



The New York City Health Literacy Campaign:
From Knowledge to Action.
Model Lessons

BE ACTIVE
ABE LEVELS 5 & 6

TEACHER'S EDITION



Developed by the Mayor's Office of Adult Education

Version 2008-2009



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All Teacher's Editions include:

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- "FAQs" to better help you field common health-related questions
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- Teacher's Workbook with embedded **directions** and **answers to questions**
- Student Handouts
- Supplemental Authentic Materials
- Teacher Survey

 Red Text = Teacher
 Black Text = Student

DEAR TEACHER,

Everyone knows that it's important to get lots of exercise. Health professionals recommend 30 minutes of physical activity a day. It is the key to maintaining a healthy weight, managing stress, and feeling good about yourself. Regular exercise is important to keep blood pressure under control and to help prevent heart disease, cancer, and other illnesses.

But, many people find it hard to maintain a regular exercise routine. Busy schedules, limited budgets, the need for childcare, and other barriers often get in the way and prevent us from getting the exercise we need.

Fortunately, there is something your students can do about it. There are many ways to be physically active for 30 minutes a day that are easy, inexpensive, and child-friendly. Small changes to daily routines can result in significant benefits to students of all ages. Also the City has free fitness classes and low-cost gym memberships to help out!

This lesson will help your students learn – or remember – all the ways in which physical activity is important. It will help them identify many simple ways to get a good workout without spending a fortune or dramatically changing their daily routine.

Monitoring results each day is an important health literacy skill and will help motivate students to be more active. Health professionals recommend monitoring heart rate to determine if you are exercising at the appropriate level. This lesson will differentiate between the different kinds of

heart rates—resting, exercise, and target. It will also show students how to calculate each, making for a variety of creative math exercises at all levels of instruction. Students will also learn how to interpret their heart rate and compare the different kinds of heart rates in order to understand how physically fit they are.

The **three key messages** that your students need to know by the end of the lesson are:

1. Physical activity is important for your health! Being active burns calories, improves heart health, strengthens muscles, and helps prevent disease.

2. Be active at least 30 minutes every day! 30 minutes of exercise each day will control stress and make you feel good about yourself.

3. Physical activity can be easy and affordable! You don't need any money to make small changes in your daily routine that will have significant health benefits.

Along the way, you will help your students:

1. Comprehend, explain and analyze information from primary source materials
2. Write basic essay
3. Perform basic operations on percents

DEAR TEACHER, *continued*

This lesson is broken up into 2-hour sessions that will require 3 consecutive days of class.

Day 1 of the lesson will begin with an opportunity for your students to discuss the meaning of “regular exercise” and describe their own exercise routines. Activities that follow expand the conversation to other ways to be active besides what we commonly think of as “exercise” and underscore the many good reasons to be active. Finally, the day will end by introducing your students to resting heart rate. For homework, your students will be asked to measure their resting heart rate.

Day 2 of the lesson begins with an opportunity to reflect on what was learned during the previous class. Your students will report their resting heart rates. You will want to record your students’ results on a chart that you keep up in your classroom for the next class. After the reports, your students will learn about target heart rate and how to calculate it. You will want to record this data on the chart as well. Day 2 ends with your class exercising as a group.

Day 3 of the lesson begins with an activity to help students make comparisons between the different heart rates and discuss how monitoring heart rate can show how their physical activity is impacting their health. After your students have collected and analyzed heart rate data, they will learn how to develop a bar graph in order to display their findings. We expect the data to show that your students’ heart rate increases when they are physically active, and hope your students can come to that conclusion as well. Then, students will use authentic materials from the Department of Parks and Recreation to improve their scanning and math skills. Afterwards, students are asked to reflect on what they have learned during the last three classes and to share what they have learned in this lesson by writing an essay that either reviews why it is important to have an active lifestyle or how an active lifestyle can be easy and affordable.

With your guidance, your students will improve their functional and health literacy skills and learn about all this City has to offer in terms of easy and affordable ways to be physically active. With this experience and knowing how to calculate and interpret heart rate and understand the importance of physical activity, your students and their families will be more likely to have active, healthy lifestyles.

Yours,



Mayor’s Office of Adult Education



“FREQUENTLY ASKED QUESTIONS” (FAQS)

I don’t exercise now and my weight is just fine. Isn’t exercise only really important for people trying to lose weight?

Absolutely not! Even if you do not need to lose weight, being more physically active will help you stay healthy. Exercise strengthens your heart, lungs, muscles, and bones. It can also help prevent diabetes and other common diseases. Getting exercise will give you more energy and help you deal with stress and anxiety.

I already exercise! Why don’t I lose weight?

If you want to lose weight, you have to burn more calories (from exercise) than you take in (from eating and drinking). There is no other way to do it. So, if you want to lose weight, but aren’t, you need to add more physical activity to your day or eat and drink fewer calories. Or do both – you will probably be more successful. Don’t forget – watch out for calories from what you eat and what you drink!

How can I stay in shape if I can’t afford to join a gym?

There are many ways to get more exercise without spending any money! You can go for a 30 minute walk a few times a week, take the stairs, dance to your favorite music, play sports in your local park, or run around a playground with your children. Also, the City offers a free fitness program called *Shape Up*

New York and a free walking program called *Step Out* in locations throughout the city. Call 311 to find out about free or low-cost fitness programs in your community.

My real problem is with food. The only way I’ll ever really lose weight is to stick to my diet.

