



Name: _____
Mod: _____
Locker #: _____
Teacher: _____

Physical Education I

Carroll County Public Schools

Physical Education I is designed to fulfill the ½ credit towards the county Physical Education graduation requirement. Emphasis will be placed on concepts of personal fitness and knowledge to achieve and maintain a healthy level of physical fitness. Students will participate in a variety of sport theme activities that can be used for lifetime recreation and personal fitness.

“Physical fitness is not only one of the most important keys to a healthy body, it is the basis of dynamic and creative intellectual activity.”

John F. Kennedy

Physical Fitness Questionnaire

Directions: Check the box that best reflects your attitude or opinion regarding physical fitness.

	4 Most of the time	3	2	1 Never
1. Being physically active makes me feel better physically and emotionally.				
2. I currently participate in a sport or exercise more than 3 days per week.				
3. I think about ways to change activities to increase physical activity.				
4. I try to eat 5 servings of fruits and vegetables each day.				
5. I make nutritious food choices when eating out.				
6. I think the activities in physical education help me maintain an active lifestyle.				
7. I consider physical fitness to be an important part of my health and wellness.				
8. I would rather participate in activities with friends or others.				
9. I would rather participate in activities by myself.				
10. I feel like I am an appropriate weight for my height and build.				

Benefits of Exercise

___/5 Points

Physical Fitness is the ability of the body systems to work together efficiently.

Directions: Check the items listed below that you find to be new or interesting information about the benefits of exercise.

- Relieves stress.
- Improves endurance, reduces fatigue.
- Lowers blood pressure.
- Eases the symptoms of PMS.
- May help to prevent certain kinds of cancer.
- Improves self image and self esteem.
- Provides for greater mental focusing skills.
- Heightens sensitivity to our body's needs.
- Gives us a greater peace of mind and ability to relax.
- Slows down the aging process- unused muscles shrink 10% each decade.
- Upper body strength lets us "carry our own weight in the world", lift children, carry items etc.
- Training eases misalignments and muscle imbalances in our body.
- Stronger muscles improve problem areas in posture...we stand taller and reduce the risk of developing "dowager humps" on little old ladies' backs.
- When muscles are stronger, they grow into a more pleasing shape.
- Strong muscles help us to stay lean, muscle is active tissue, and it burns up calories. Our energy needs increase, our metabolism speeds up and we have to eat more, more often. Not to worry, as long as our meals are low fat and small, we should see weight loss and improved levels of fitness.
- Muscles weigh more than fat, so don't depend of the scale to measure success or failure. The way your clothes fit and how tight your muscles feel are better indicators.

Components of Fitness

Health Related Fitness : The components of physical fitness that contribute to how well the systems of the body operate.

a. Flexibility The range of movement possible at various joints.

b. Muscular Strength The ability of muscle to exert a force at one time.

c. Cardiovascular Endurance The ability of the heart, blood vessels and respiratory systems to supply oxygen and nutrients to the muscles during exercise.

d. Muscular Endurance The ability to uses muscles for a long period of time.

e. Body Composition The ratio of fat to muscle, bone and other body tissues.

Skill Related Fitness: The components of physical fitness that contribute to the ability to successfully participate in sports.

a. Agility The ability to change the position of the body and to control body movement.

b. Balance The ability to keep an upright posture while standing still or moving.

c. Coordination The integration of hand, eye and foot movements.

d. Power The ability to do strength performances at a rapid pace.

e. Reaction Time The amount of time it takes to a get moving once the senses signal the need to move.

f. Speed The ability to cover distances in a short time.

Contrasting Muscular Strength and Muscular Endurance Activities



Types of muscular strength:

Push-ups
Power lifting
Sprints
Gymnastics
Football

Type of muscular endurance:

Curl-ups
Lifting –low weight/ high rep
Distance Running
Biking
Swimming

Health Related Fitness Assessment

Name:

Age:

Sit And Reach

Pre

Post

Push-up

Pre

Post

Pacer

Pre

Post

Curl-up

Pre

Post

Outstanding

Healthy Fitness Zone

Needs Improvement



Recommendations for Fitness Improvement

FLEXIBILITY:

- Maintain your flexibility by stretching slowly on a daily basis holding each stretch for 10-15 seconds. To build flexibility, one should perform a static stretch slowly and to the point of discomfort. The muscle should feel slightly uncomfortable.

