPENDIX



Master List of Materials

To complete all of the activities and energizers in *Power Up for Learning*, you'll need the following materials:

- Traffic-type cones or several long pieces of yarn/rope or chalk (Activities 1, 2, 4, 5)
- Masking tape or self-adhesive labels (Activity 2)
- Pens or pencils (Activity 2)
- Flying disks (Activity 3)
- Hoops, shallow buckets, or paper grocery bags (Activities 3 & 4)
- How Much Do I Need? activity sheet from Activity 3 in the 4th or 5th Grade *School Idea & Resource Kit* (Activity 3)
- Bean bags, tennis balls, yarn balls, or scrunched up paper (Activities 3 & 4)
- *Children's Power Play! Campaign Power Up with Fruits and Vegetables* cups of fruits and vegetables poster, optional (Activity 3)
- Paper or cardstock (Activities 5 & 6)
- Felt-tip marker (Activity 5)
- Deck of playing cards (Energizer 2)
- Map of California or United States, optional (Energizer 5)
- Beach balls or balloons (Energizer 6)
- CD player and CD with Caribbean or Conga-style music, optional (Energizer 10)



Create a Healthy Classroom

Many of a child's waking hours are spent at school in the classroom. What better place to encourage children to be more physically active and to eat more healthfully! Physical activity and healthful eating help children stay energized and ready to learn. In addition to teaching your students about the importance of being physically active and eating fruits and vegetables, you can create a classroom that supports these behaviors.

Here's how to create a healthy classroom:

1. Inspire your students with your words and actions.

Let your students see you participating in physical activities at school or hear you talking about physical activities you participate in outside of school. Before students head out for recess, encourage them to do something physically active.

2. Do a scan of your classroom to be sure it supports physical activity and healthy eating.

Remove any posters, bulletin boards, or objects that promote unhealthy eating or sedentary behaviors (e.g., TV watching, video games). Put up posters, bulletin boards, and other images promoting physical activity and fruit and vegetable consumption (contact your *Regional Network for a Healthy California* to request *Children's Power Play! Campaign* and

Harvest of the Month posters). Avoid any objects in your classroom that could be considered an advertisement, especially those that promote unhealthy products.

3. Create a classroom that moves.

Provide opportunities for physical activity throughout the day. Movement facilitates improved attention and focused learning in the class. Use the energizers in *Power Up for Learning* between lessons or when you notice your students' energy levels dipping. Contact your *Regional Network for a Healthy California* to request an Instant Recess DVD. Join in and participate with the students. Offer physical education on a daily basis.

4. Keep kids moving during physical education.

- Look for movement. If you don't see enough, change the activity. For example, do a different drill or a timed challenge, reduce group size, add more balls, widen the boundaries, etc.
- Do not use drills or games that eliminate children and make them non-participants.
- Be line conscious! Be aware of how long children wait for a turn at bat or a chance to run. Form smaller groups, use more equipment, add activity/drill stations, etc.

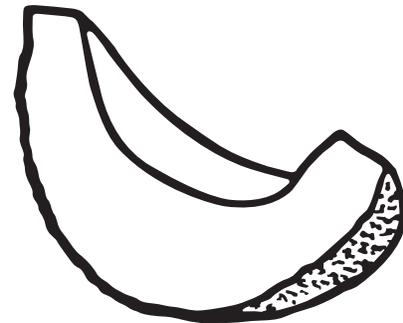
- Keep instructions short. Set aside classroom time for information that is best shared when children are sedentary. Establish the “Principal of 3s.” (Three for everything! 3 seconds to hold the ball, 3 dribbles before a pass, 3 seconds to throw a ball in from out of bounds, etc.) This limits rule variations, reduces confusion, and speeds up game play.
- Provide high rates of positive feedback to those actively engaged.
- Encourage children to begin moving immediately at the start of the lesson. This is often referred to as “Instant Activity.” For example, have your students pick up a jump rope, find personal space, and start their warm-up.
- Keep everyone involved. As you conduct your activity, take note of whether all children are participating equally. Ensure the activity provides the same opportunities for every child—regardless of size, gender, or ability.