There are only two ways to lose weight: get fewer calories from food and drinks or burn more calories from physical activity. Make sure your diet is easy for you to follow. And remember that the best way to lose weight is to change your eating habits and add more exercise into your weekly schedule.

Don’t I have to exercise many hours everyday just to see any benefits?

Not really. Having an active lifestyle does not mean that you have to exercise all the time. In fact, health experts recommend that you spend just 30 minutes each day on activities like walking, riding a bike, or doing household chores. Try walking for 10 minutes three times each day if you don’t have a lot of time. Or try more intense activities such as running, aerobics, or lifting weights for just 20 minutes 3 times a week. Either way, that leaves you plenty of time for other things.

In my neighborhood, there is nowhere to exercise. What am I supposed to do?

Remember, you do not have to join a gym or a sports team to be more active! This lesson will show you a lot of other easy and affordable ways to be more active, such as getting off the bus one stop earlier, taking the stairs up to your apartment, or working out while you watch television. Also, many neighborhoods in New York City do have affordable places to exercise that are

“FREQUENTLY ASKED QUESTIONS” (FAQS): *continued*

managed by the City’s Parks Department. The *Shape Up* New York free fitness program is one example of the affordable choices you may have in your area. Call 311 to get more information about free or affordable fitness programs.

I am too tired to exercise. Won’t exercise just make me even more tired?

It may seem like exercise will just make you more tired, but exercise will actually give you more energy. If you feel too tired to go for a long walk, take three short walks throughout your day instead. If you are too tired to exercise after work, try to workout in the morning or during your lunchtime. You’ll feel good about yourself and exercise will help you manage stress.

How can I exercise if I do not have anyone to take care of my children?

Don’t worry! One affordable and enjoyable way to be more active is to play with your children. Play active games like hide-and-go-seek in your home. Or, take your family to the park and play games or just run around together. Your children will love it and you’ll be improving your health. It’s also a great way to teach your children how important it is to be active!

What if I do not have any time to exercise?

It may not seem like it, but there is always room for more activity in your life. All it takes is making small changes in your daily routine such as getting off the bus one stop early, putting on some music and dancing while you clean the house, or taking a walk with your family instead of watching television in the evening.

What if I already have diabetes? Isn’t it too late to begin an exercise program?

Actually, this is the perfect time to begin exercising! Becoming more physically active is an important part of taking care of your diabetes. Regular physical activity can help improve your blood sugar levels as well as reduce your risk of heart disease and nerve damage, two common and serious consequences of diabetes. It can also help you control your blood pressure.

If you have diabetes, ask your doctor to recommend an exercise plan for you. This is especially important if you have not been active for awhile.

Can I be active with asthma?

Yes! Having asthma doesn’t mean you can’t be active. In fact, famous athletes like the basketball player Dennis Rodman and the Olympic gold medalist Jackie Joyner-Kersey have asthma and were still able to reach the top of their game. Coughing and wheezing while exercising can almost always be prevented. Some people have to take asthma medicine immediately before exercising. Others can prevent asthma symptoms with just their regular asthma medicines. **If you have asthma, ask your doctor to recommend an exercise plan for you.**

Can I be active with high blood pressure?

Yes! Exercising may directly lower your blood pressure and it is a great way to cope with stress. Being more active is good medicine! Even 5 to 10 minutes of walking is a good start. Over time, try building up to 30 to 45 minutes a day doing whatever exercise you enjoy most. **If you have a medical condition, always check with your doctor before starting an exercise program.**

KEY VOCABULARY

(LIST VOCABULARY WORDS ON THE BOARD BEFORE EACH ACTIVITY)

ACTIVITY 1	Regular
ACTIVITY 2	Calories, context clues, slothfulness, whittles, promotes, fortifies, litany, sedentary, optimal, vigorous, longevity, capacity, epiphany, incidental, parlance, physiologists, forgo, begets, commodity, hordes, bottlenecked, estimations
ACTIVITY 3	Obesity, diabetes, heart disease, misjudge, consume, entrees, intake, exertion
ACTIVITY 4	Health professionals, heart rate, pulse
ACTIVITY 5	Target, range, maximum, mean
ACTIVITY 6-7	Compare, bar graph, X-axis, Y-axis
ACTIVITY 8	Scanning, recreation, membership
ACTIVITY 9	Review vocabulary from entire lesson

NATIONAL REPORTING SYSTEM (NRS) DESCRIPTORS: ABE 5 AND 6

These are skills that your students should master before moving to the next level:

- Comprehend, explain, and analyze information from primary source materials
- Use context clues to interpret meaning
- Write a basic essay
- Interpret and develop tables and graphs
- Perform basic operations on percents
- Work productively and collaboratively in groups and serve as facilitator and reporter of group work
- Computer proficiency

Look for these level-specific Descriptors in the following Lesson Outline.

DAY 1

Topic: There are many different ways and many good reasons to be active.

Aim: Students will be able to identify many different ways to be active and various reasons why it is important for their health. Students will also learn how to calculate heart rate.

BEGIN YOUR CLASS WITH STRETCHING, A GAME, DANCE, OR SONG!

ACTIVITY 1 Be Active – Get Regular Exercise	Class discussion and short writing activity.
ACTIVITY 2 When Exercise is a Part of Everyday Life	Reading a Daily News article. <ul style="list-style-type: none">Comprehend, explain and analyze information from primary source materialsUse context clues to interpret meaning
ACTIVITY 3 Be Active to Control Body Weight	Reading health-related literature and tables. <ul style="list-style-type: none">Comprehend, explain, and analyze information from primary source materialsInterpret and develop tables and graphs
ACTIVITY 4 Heart Rate Part 1	Learn how to calculate resting heart rate. <ul style="list-style-type: none">Perform basic multiplication

DAY 2

Topic: Be Active!