MUSCULAR FITNESS:

- Abdominal Strength/Endurance: Maintain or improve your abdominal strength and endurance by doing curl-ups 3-5 days per week. Remember to keep your knees bent and avoid having someone hold your feet.
- Upper Body Strength/Endurance: Maintain or improve your strength by doing any variety of push-ups, flexed arm hands, chin-ups, pull-ups and strength training exercises 2-3 days per week.

CARDIOVASCULAR FITNESS:

- You can improve your cardiovascular capacity working non-stop for 20-30 minutes of vigorous activities at least 3 to 4 times each week.

BODY COMPOSITION:

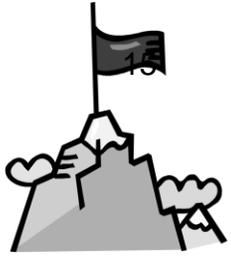
- To improve body composition, remember to perform some cardiovascular activity each day.
- Follow a balanced nutritional program eating more fruits and vegetables while eating fewer fats and sugars.

BOYS – Healthy Fitness Zone

Age	20-meter PACER	Curl-up	90 degree push-up	Back-saver sit and reach (inches)
14 (grade 9)	42 - 83	32 - 47	15 - 31	8
15 (grade 10)	51 - 94	32 - 47	16 - 35	8
16 (grade 11)	61 - 94	32 - 47	18 - 35	8
17 (grade 12)	61 - 106	32 - 47	18 - 35	8

GIRLS – Healthy Fitness Zone

Age	20-meter PACER	Curl-up	90 degree push-up	Back-saver sit and reach (inches)
14 (grade 9)	32 - 51	24 - 36	10 - 16	12
15 (grade 10)	32 - 51	24 - 36	10 - 16	12
16 (grade 11)	32 - 61	24 - 36	10 - 16	12
17 (grade 12)	41 - 61	24 - 36	10 - 16	12



___ /8 Points

Personal Fitness Goals



Directions: Write personal fitness goals based upon your assessments of the four health-related components of fitness. The goals should be measurable and attainable this quarter. (Example: I can currently complete 43 PACER laps. By the end of the quarter I will be able to complete 53 PACER laps.) Refer to page 8 & 9.

Cardiovascular Endurance	
Muscular Endurance	
Muscular Strength	
Flexibility	

EVALUATING YOUR FITNESS GOALS

____/8 Points

Refer to page 8 & page 16. On the health-related fitness chart, consider what you want to achieve as your personal level of fitness. Select one of the health-related components.

Component _____

1. What specific activity will help you accomplish your goals?

a. _____

b. _____

c. _____

2. List two benefits of reaching your goals?

a. _____

b. _____

3. List two obstacles you may need to overcome to reach your goals?

a. _____

b. _____

The FITT Principle

You know that you must do more physical activity than normal to build fitness and that you should gradually increase your physical activity to stay within your target heart rate zone. There are four steps to follow when you design an individualized plan, workout or routine for health-related fitness.

F – Frequency refers to how often you do physical activity, or the number of days you should take part in physical activity each week. Teens should be active a minimum of 5 days a week.

I – Intensity refers to how hard you perform physical activity. Should it be light, moderate, or vigorous?

T – Time refers to how long you do physical activity or how many minutes you should be active each day. 30 to 60 minute duration of time is recommended.

T – Type refers to the kind of activity you do to build a specific part of fitness or to gain a specific amount. flexibility, cardiovascular endurance, muscular endurance, or muscular strength.

The FITT Principle

____/5 Points

Using the steps in the FITT principle, develop a practice activity regimen for one fitness component you would like to follow.