5. Use classroom rewards and discipline that support health.

Avoid using any kind of food as a reward, especially foods with low nutritional value. As an alternative, you may wish to provide incentives or rewards that promote physical activity. Don't withhold recess or physical education (P.E.) time as a form of discipline.

6. Be an advocate for a healthier school environment.

Work with other teachers, school administrators, school staff, parents, and students to establish an advisory council that focuses on creating a healthy school nutrition and physical activity environment. Your group can use existing tools, such as the CDC's School Health Index (<http://apps.nccd.cdc.gov/shi/>) and the USDA's Changing the Scene (www.fns.usda.gov/tn/Healthy/changing.html) to assess the school's current environment and work toward healthy changes. Or, find out how to become involved with your school district's Local Wellness Policy implementation. To learn more about Local Wellness Policies, visit the California Department of Education Web site at www.cde.ca.gov/ls/nu/he/wellness.asp or the California Healthy Kids Resource Center Web site at www.californiahealthykids.org.



Tips to Help Your Students Power Up for Learning

Ensuring a safe and efficient lesson

- Dress for movement by wearing comfortable, safe, athletic shoes and unrestrictive clothing.
- Be safety conscious! Examine the instructional area and equipment to ensure that safe conditions exist.
- Establish a system of helpers to set up and put away equipment.
- When providing instructions, speak slowly and clearly while facing the class, and face the sun when giving instructions outside.
- Begin class with a brief warm up, either before the activity begins or by starting the activity with walking and then transitioning to other locomotor skills (for ideas, see Energizer 1: Wake Up, Warm Up, Power Up).
- Demonstrate enthusiasm for physical activity and healthy eating.
- Provide high rates of instructional and motivational feedback. Ensure positive student interactions outnumber corrective ones.
- Be activity conscious! Avoid lengthy explanations, drills, and games that don't encourage movement.
- Teach children to respond quickly and consistently to start and stop signals. Use music whenever appropriate (e.g., music starts, children move/practice; music stops, children stop). Other sound producing objects (e.g., tambourine, chimes) and visual signals (e.g., hand, number of fingers) may be used. Whistles are discouraged and should only be used when necessary to hear over competing loud noises or when children are spread over a large area and no other audible signal could be heard.
- Use the fewest words possible to get your class moving. The object of the game is _____; you do that by _____; ready, go!"
- Use the 80/20 rule. After instruction, assume 80% of your students "get it." Instead of using valuable time to answer student questions, get started. During the activity, move around the group, providing more information for those who need it.

Organizing students into groups

- When possible, use pre-existing groups to reduce inactive time and provide for a smooth transition.
- If pre-existing groups don't exist, create your own. Do not let students choose teams. This takes time and may cause other problems. In order to organize groups quickly, try using the following methods:
 - Number or letter individuals (count off A, B, A, B or 1, 2, 1, 2). All children with the same letter or number are in the same group.
 - Hand out cards that have characteristics to identify different groups.
 - Use specific characteristics to determine groups, such as birthdays, first letter of name, or clothing colors.
 - Play formation games such as Mix and Match, described here:

Have students stand within boundaries (classroom, coned-off area outside, gym)

When music starts or you say "GO," have students walk within the boundaries without touching anyone.

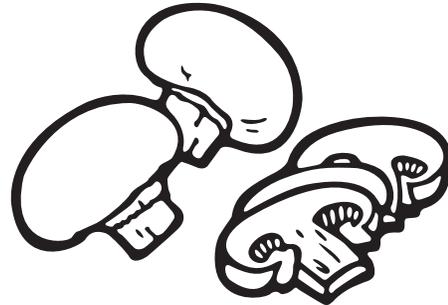
When the music stops or you say "STOP," have students pair up back-to-back with someone.

Prompt students to pair up quickly. If they can't find a partner, tell them to come to you.

Continue doing this a few times. You can have students pair up elbow-to-elbow, foot-to-foot, etc. to mix it up.