Aim: Students will reflect on previous activities, calculate target heart rate, and be physically active as a class.

Reflection.

ACTIVITY 5 Heart Rate Part 2	Learn how to calculate target heart rate. <ul style="list-style-type: none">Perform basic operations on percents
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Be Physically Active With your Class.

DAY 3

Topic: Spread the word!

Aim: Students will share good reasons to be active and different ways to be active in a writing activity.

ACTIVITY 6 Compare Heart Rates	Complete the heart comparison table <ul style="list-style-type: none">■ Interpret and develop tables and graphs
ACTIVITY 7 Graph It!	Develop a graph comparing the data from Day 1 to Day 2. <ul style="list-style-type: none">■ Interpret and develop tables and graphs
ACTIVITY 8 Recreation Center Membership	Reflect on exercise from previous class and practice scanning with Parks brochure. <ul style="list-style-type: none">■ Comprehend, explain, and analyze information from primary source materials
TAKE A BREAK WITH SOME STRETCHING, A GAME, OR A DANCE.	
ACTIVITY 9 Write About It	Write a short essay. <ul style="list-style-type: none">■ Write a basic essay

SET GOALS FOR YOUR HEALTH: You Can Be More Active!

ACTIVITY 2: WHEN EXERCISE IS A PART OF EVERYDAY LIFE

Ask students to skim the article headings, tables, and pictures. Ask students to predict what this article will be about. Then, have students read the 2-page article individually, circling every word that is new to them. Afterwards, make a list of new vocabulary on the board. Divide your class in half. Have one group answer the questions for the first page of this article and the other group work on the questions for the second page.

WHEN EXERCISE IS PART

By Shelia Anne Feehey
Daily News Staff Writer

According to a 1996 report by the Surgeon General 60% of adults do not achieve the recommended amount of physical activity and a full quarter are not active at all. The implications of our slothfulness are profound:

Regular activity, according to the Surgeon General, not only helps control weight, but reduces the risk of developing diabetes, high blood pressure and colon cancer. It also whittles away feelings of depression and anxiety, promotes psychological well-being, helps older adults become stronger and less likely to fall, fortifies joints, muscles and bones, and ups cardiovascular fitness - all of which makes you less likely to die before your time.

But you don't have to be a gym rat to rack up health benefits.

Two recent studies published by the journal of the American Medical Association add weight to the idea that you can shape up without joining a gym or taking classes.

This is great news for the millions of Americans who recite a litany of excuses for why they're not more active: lack of time, money, motivation or opportunity to exercise conventionally. Truth is, many people don't exercise because they hate it.

In a study published in January, a randomized trial of 235 sedentary men and women showed that incorporating activity into everyday tasks was as effective as a structured exercise program in improving cardio-respiratory fitness and lowering blood pressure.

Another study of 40 obese women revealed that a diet and strategic lifestyle activities (walking more, taking the stairs, etc.) was as effective as diet and aerobic classes in reducing blood pressure, harmful cholesterol levels and weight (about 19 pounds in 16 weeks). What's more, a year after the study's conclusion, "the lifestyle exercisers kept all of their weight off," whereas the aerobicizers gained back an average of 4 pounds, says one of the study's authors,

Ross E. Anderson, an assistant professor of medicine at Johns Hopkins University.

In trying to make exercise part of your life, you would do well to abandon "absolutist" views of exercise and "all or nothing" attitudes, says Dr. David Allison, associate research scientist at St. Luke's-Roosevelt Hospital's Obesity Research Center. "A minute amount is better than zero, and a small amount is better than a minute amount," says Allison.

If, for example, you don't want to hike up 15 flights of stairs, climb a few and take the elevator the rest of the way up, says Allison. The key is to never miss an opportunity for extra movement and the benefits will start to add up.

The upside of even a little extra movement is illustrated in a story told by Dr. Margaret Smith, program director for rheumatology at St. Vincent's Hospital and Medical Center. Smith treated a sedentary 60-year-old woman with severe rheumatoid arthritis who could not lift her left arm, although her right arm lifted easily. Smith wanted to know what the woman did with her right arm that she didn't do with her left. It turned out, said Smith, that "she let her cat out every day and unhooked the hinge of her screen door with her right hand." That small movement alone made the difference in preserving the joint's range of motion.

According to Anderson, it seems that as people develop feelings of accomplishment

and mastery, they may become inclined to try a traditional exercise program. "What's optimal is a vigorous exercise program," says Anderson, but only 11% of Americans have found a way to work such regular, structured conditioning into their lives. "Health benefits [associated with increased longevity and quality of life] can be accrued with a lower intensity program," he continues. "But for fitness-gains in strength and cardiovascular capacity - you still need a more vigorous program."



Choose to get physical

Most of us underestimate how much we eat and overestimate how much we exercise. To combat those lapses, exercise physiologists urge keeping activity logs and food diaries to detail every deposit and withdrawal from personal "health banks." Pedometers, too, are useful to help you get a sense of how much walking you're able to pack into a day.

Susan Bartlett, associate director of clinical psychology at the Johns Hopkins Weight Management Center, and Ross E. Anderson, assistant professor of medicine at Johns Hopkins University, offered additional tips on how to incorporate more physical activity into your lifestyle.

Park at the opposite end of the mall or at the spot farthest from where you want to go.

Take a five minute "nonsmoking" walk while coworkers are on a cigarette break.

