



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

BE ACTIVE
ABE LEVELS 3 & 4

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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- Student Handouts
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- Teacher Survey

 Red Text = Teacher
 Black Text = Student

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, having a healthy heart, 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. And 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 track your progress as you become physically active regularly. A strong heart

has an easy time pumping blood, and therefore, has a slower heart rate. This lesson will show students how to take their pulse and measure their heart rate, making for a variety of creative math exercises at all levels of instruction. Students will also learn how to interpret their heart rate by comparing rates before and after exercise.

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 , exercise
ACTIVITY 2	Calories, context clues, epiphany, incidental, parlance, physiologists, forgo, begets, commodity, hordes, bottlenecked, estimations
ACTIVITY 3	Obesity, diabetes, heart disease, misjudge, consume, entrees, intake, exertion
ACTIVITY 4	Decide on vocabulary as a class
ACTIVITY 5	Health professionals, heart rate, pulse
ACTIVITY 6-7	Review previous vocabulary, compare, target, range, maximum, mean
ACTIVITY 8-9	Scanning, recreation, membership
ACTIVITY 10	Television, commercial, script

NATIONAL REPORTING SYSTEM (NRS) DESCRIPTORS: ABE 3 AND 4

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

- Read text on familiar subjects
- Determine new vocabulary by context
- Make minimal inferences
- Use context to determine meaning
- Interpret actions required in written directions
- Write paragraphs with a main idea and supporting details
- Add, subtract, multiply, divide
- Perform basic operations on fractions
- Read simple charts, graphs and labels

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 use a pedometer.

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

ACTIVITY 1 Be Active – Get Regular Exercise!	Class discussion and short writing activity. <ul style="list-style-type: none">■ Interpret actions required in written directions■ Write paragraphs with a main idea and supporting details
ACTIVITY 2 When Exercise is a Part of Everyday Life	Reading a Daily News article. <ul style="list-style-type: none">■ Read text on familiar subjects■ Determine new vocabulary by context■ Make minimal inferences■ Use context to determine meaning
ACTIVITY 3 Be Active to Control Body Weight	Reading health-related literature and tables. <ul style="list-style-type: none">■ Read text on familiar subjects■ Read simple charts, graphs, and labels
ACTIVITY 4 Some Other Good Reasons to Be Active	Short reading and class discussion. <ul style="list-style-type: none">■ Read text on familiar subjects
ACTIVITY 5 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 6 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 mock commercial.

ACTIVITY 7
Compare Heart Rates

Complete the heart comparison table

- Interpret and develop tables and graphs

ACTIVITY 8
Recreation Center
Membership

Reflect on exercise class and practice scanning with Parks brochure.

- Read text on familiar subjects
- Add, subtract, multiply, divide

Take a break with some stretching, a game, or a dance.

ACTIVITY 9
Review

Write a short essay.

- Write paragraphs with a main idea and supporting details

ACTIVITY 10
Be Active - Share What
You Know

Develop and perform a television commercial script.

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

DAY 1

ACTIVITY 1: BE ACTIVE – GET REGULAR EXERCISE!

Begin this lesson with a conversation about what your students already know about exercise.



- 1. Name some common exercises.** Ask students to list of all the exercises they can collectively think of on the board. The pictures above will help start the conversation.
- 2. Health professionals tell us that it is important to get regular exercise. We know what exercise is, but what is “regular exercise”?** Have students pick a partner to discuss Question #2. Have several pairs share their answers.

To exercise is to workout, train, or keep ones body fit. “Regular exercise” means that exercise is a habit or something that we do often. Regular exercise does not refer to physical activities which we do only once in a while. Health professionals recommend that we get at least 30 minutes of moderate exercise (like walking, riding a bike, or doing household chores) every day.

- 3. Write a short paragraph about exercising. Make sure to include a main idea and supporting details. The questions below might help you get started.**
 - Do you like to exercise? Why or why not?
 - What types of exercise do you like to do?
 - How often do you exercise?

ACTIVITY 2: WHEN EXERCISE IS A PART OF EVERYDAY LIFE

Ask students to skim the article headings, tables, and pictures. Have students predict what this article will be about. Then, ask them to read the article individually and circle every word that is new to them. Afterwards, make a list of new vocabulary on the board. Discuss how to use **context clues** to understand new vocabulary when you cannot use a dictionary. Practice using context clues to determine the meaning of some words that are not in the vocabulary exercise on the next page as a class. Last, refer students to the questions on the next page.

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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.

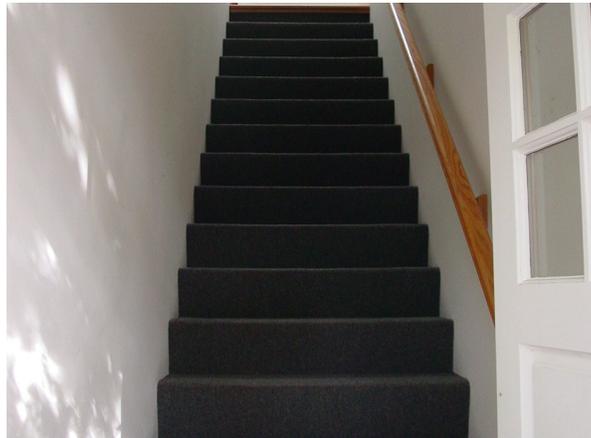
Television watching became prime time for spot toning: Buss wound himself into all manner of yoga poses in front of the set, and converted a bedside table into a foot-holder for

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

DAILY NEWS
MONDAY APRIL 12, 1998

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

Directions: 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 as 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 that 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!