You can also change the locomotor skill they use when the music starts. For instance, prompt students to side slide, gallop, skip, hop, etc. Also, you can mix up the direction or speed such as low to the ground, fast, slow, or curvy pattern.

Variation: Instead of just using this for pairing students up, you can also use this activity to get students into groups of any size. When you stop the music or blow the whistle two times, call out "groups of 5, groups of 3," etc.



The Basics of Nutrition and Physical Activity

You don't need to be an expert to convey the importance of being physically active and eating healthfully to your students! Here are a few basics that will give you a general understanding of these concepts as they relate to both adults and children. This overview will help you to be more comfortable conducting physical activity and nutrition education lessons. To learn more about the *2005 Dietary Guidelines for Americans* and find ways to make healthy physical activity and food choices, go to www.health.gov/dietaryguidelines and www.mypyramid.gov.

Regular physical activity is important for your overall health and fitness, and helps you manage your body weight. Here are a few physical activity recommendations that pave the way to a healthier you:

- Do a minimum of 150 minutes of moderate-intensity aerobic activity a week.
- Also do muscle strengthening activities on two or more days a week.
- Increasing the intensity or the amount of time that you are physically active can have even greater health benefits and may be needed to manage body weight.
- Children and teenagers should be physically active for at least 60 minutes every day.

The physical activity and food choices you make every day affect your health—how you feel today, tomorrow, and in the future. The science-based *2005 Dietary Guidelines for Americans* highlight how to make smart choices from every food group, get the most nutrition out of your calories, and find your balance between food and physical activity. The best way to give your body the balanced nutrition it needs is by eating a variety of nutrient-packed foods every day and staying within your daily calorie needs. A healthy eating plan is one that:

- Emphasizes fruits, vegetables, whole grains, and fat free or lowfat milk and milk products.
- Includes lean meats, poultry, fish, beans, eggs, and nuts.
- Is low in saturated fats, trans fats, cholesterol, salt (sodium), and added sugars.

Regular physical activity and a healthy, balanced diet with plenty of fruits and vegetables are major investments in your life. In fact, physical activity and healthy eating reduces your risk of many serious health problems like obesity, type 2 diabetes, osteoporosis, heart disease, hypertension, and certain types of cancer, and increase your chances for a longer life.

The Importance of Physical Activity

Physical activity helps you feel good, be more productive, and sleep better. Physical activity is also good for your health. It helps you achieve and maintain fitness and lowers your chronic disease risk. Children and adolescents benefit from activity, too. It is recommended that they get at least 60 minutes of moderate to vigorous physical activity every day.

Regular physical activity in childhood and adolescence builds strength and endurance, helps build healthy bones and muscles, helps manage weight, reduces anxiety and depression, and improves blood pressure and cholesterol levels. Positive experiences with physical activity at a young age help lay the foundation for being regularly active throughout life.

The Importance of Fruits and Vegetables

Fruits and vegetables give you many of the nutrients that you need for good health: vitamins, minerals, dietary fiber, water, and phytochemicals. Some are sources of vitamin A, while others are rich in vitamin C, folate, or potassium. Almost all fruits and vegetables are naturally low in fat and calories, and none have cholesterol, making them a sensible part of your daily meals and snacks.

For children, fruits and vegetables are sources of nutrients that are essential for growth and development, such as vitamin A, vitamin C, folate, and dietary fiber. By establishing the habit of eating fruits and vegetables early in life, children can get a head start in reducing their future risk of serious health problems like obesity, type 2 diabetes, heart disease, stroke, and certain types of cancer.

Consider These Facts

Children are not engaging in enough physical activity or eating enough fruits and vegetables.