Stand up to do desk work instead of sitting down. Take a three-minute walk around your office every hour or so.

Climb stairs during commercials.

Do errands one at a time instead of combining them.

30 MINUTES A DAY of moderately vigorous exercise is suggested for sedentary people. How are some ideas about how to shoehorn activity into a busy week.

Monday

Vacuum all of the carpets and furniture. Wash your floors.



- Take three 10 minute walks.
- Climb at least four flights of stairs.

Tuesday



Wednesday



Baby-sit a child and get out and play. Put on your favorite CD and wash all of the windows-inside and out- work up a sweat.

OF EVERYDAY LIFE

Staying fit, without a gym membership

When James Buss turned 30 last year, he had an epiphany: Good health was not something that he could continue to count on if he didn't exercise. His parents had high blood pressure, and he wanted to nip this unwanted inheritance in the bud.

Yet he hated going to the gym he joined for six months. "Going to the gym for me feels like another part-time job," says Buss. "I find gyms really boring."

So he became an incidental exerciser or, in the parlance of physiologists, a "lifestyle exerciser." At Grand Central, he'd forgo the escalator to bound up the stairs to the street. He'd walk the 30 blocks home from his fact-checking job several times a week, and sometimes

climb all 15 flights to his apartment.

Television watching became prime time for spot toning: Buss wound himself into all manner of yoga poses in front of the set, and converted a bedside table into a foot-holder for stomach crunches. By exercising in front of the TV, he says, "I feel like I'm accomplishing something: I'm not just a couch potato."

At his desk at work, he took to doing a series of stretches to relieve neck and back kinks. When summer comes, he makes a point of swimming as often as he can.

Lifestyle exercise is indeed rewarding, says Buss, because activity begets yet more activities: The more he does,

the less tired he feels. He also saves time, that most precious Gotham commodity. While hordes of New Yorkers stand bottlenecked on platforms waiting for a subway escalator, Buss is up the stairs and on his way.



Shop till you drop pounds

The 1991 edition of "Exercise Physiology," published by Lea & Febiger includes a table that lists calories expended in a wide range of activities. The following estimations are those of calories expended for a 157-pound person during one hour of the listed activity.

Activity	Calories
Universal Circuit Training.....	498
Carpentry.....	222
Cooking (female).....	192
Cooking (male).....	204
Intense aerobic dance.....	600
Leisurely cycling.....	270
Food shopping.....	264
Lawn mowing.....	480
Raking.....	228
Playing drums.....	282
Playing violin.....	192
Mopping floor (female).....	264
Mopping floor (male).....	246
Racquetball.....	756
Lying around.....	96
Typing.....	114
Window cleaning.....	252
Tennis.....	462



Thursday	Friday	Saturday	Sunday
<p>Take a 10-minute walk at lunch. Powerwalk while doing errands: Make a point of covering each aisle of Home Depot or Costco, or every foot of the mall.</p> 	<p>Go Dancing! Wing or salsa for as long as you can.</p> 	<p>Take the dog to the park and play tug-of-war; canine Frisbee will also suffice. Strip the beds, remake them and do the laundry.</p> 	<p>Clean out your closets or your garage. Sweep the sidewalk. Take the family out on a community improvement march to pick up neighborhood trash. Do some yard work.</p> 

ACTIVITY 2 (CONTINUED): WHEN EXERCISE IS A PART OF EVERYDAY LIFE

First Page: Use context clues to find the meaning of new vocabulary words.

<p>1. Slothfulness a. being physically active b. laziness c. having a lot of energy</p> <p>2. Whittles a. to reduce gradually b. increase quickly c. to let grow</p> <p>3. Promotes a. obstructs b. contributes to the growth of c. frustrates the progress of</p> <p>4. Fortifies a. strengthens b. weakens c. takes away</p> <p>5. Litany a. small size b. type of lighting c. a long account</p>	<p>6. Sedentary a. active b. inactive c. mobile</p> <p>7. Optimal a. least favorable b. worst c. most favorable</p> <p>8. Vigorous a. strong and active b. inactive c. lethargic</p> <p>9. Longevity a. form of measurement b. discontinuation c. a long life</p> <p>10. Capacity a. weakness b. incompetence c. capability</p>
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11. Name five reasons to be active on a regular basis.

- 1) Weight control.
- 2) Reduced risk of developing chronic diseases like diabetes.
- 3) Less feelings of anxiety and depression.
- 4) Better mental health.
- 5) Stronger joints, muscles, and bones.

12. Summarize the main point of this page in one paragraph. Your paragraph should have a topic sentence and include supporting details from the article.

ACTIVITY 2 (CONTINUED): WHEN EXERCISE IS A PART OF EVERYDAY LIFE

Second Page: Use context clues to find the meaning of new vocabulary words.

1. Epiphany a. a type of sickness or disease b. a sudden insight c. a musical instrument	6. Begets a. lessens b. adds to c. brings about
2. Incidental a. casual b. planned c. every day	7. Commodity a. place to go b. item of value c. statue
3. Parlance a. manner of dress b. way of speaking c. a form of dance	8. Hordes a. small groups or crowds b. large groups or crowds c. a type of animal
4. Physiologists a. those who study the mind b. those who study emotions c. those who study organs, tissues, and cells	9. Bottlenecked a. people who stood in line b. stuck in the top of a bottle c. trapped in congested traffic
5. Forgo a. give up b. to not remember c. to join	10. Estimations a. numbers b. educated guesses c. opinions

Thinking about the reading:

11. This article talks about “incidental” or “lifestyle” exercise in order to prove that you do not have to go to the gym in order to be active. What is incidental exercise?