Discuss table decoding skills. Please see your supplemental materials for a larger version of this table. Talk about the difference between columns and rows. Then discuss the title and the headings for each column. Write someone's sex (female), activity level (less than 30 minutes of activity each day) and age (30) on the board. Have students put their right index finger on the female column. Have students move their finger down into in the column titled "less than 30 min...." Next, have students place their left index finger on the row titled "26-40." Last, have students move their left finger across and their right finger down until they meet at 1800 calories. See if any students are willing to share their information with the class. Have students practice using the table to find these students' Recommended Daily Caloric Intake (RDCI).

Recommended Daily Caloric Intake ²				
	Males		Females	
	Activity Level		Activity Level	
Age	Less than 30 min. of activity each day	30 - 60 min. of activity each day	Less than 30 min. of activity each day	30 to 60 min. of activity each day
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+	2000	2200	1600	1800

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

Calories measure the amount of energy available in the food 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.

In order to have a healthy lifestyle you need to limit how many calories you take in from food 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: SOME OTHER GOOD REASONS TO BE ACTIVE³

Have students read this page individually, circling unfamiliar words as they read. Discuss new vocabulary and the “questions for discussion” as a class.

Besides helping you control or lose weight, an active lifestyle also improves your overall health and reduces your risk of disease.

Short-term benefits of regular physical activity include:

- A healthier heart. Physical activity makes demands on your heart that make it stronger and better able to function.
- Healthy muscles, bones, and joints. Activities such as weightlifting improve your bone and muscular strength, which is especially important for older adults to prevent falls and injuries.
- Improved ability to fall asleep and sleep well.
- Increased energy.
- Increased mental ability. You will be sharper and faster thinking.
- Better mental health and ability to cope with stress. People who are active have less anxiety, depression, and stress than people who aren't active.

Long-term benefits of regular physical activity include reduced risk of:

- Dying early.
- Developing heart disease.
- Having a second heart attack.
- Developing high blood pressure. Regular physical activity can also lower blood pressure in those who have high blood pressure.
- Developing Type 2 diabetes. Physical activity may prevent Type 2 diabetes.
- Developing cancer.
- Becoming obese.

Questions for discussion:

1. **What is the difference between short-term and long-term benefits?** Short-term benefits are advantages or gains that you receive in a short period of time. Long-term benefits are advantages or gains that you receive at the end of a long period of time.
2. **What do you think are the best reasons to be active? Why?**

³Adapted from: <http://www.webmd.com/fitness-exercise/tc/fitness-why-should-i-exercise>

ACTIVITY 5: 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.

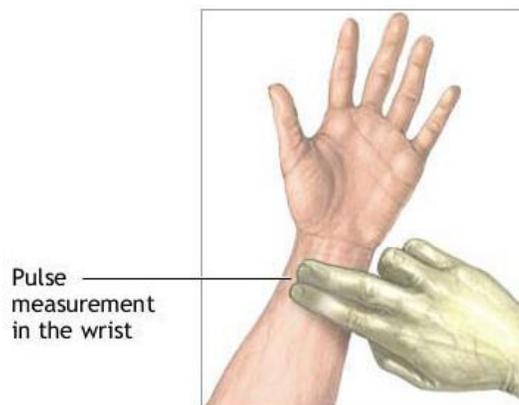
Heart rate is measured in beats per minute. Checking your pulse is how you calculate heart rate. You can check your pulse in several different spots on your body. The most common pulse points are on the neck and on the wrist.

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.⁴ 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.



⁴ From the American Heart Association: www.americanheart.org

ACTIVITY 5 (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 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 6: 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 6 (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 7: 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.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
Class Mean	= 242 / 3 = 80.7		= 437 / 3 = 145.6

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.

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

3. How much does it cost to join a recreation center without a pool? **\$50.00**
4. That is the price for one year. How much will this membership cost per day?
 $50/365 = 0.136 = \$0.14$ per day
5. How much more does it cost to join a recreation center with a pool than a recreation center without a pool? **$75 - 50 = \$25.00$ more**
6. How much will this membership cost per day? **$75/365 = 0.205 = \$0.21$ per day**
7. How much will it cost someone older than 55 to join? **\$10.00**
8. How much will a senior membership cost per day? **$10/365 = 0.027 = \$0.03$ per day**
9. 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.

ACTIVITY 10: BE ACTIVE – SHARE WHAT YOU KNOW

Introduce this activity by asking your class questions.

- Who watches television?
- What are commercials?
- What are some of your favorite television commercials?
- Are there any commercials about being active on television?
- What are they?
- Do you think more people would be active if they saw commercials for easy and affordable physical activity?
- What information should be included in a commercial for easy and affordable physical activity?

Explain to your students that they will be creating a commercial about easy and affordable physical activity. They can choose to create a commercial about the City’s recreation centers or another exercise option. Task your students with including at least one good reason to be active and one easy and affordable way to be active. Break your students into small groups and have each develop a written script and then act out that script for the class. Encourage them to be creative and think of what would appeal to people from their culture or another culture they are familiar with.

It may be helpful to provide an example commercial. Below is a sample script that you can follow with another student or teacher. It may be helpful to write this sample script on the board or another sample script that has been co-constructed as a class.

Person 1: Hello.

Person 2: Hey, how are you?

Person 1: I am fine thank you. How are you?

Person 2: I am okay, thanks.

Person 1: Hey, I’m going to an exercise class right now. Do you want to come with me?

Person 2: Oh, no thank you. You know that I don’t like to exercise.

Person 1: Why not? You should be active. If you are active, you will have a healthier heart.

Person 2: I know you’re right, but I don’t have any time or money.

Person 1: Don’t worry! I go to classes at city recreation centers. Membership is cheap!

Person 2: How cheap?

Person 1: Very cheap! Come with me and find out.

Person 2: Okay. I’ll try it out.

When groups are ready, have each one present their commercial to the class.

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.