- More than half (55 percent) of California's 9- to 11-year-old children fail to meet the daily physical activity guideline (60 minutes or more of moderate and vigorous physical activity).¹
- Fewer than one in three (28.5 percent) California fifth graders achieved the Healthy Fitness Zone in all six areas measured by the 2007-2008 California Physical Fitness Test.²
- In California, 9- to 11-year-old children eat an average of 3.0 servings or 2.2 cups of fruits and vegetables on a typical school day, significantly below recommended consumption levels (3-5 cups of fruits and vegetables).³

¹ California Department of Public Health. (2007). *California Children's Healthy Eating and Exercise Practices Survey: 2005 Data Tables* (Table 54). Retrieved February 6, 2009 from <http://www.cdph.ca.gov/programs/cpns/Pages/2005CalCHEEPSDataTables.aspx>

² California Department of Education. (2009). 2007-2008 California Physical Fitness Report. Retrieved August 26, 2009 from <http://www.cde.ca.gov/ta/tg/pf/pftresults.asp>

³ California Department of Public Health. (2007). *California Children's Healthy Eating and Exercise Practices Survey: 2005 Data Tables* (Table 2 & 2a). Retrieved February 6, 2009 from <http://www.cdph.ca.gov/programs/cpns/Pages/2005CalCHEEPSDataTables.aspx>

Adapted from: "Finding Your Way to a Healthier You: Based on the *Dietary Guidelines for Americans*", U.S. Department of Health and Human Services, U.S. Department of Agriculture; available at www.health.gov/dietaryguidelines and *2008 Physical Activity Guidelines for Americans*, U.S. Department of Health and Human Services; available at www.health.gov/paguidelines.

Low levels of physical activity and poor nutrition have significant consequences among children.

- Children engaged in daily physical education show a more positive attitude toward school as compared to their counterparts who do not.⁴
- Inadequate nutrition and poor diet are major causes of impaired cognitive development, are associated with poor educational performance among low-income children, and also contribute to obesity, anemia, and susceptibility to lead poisoning.⁵
- Obesity rates have doubled for children and tripled among adolescents over the last two decades and continue to rise.⁶ In California, the rise in overweight among 9- to 11-year-old children parallels the national trend, increasing from 15 percent in 1999 to 22 percent in 2005.^{7,8}

- Obesity increases the risk of high blood cholesterol, high blood pressure, asthma, and type 2 diabetes while still in childhood.⁹

Establishing healthy activity and eating habits in childhood can help prevent problems in adulthood.

- Physical activity tends to decline with age, with the steepest decline between the ages of 13 and 18.¹⁰
- About half of overweight children or teens will be obese in adulthood.^{11,12}

⁴ Center on Hunger, Poverty and Nutrition Policy. (1998). *Statement on the link between nutrition and cognitive development in children 1998* (4th edition). Medford, Mass: Tufts University, School of Nutrition.

⁵ Pollatschek J.L. & O'Hagen F.J. (1989, September). An investigation of the psycho-physical influences of a quality daily physical education programme. *Health Education Research*, 4, 341-350.

⁶ National Center for Health Statistics. *Health, United States, 2006: With chartbook on trends in the health of Americans*. (Table 74). Hyattsville, MD: 2006.

⁷ Keihner A, Foerster S, Sugerman S, Oppen M, Hudes M. *A Special Report on Policy Implications from the 1999 California Children's Healthy Eating and Exercise Practices Survey*. Sacramento, CA. Available at <http://www.cdph.ca.gov/programs/cpns/documents/cpns-reu-policyreport72502.pdf>: The California Endowment; 2002.

⁸ California Department of Public Health. (2007). *California Children's Healthy Eating and Exercise Practices Survey: 2005 Data Tables* (Table 66). Retrieved February 6, 2009 from <http://www.cdph.ca.gov/programs/cpns/Pages/2005CalCHEEPSDataTables.aspx>

⁹ U.S. Department of Health and Human Services (2001). *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General.

¹⁰ Sallis JF. Age-related decline in physical activity: a synthesis of human and animal studies. *Med Sci Sports Exerc*, 2000 Sep; 32 (9): 1598-600.

¹¹ Whitaker, R.C., Wright, J.A., Pepe, M.S., Seidel, K.D., & Dietz, W.H. (1997). Predicting obesity in young adulthood from childhood and parental obesity. *The New England Journal of Medicine*, 337, 869-873.