Incidental exercise is exercise that you get while following your daily routine. When you are an incidental or lifestyle exerciser, you do not join the gym to get exercise.

12. Name six examples of incidental exercise.

- 1) Take the stairs instead of the escalator.
- 2) Walk home from work.
- 3) Exercise in front of the television.
- 4) Do desk stretches at work.
- 5) Take the dog to the park.
- 6) Go dancing.

ACTIVITY 3: BE ACTIVE TO CONTROL BODY WEIGHT¹

Ask students to read this individually and answer the questions on the next page. Ask students to work in pairs when answering questions.

Having a healthy lifestyle isn't just about eating healthy—it's also about getting regular physical activity. Regular physical activity is important for your overall health and fitness. It also helps you control body weight by balancing the calories you take in from food with the calories that you burn during physical activity each day.

Most adults need about 2,000 calories a day. The exact number of calories each person needs depends on their sex, age, and physical activity level. Eating or drinking more calories than the body uses causes weight gain. Weight gain can lead to obesity, diabetes, and heart disease. Most people misjudge the amount of calories they consume. As a result, it is easy to take in too many calories without realizing it. For example, some large sodas have as many as 600 calories and some entrees may contain 1600 calories. Just eating or drinking 100 extra calories per day leads to 10 pounds of extra weight in a year! **Practice reading the table with your students.**

Recommended Daily Caloric Intake ²				
	Males		Females	
	Activity Level*		Activity Level*	
Age	Sedentary	Moderate	Sedentary	Moderate
16-18	2400	2800	1800	2000
19-20	2600	2800	2000	2200
21-25	2400	2800	2000	2200
26-40	2400	2600	1800	2000
41-45	2200	2600	1800	2000
46-50	2200	2400	1800	2000
51-60	2200	2400	1600	1800
61-65	2000	2200	1600	1800
66 and up	2000	2200	1600	1800

*Sedentary means less than 30 minutes of moderate physical activity per day; most New Yorkers are sedentary. Moderate means 30 to 60 minutes a day of moderate physical activity.

Calories measure the amount of energy available in the foods and drinks you take into your body as well as the amount of energy your body burns when you are active. Your body burns calories during daily activities such as brushing your teeth and during activities that require extra physical exertion such as walking or running. The more active you are, the more calories you will burn.

¹Reading adapted from "Finding Your Way to a Healthier You: Based on the Dietary Guidelines for Americans U.S. Dept. of Health and Human Services and the U.S. Dept. of Agriculture" found at: www.health.gov/dietaryguidelines/dga2005/document/html/brochure.htm#b4.

² Table and text on calories adapted from "How Many Calories do people Need Each Day?" New York City Department of Health and Mental Hygiene found at: <http://www.nyc.gov/health>.

ACTIVITY 3 (CONTINUED): BE ACTIVE TO CONTROL BODY WEIGHT

In order to have a healthy lifestyle you need to limit how many calories you take in from foods and drinks. But just being careful about how many calories you consume is not enough - you also need to be active in order to burn the calories that you take in from eating and drinking!

Health professionals recommend that you:

- Be physically active for at least 30 minutes most days of the week to control your weight.
- Be physically active for about 60 minutes each day to lose weight.
- Reduce calories and increase physical activity in order to lose weight.

Questions:

1. Explain the meaning of “Recommended Daily Caloric Intake” (RDCI).

RDCI is the amount of calories that health professionals recommend we consume every day. Each specific amount is based on our sex, age, and amount of physical activity.

2. Using the table:

a. Miguel is a 42 year-old man who is never active. What is his RDCI?

He should not eat more than 2200 calories each day.

b. Marcel is a 44 year-old man who exercises at least 30 minutes each day. What is his RDCI?

He should not eat more than 2600 calories each day.

c. Margo is a 43 year-old woman who is never active. What is her RDCI?

She should not eat more than 1800 calories each day.

d. What would Margo’s RDCI be if she started to get regular exercise?

She would be able to eat 2000 calories instead of 1800.

e. How is RDCI different for men and women?

Men can eat more calories than women.

f. How is RDCI different for people who do not exercise and people that exercise 30 – 60 minutes each day?

People that exercise can eat more calories each day.

g. How does RDCI change with age?

The older we get, the less calories we should consume.

3. What is the minimum amount of activity we should get every day? 30 minutes

4. Why do we gain weight?

We gain weight when we consume more calories than we burn in physical activity.

5. How do we lose weight?

There are only two ways to lose weight: get fewer calories from food and drinks or burn more calories from physical activity. Exercising more without eating more is often easier than eating less and it is sometimes more effective.

ACTIVITY 4: HEART RATE PART 1

Before you begin this activity, read the paragraphs as a class.

Health professionals say that we should be active for at least 30 minutes each day in order to control our weight and stay healthy. They also suggest that we monitor our heart rate to measure our progress. Physical activity makes our heart muscles strong and heart rate tells us how strong the heart muscles are. If your heart rate is high, it means your heart needs to work hard to pump blood through your body. If your heart rate is slower, it means your heart has an easy time pumping blood. This means your heart is strong and you are in good health. Everyone's heart rate is different. Heart rate depends on your age, weight, sex, and physical activity level.

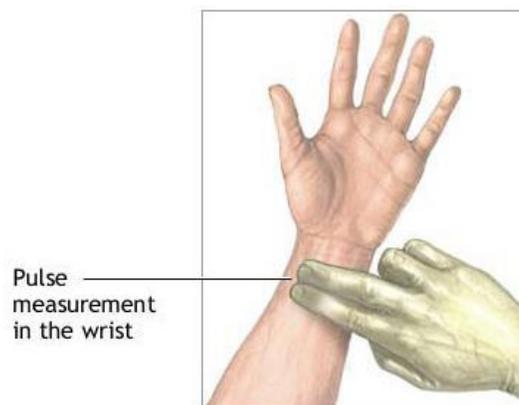
Heart rate is measured in beats per minute. Checking your pulse is how you calculate heart rate. You can check your pulse in several different spots on your body. The most common pulse points are on the neck and on the wrist.

Resting heart rate is your heart rate at rest. The best time to calculate your resting heart rate is in the morning, after a good night's sleep, and before you get out of bed. A good resting heart rate is between 60 beats per minute and 80 beats per minute. Resting heart rate usually rises with age. Resting heart rate is lower in people who are physically fit.³ Let's practice calculating heart rate as a class.

How to measure your resting heart rate: Follow each direction step by step.

1. Be in a restful state. Remember, the best time to calculate your resting heart rate is in the morning, after a good night's sleep, and before you get out of bed.
2. Stretch your left arm out and rest it on a table or other surface.
3. Turn your wrist up so that it faces the ceiling.
4. Open your hand and stretch out your fingers and thumb.
5. Take the first finger of your right hand, put it on the tip of your left thumb.
6. Slide your finger down the outer edge of your thumb until you get to your wrist.
7. Feel around your wrist bone until you feel your pulse.
8. Count the beats for 10 seconds. Multiply by 6 to get the number of beats per minute.

*If you cannot find your pulse, do not panic! It's there. It takes some practice and feeling around your wrist to find it. Try using 2 fingers to push down lightly on your wrist.



³ From the American Heart Association: www.americanheart.org

ACTIVITY 4 (CONTINUED): HEART RATE PART 1

1. What is your current heart rate? _____

(Answer should be in beats per minute)

2. How many beats does your heart make in one hour? _____

(Heart Rate x 60 minutes per hour)

3. How many beats does your heart make in day? _____

(Heart rate per hour x 24 hours per day)

Homework: What is your resting heart rate? _____

Remind your students that they must be in a rested state to get the best possible reading of their heart rate.

When you exercise, your body speeds up, and so does your heart as it works to meet your increased energy needs.

Discuss the activities below with your students and how they can increase their heart rate.

Activities That Can Increase Your Heart Rate					
					
Dancing	Skating	Swimming	Bicycling	Gardening	Playing Soccer
					
Boxing	Cleaning	Shopping	Weight Lifting	Doing Yoga	Aerobics

DAY 2: REFLECTION

Start class by reviewing key concepts and vocabulary from Day 1 with your students. Use these questions to help you facilitate the discussion. Record the discussion on the board for your students to reference.

1. In our last class we talked about being more active. What exercises did we talk about? (swimming, jogging, walking, playing sports, lifting weights, skating, jumping rope, dancing).

2. What are some other easy and affordable ways to be more active? (playing with your children, taking the stairs, cleaning the house).

3. What are some good reasons to be active? (control your weight, sleep better, build strong muscles, feel less depressed, have a healthy heart).

4. How many minutes should we be active each day? (at least 30 minutes).

5. If we want to lose weight, how many minutes should we be active each day? (60 minutes).

6. What do health professionals recommend monitoring to track your progress with exercise? (heart rate).

7. Heart rate is measured as _____? (beats per minute)

8. What was your resting heart rate? Record student responses on the board or chart paper (see the table on the following page). Leave this data up in your classroom for the next activity.

ACTIVITY 5: HEART RATE PART 2

Copy this table on your board or on chart paper. Have students interview each other and report their resting heart rates. Then, record this information on your table. Keep this table up in your classroom until the next activity.

Heart Rate Comparison Table			
Name	Resting Heart Rate	Target Heart Rate	Exercise Heart Rate
1. Steven	65bpm		
2. Maria	82bpm		
3. Greta	95bpm		
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
		=	=
Class Mean	= $242 / 3 = 80.7$	=	=

ACTIVITY 5 (CONTINUED): HEART RATE PART 2

Read this Paragraph as a class.

When you exercise, your body speeds up, and so does your heart as it works to meet your increased energy needs. Your Target Heart Rate is a range of heart rates that are good for you to reach during exercise. If your heart rate while exercising is too high, it means you are straining yourself and should slow down. If your heart rate while exercising is too low, it means you can push yourself a little harder.

Below is a chart that shows Target Heart Rates for different ages. These numbers are averages and should be used as general guidelines. Find the age closest to yours on the chart.

Age	Target Heart Rate
20 years	120 to 170bpm
25	117 to 166
30	114 to 162
35	111 to 157
40	108 to 153
45	105 to 149
50	102 to 145
55	99 to 140
60	96 to 136
65	93 to 132
70	90 to 128

You can also calculate your Target Heart Rate. Follow these steps:

1. First determine your Maximum Heart Rate. This number is 220 minus your age.

Example: I am 33 years old. $220 - 33 = 187$ is my Maximum Heart Rate

2. Calculate 60% of your Maximum Heart Rate. This is the low end of your Target Zone.

Example: $187 \times 60/100 = 112.2$. Round to the nearest whole number. 112.

3. Calculate 80% of your Maximum Heart Rate. This is the high end of your Target Zone.

Example: $187 \times 80/100 = 149.6$. Round to the nearest whole number. 150.