¹² Dietz, W.H. (1998). Childhood weight affects adult morbidity and mortality. *The Journal of Nutrition*, 128, 411S-414S.

Exercise How-To's

These descriptions will tell you how to maintain proper form for a variety of the exercises and stretches recommended in *Power Up for Learning*. Photographs demonstrating most of these activities and more can be found on the American Council on Exercise's Web site at www.acefitness.org/exerciselibrary/default.aspx.

Abdominal Curl

Lie supine with one knee bent with the foot flat on the floor and the other leg extended. Cross your arms over the chest or place them, unclasped, behind the head with the elbows out to the side. Maintain neutral alignment in the cervical spine. Engage the abdominals and exhale while curling up. Initiate the movement by gently flexing the cervical spine by dropping the chin slightly. Next, activate the abdominals by raising the shoulders and upper back off the floor toward the pelvis. Contract at the top of the movement. Pause, then slowly return to the starting position.

Bicep Curl

To strengthen your right biceps muscle, hold a book in your right hand, keeping your elbow touching your torso. As you exhale, think about squeezing your biceps muscle as you bend your elbow. Tighten the biceps muscle and move the book toward your right shoulder. Try this for 10 repetitions (times) before switching to the other arm.

Hamstring Stretch*

Stand up straight, with your right foot slightly behind hips. Slowly bend the rear leg as if sitting backwards. Keep the front leg straight with a very slight bend at the knee. Place hands on right thigh. Push buttocks backwards, slowly, until you feel a slight tension in your hamstring. Keep your neck in line with your spine. Never place your hands on the front leg. Make sure your feet are correctly positioned for balance before stretching.

*Stay Active and Be Fit! — A Guide to Fitness and Activity Fundamentals. President's Council on Physical Fitness and Sports, U.S. Department of Health and Human Services. www.presidentschallenge.org/pdf/adultgetfit.pdf.

Reprinted with permission from the American Council of Exercise. www.acefitness.org.

Heel Raise

Start with feet shoulder-width apart, knees slightly bent, and engage the abdominals to help support the lower back. Plantarflex up on the toes. Pause, then slowly lower to the starting position.

Lunge

Stand at the side of your desk in a split stance (one foot in front of the other). While keeping good posture (head upright, shoulders down and back, abdominals tight), bend the knees while keeping the front knee in line with the front ankle region to complete a single leg lunge. Pause briefly at the bottom of the lunge. Squeeze the hips, thighs, and “seat” muscles as you return to your starting position.

Overhead Book Press

Use two books (similar in weight) to complete this exercise. Hold books in hands at shoulder level. Press books up and overhead while exhaling. Stop and pause at the top before returning to starting position.

Push-Up

Begin on the floor with the hands slightly wider than shoulder-width apart. Place toes or knees onto floor, depending on the level of resistance needed. Keep the back straight and torso supported by engaging the abdominals throughout the exercise. Press the body up to the point just prior to locked elbows. Pause, then lower until elbows are at approximately a 90-degree angle.

Variations: Wall push-up or desk push-up (see below)

Desk Push-Up

Face the desk, hands grasping the edge of the desk. Place feet approximately one to two feet away from desk. Lower the body until the chest touches the desk. Hold abdominals tight to support the core (abdominals, hip, back) of the body. Avoid arching the back or sticking the hips out. Exhale as you contract your upper-arm muscles and extend (straighten) the elbows.

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Quadricep Stretch*

Stand with feet together, bend your left knee and with your left hand lift the left foot towards your buttocks. Bend slightly on the supporting leg. Keep the knees close together. Tilt the pelvis forward and keep the back straight. Always keep the support leg bent. Use a wall or other object for balance. Keep your back straight and stomach tight.

Squat

Stand to the side of the desk with one hand holding onto the desk. Imagine you're going to sit down on an imaginary chair. Keeping the chest lifted, lower the hips down toward the floor as if your bottom is going to touch the seat of a chair. Keep the abdominals and back muscles contracted and the knees over the ankle region. You should be able to gently tap your toes (to show the weight of the body is not too far forward). Squat down and try to get your thighs as close to parallel to the floor as you can. At NO time should a student work in a painful zone. Always encourage comfortable, yet challenging, intensities of exercise.