Final Answer: The Target Zone for a 33 year old person is 112 to 150 bpm (beats per minute).

Does your calculated target heart rate match your target heart rate from the chart above? Enter students' target heart rate on the heart rate comparison chart.

BE PHYSICALLY ACTIVE WITH YOUR CLASS

To get your students moving and their heart rates up, take a walk around your building or climb a couple flights of stairs. Take a field trip to the nearest Parks Department Recreation Center. Participate in a Parks Department Shape Up class. Or you could turn on some music and have a dance party in your classroom. You can even run in place, do jumping jacks, or yoga. Be creative! If you have a favorite exercise tape or workout video, share it with your students. Spend as close to 30 minutes being physically active as you can to model the recommended daily amount of exercise. Here are some resources:

NYC Department of Parks and Recreation: Shape Up Free Fitness Classes
http://www.nycgovparks.org/sub_things_to_do/programs/shape_up_ny/shape_up_ny.html

NYC Department of Parks and Recreation: Rec Centers
http://www.nycgovparks.org/sub_things_to_do/facilities.php

If you are taking your students to a Shape Up class, great! If you are not, pass around the Shape Up class schedule and give students a few moments to see if they could attend a class on their own.

At about 15 minutes into your exercise session, have your students take a moment to measure their heart rate by checking their pulse. Follow the steps from Day 1. Ask students to mentally take note of whether the heart rate is within the target zone.

When your exercise session is over, as a class, re-check your heart rate. Record on the heart rate comparison chart. Discuss the comparisons with your students. Use the following questions to guide your discussion:

Did your heart rate after exercise fall into your target zone?

Was your heart rate after exercise higher or lower than your target zone? What does this mean about your physical activity level?

How do you think regular physical activity will affect your resting heart rate?

Tip: Talk to your students about the “Talk Test.” You should be able to carry on a conversation as you exercise. If you are breathless, slow down, you are straining yourself. As you exercise more and your heart and body become stronger, you will not be as breathless even as the rigor of your activity increases.

DAY 3

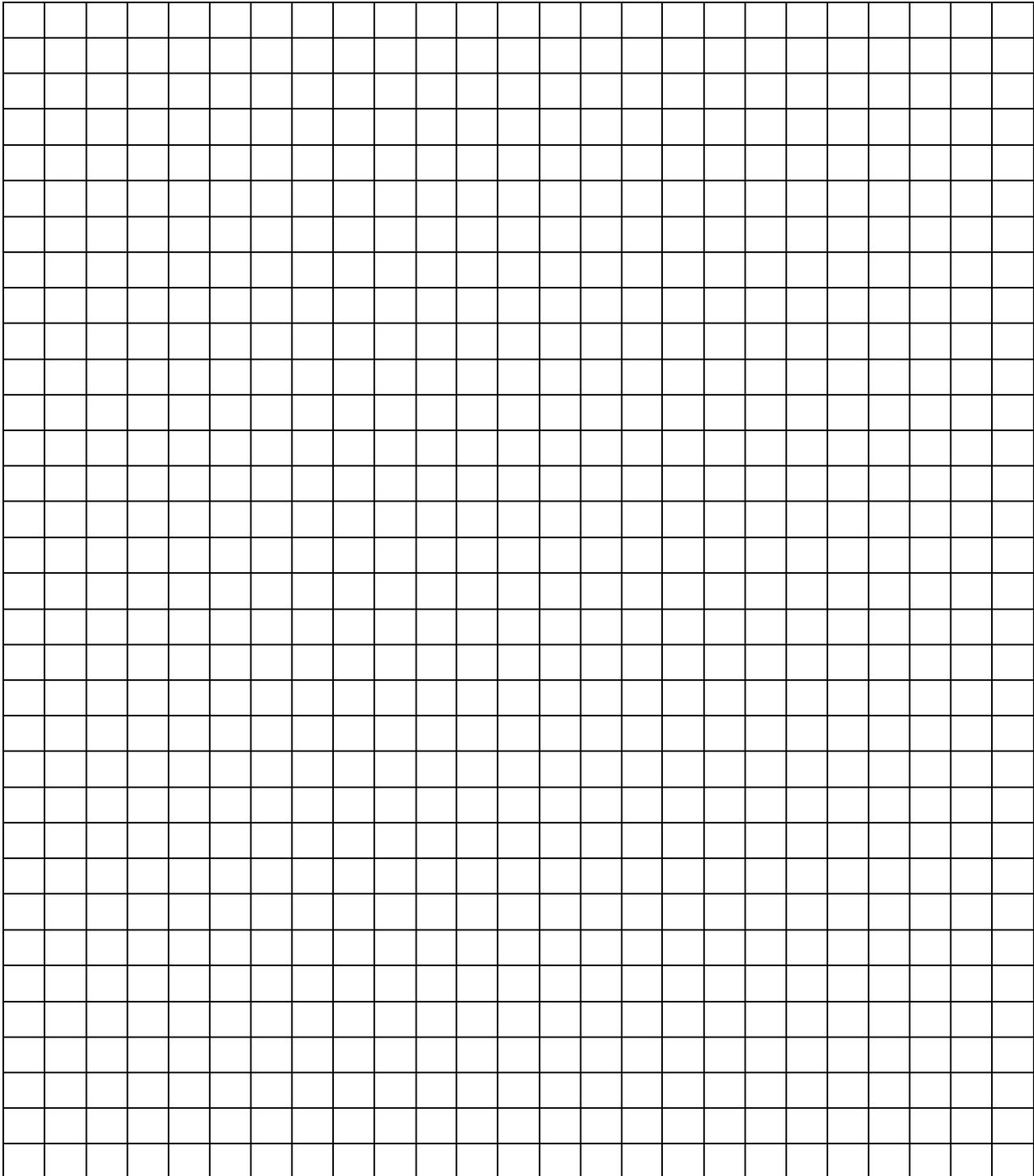
ACTIVITY 6: COMPARING HEART RATES

Have students return to their worksheet from Day 2, interview each other again, and then report their exercise heart rate. Record this information on your board or on chart paper. Then have students compare the difference between the resting heart rate they took on Day 1 and the exercise heart rate they took on Day 2. Have each student report back and record their answers on the table.