*Stay Active and Be Fit! — A Guide to Fitness and Activity Fundamentals. President's Council on Physical Fitness and Sports, U.S. Department of Health and Human Services. www.presidentschallenge.org/pdf/adultgetfit.pdf.

Static Seated Twist

Sit in your chair with both feet flat on the floor. Sit up tall, so your head is over your shoulders; shoulders over your hips. Without moving your hips off your seat, take a deep breath in. While exhaling, slowly twist to the right, looking over your right shoulder, attempting to reach your left hand to the back of your chair. Hold for 30 seconds and breathe comfortably, keeping both hips on your seat. Repeat to the other side. Attempt three stretches to each side.

Static Standing Calf Stretch

Stand facing your desk with your right foot in front of your left foot. Lean forward while placing your hands on your desk. Keep your head upright and imagine one long line from your head to your bottom, while keeping your left heel on the floor. Both feet should be facing forward, front knee slightly bent; rear knee straight, but not locked. Take a deep breath in and then exhale slowly. Hold the stretch for 30 seconds without bouncing or bobbing. Repeat with other foot in front. Attempt 3 stretches per side.

Yoga “Tree” Pose

Place the sole of your right foot on the inside of the upper left thigh. Open your right knee to the right. Keep your hips square and contract the thigh muscles of the standing leg. Bring your palms together at your heart center.

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Links to Physical Education Model Content Standards for 4th & 5th Grades

Standard 1.0

Students demonstrate the motor skills and movement patterns needed to perform a variety of physical activities.

Standard 2.0

Students demonstrate knowledge of movement concepts, principles, and strategies that apply to the learning and performance of physical activities.

Standard 3.0

Students assess and maintain a level of physical fitness to improve health and performance.

Standard 4.0

Students demonstrate knowledge of physical fitness concepts, principles, and strategies to improve health and performance.

Standard 5.0

Students demonstrate and utilize knowledge of psychological and sociological concepts, principles, and strategies that apply to the learning and performance of physical activity.

ACTIVITY (A)	4TH GRADE	5TH GRADE
A1. The Great Garden Face-Off	1.3 3.7 4.4, 4.8 5.5, 5.6	1.3 3.7 4.1, 4.11 5.7
A2. Fruit and Vegetable Code Breakers	1.3 3.4*	1.3 3.5*
A3. Flying Fruits and Veggies!	1.8 4.4 5.3 5.5	1.5 3.2 5.1
A4. Harvest Hoop-la	3.1, 3.7* 4.4 5.6	1.3 3.2 4.1*, 4.5 5.5, 5.7
A5. More or Less?	4.5* 5.3, 5.4, 5.5	1.3 4.2* 5.4, 5.7
A6. High 5 Memory Challenge	4.3* 5.1* 5.3	4.3* 5.1* 5.5

ENERGIZER (E)	4TH GRADE	5TH GRADE
E1. Wake Up, Warm Up, Power Up!	1.22 3.1, 3.6 4.1, 4.7	1.18 3.1, 3.6 4.14, 4.5
E2. Hit the Deck!	3.4*	3.4*, 3.5*
E3. Pass, Count, Go	1.6, 1.17*	1.14*, 1.16*
E4. The 12 Days of Fitness	1.1, 1.22	1.1, 1.22*
E5. California Dreamin'	5.5	5.7, 5.8
E6. Beach Ball Bump	1.20	1.17
E7. Stop and Scribble	3.4* 5.5	3.4*, 3.5* 5.5
E8. Face-Up, Face-Down	3.7 5.4, 5.6	3.7 5.8
E9. As If!	5.5	5.7
E10. "Let-us" Conga!	1.2, 1.22 5.5	5.7

**Standard is supported in the "Go Farther" section of the activity.*

The Physical Education Model Content Standards are available on the California Department of Education's Web site at www.cde.ca.gov/be/st/ss/index.asp.