Heart Rate Comparison Table			
Name	Resting Heart Rate	Target Heart Rate	Exercise Heart Rate
1. Steven	65bpm	105 -132bpm	130bpm
2. Maria	82bpm	114 -162bpm	175bpm
3. Greta	95bpm	102 -145bpm	132bpm
4.			
5.			
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10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
Class Mean	= 242 / 3 = 80.7		= 437 / 3 = 145.6

ACTIVITY 7: GRAPH IT!

Using the table from the previous activity, have students create a double bar graph that will compare heart rates. Have students label the X-axis "Names" and the Y-axis "Heart Rate". Discuss how you will distribute the data on the Y-axis. For example: Will you start with zero? Should every line be equal to 100 bpm? Afterwards, label students' names across the X-axis and have students plot data for Day 1. After all points are plotted, have students draw bars and color them blue. Next, have students plot data for Day 2 beside corresponding data for Day 1 and draw black bars. Decide on a title for the graph, create a key, and discuss what can be learned from this visual representation of the data.



ACTIVITY 8: RECREATION CENTER MEMBERSHIP

Reflect on your exercise session from the previous class. Talk about how exercise can be an easy part of your daily routine, but it is also easy and affordable in New York City to join a recreation center. The New York City Department of Parks and Recreation has recreation centers in all 5 boroughs that are equipped with gym equipment, basketball courts, park space, and some even have swimming pools! See the following page for the "Recreation Center Membership" brochure. Read the paragraph as a class and then ask students to answer the questions individually.

"Scanning" is a reading strategy many people use when looking up a word in the telephone book or dictionary. When you scan written materials, you search for key words or phrases. In most cases, you know what you're looking for, so you concentrate on finding a particular answer. Scanning involves moving your eyes quickly down the page seeking specific words and phrases. Scanning is also used when you first get a written document of any kind to determine whether it will answer your questions. Scan this brochure to answer the questions below.

Services: Ask students how they will scan the brochure for each question.

1. Name 3 services offered in Recreation Facilities.

Programs: Ask students how they will scan the brochure for each question.

2. Name 3 programs offered in Recreation Facilities.

Membership: (Round your answers to the nearest penny when necessary.)

3. How much does a membership at a recreation center without a pool cost per day?

$$50/365 = 0.136 = \$0.14 \text{ per day}$$

4. How much more does it cost to join a recreation center with a pool than a recreation center with a pool? $75 - 50 = \$25.00$ more

5. How much does membership at a recreation center with a pool cost per day?

$$75/365 = 0.205 = \$0.21 \text{ per day}$$

6. How much will a senior membership cost per day? $10/365 = 0.027 = \$0.03$ per day

7. How much does it cost someone 18 or younger to join? $\$0.00$



Indoor Recreation Facilities

Since 1910, the City of New York/Parks & Recreation has provided the most affordable and extensive network of recreational services throughout New York City. Our Recreation Facilities (Recreation Centers, Community Centers, Field Houses, and Nature Centers) offer services such as indoor pools, weight rooms, basketball courts, dance studios, boxing rings, art studios, game rooms, and libraries.

All of our Recreation Facilities offer a wide range of programs for all ages, such as aerobics, dancing, computer classes, and art. Most of our programs are free or available at a modest cost, and all are open to the general public. Each facility is equipped with a professional staff who provide organized and free-play activities that are safe, fun, and educational. **Please note: all recreation centers are closed on New Year’s Day, Easter, Fourth of July, Labor Day, Thanksgiving, and Christmas.**

Membership Information and Prices

Standard membership includes scheduled access to gym, pool, and other facilities for one year. Instructor-led courses such as aerobics, martial arts, music, or yoga may require additional session fees.

	Seniors (55 and up)	Adults (18 and up)	Youths (under 18)
Recreation Centers	\$10	\$50	Free
Recreation Centers with indoor pools	\$10	\$75	Free

You can pay for a membership with a check or money order made out to "Department of Parks & Recreation" or by credit card. Please bring two forms of identification, including a photo ID.

SET GOALS FOR YOUR HEALTH: YOU CAN BE MORE ACTIVE!

Read the following text for your class and ask them to choose two goals for the next week. After you and your students have chosen your goals, have everyone share. Encourage your students to place this in an obvious place in their home.

Before students leave class, make a copy of this page for the classroom so that you can check-in with your students in a week and see how they are progressing.

Here are some easy ways to be more active. Choose some goals from this list. Remember, small changes in your life can make big changes in your health!

- I will take the stairs.
- I will take a walk every day.
- I will dance for _____ minutes every day.
- I will be active while I watch television.
- I will play active games with my kids.
- I will walk my children home from school.
- I will get off the train or bus early and walk.
- I will bicycle to work or school.
- I will measure my heart rate before and after exercise.
- I will join a City Recreation Center.