Recommendation	Your Fitness Component _____ p. 17 Your Goal _____ p. 16		
F – Frequency of participation Aim for most, preferably all, days of the week.	----- days each week Sun Mon Tues Wed Thur Fri Sat		
I – Intensity of exercise (light, moderate, vigorous) Start with an easy to moderate intensity. The “ Talk Test ” is an easy way to monitor your approximate intensity and perceived exertion during physical activity. Find your level in the column to the right.	Check one. <input type="checkbox"/> Light – When active at a light intensity, a person should be able to sing while taking part in the activity. <input type="checkbox"/> Moderate – At a moderate intensity, a person should be able to comfortably carry on a conversation while participating in the activity. <input type="checkbox"/> Vigorous - A person taking part in vigorous activity will still be able to talk, but will find conversation difficult due to heavy breathing.		
T – Time of physical activity Aim for 30-60 minutes of physical activity each day. Start with 15-20 minutes and work up to at least 30 minutes daily. * It's okay to break sessions into 2 or 3 shorter sessions	_____ Minutes per day		
T – Type of activity Participate in activities you enjoy such as: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> Moderate Activity Aerobics to music Bicycling (10 mph) Golf Hiking Walking </td> <td style="width: 50%; vertical-align: top;"> Vigorous Activity Bicycling (12 mph) Running Skiing Swimming laps Tennis </td> </tr> </table>	Moderate Activity Aerobics to music Bicycling (10 mph) Golf Hiking Walking	Vigorous Activity Bicycling (12 mph) Running Skiing Swimming laps Tennis	Name a few activities you will enjoy doing. 1. _____ 2. _____ 3. _____
Moderate Activity Aerobics to music Bicycling (10 mph) Golf Hiking Walking	Vigorous Activity Bicycling (12 mph) Running Skiing Swimming laps Tennis		

FITT PRINCIPLE QUIZ

___/10 Points

	What does the letter stand for?	Write a 2 word definition
F		
I		
T		
T		

Choose a cardiovascular activity and describe how you would apply the FITT principle to improve your personal fitness goals?

F - _____

I - _____

T - _____

T - _____

Principles of Training

Directions: In order to answer the questions thoroughly below read and utilize the following definitions.

Principles of Training:

Progression: The gradual increase in the intensity and time spent on an activity. For example, a person runs faster for extra minutes (this means you work harder for a longer time period.)

Overload: Adding activities to a workout to improve the body's ability to do work. This refers to things we can count such as completing 5 extra push-ups.

Specificity: Choosing an activity to improve a specific Health Related Fitness Component.

For the following questions pretend that you ride a stationary bike 3 times per week for 30 minutes.

1. How could you add **progression** to the stationary bike workout?

2. There are 2 days in which you do not bike. Biking is an activity that requires cardiovascular endurance. Use the principle of specificity to explain what things you might do to substitute for the missed 2 days of biking.

Heart Rate

The term "heart rate" refers to the number of times your heart beats per minute. As the heart muscle pumps blood out to the body, it first contracts to push the blood out and then relaxes. Your heart rate measures how many times per minute the heart contracts. The average healthy heart rate is around 70 to 80 beats per minute. It can go as low as 40 to 60 in athletes. Taking your heart rate can be a good indication of your overall heart health.

- **Resting Heart Rate** a measure of the heart rate following inactivity or rest. The true resting heart rate is when you wake up in the morning before you get out of bed. A high resting heart rate generally indicates a poor level of cardiovascular fitness. Resting heart rate usually rises with age, and it's generally lower in physically fit people.
- **Target Heart Rate** where you want your heart rate to be during exercise (approximately 135 – 180 bpm) If your pulse rate falls below the THZ while working out, you should increase the level of the workout.
- **Maximum Heart Rate** highest number of beats your heart should beat per minute. It is not recommended to exercise above 90% of your MHR.

To calculate your predicted maximum heart rate, use this formula:

220 - Your Age = Predicted Maximum Heart Rate Example: a 15-year-old's predicted maximum heart rate is 205.

- **Recovery Heart Rate** a measure of the heart rate taken at the end of exercise. Referring to the amount of time it takes for the heart rate to return to pre- exercise rates. Quick recovery indicated good cardiovascular fitness.

How to Measure Your Pulse or Heart Rate

- 1) Feel at your ankle, elbow, or wrists (see diagram below) with the fingertips of your index and middle fingers for your pulse point until you detect pulsations.
- 2) Keep yourself as still as possible while you are taking your heart rate. Do not hold your breath.
- 3) Count the number of heartbeats you feel during the time periods on your data chart Record the results.



Carotid artery in the neck (DO NOT use this for today's experiment)

Anterior Tibial Artery on the front of the ankle



Brachial Artery in the inside of the elbow

Radial Artery in the wrist



Count Pulse for:	Record your count	Multiply by:	Heart beats per minute
60 seconds		X 1	
30 seconds		X 2	
10 seconds		X 6	

How can I determine my Target Heart Rate Zone?

___/5 Points

1. First find your maximum heart rate (MHR) by subtracting your age from 220

220	Minus		=	_____ MHR
-----	-------	--	---	-----------

2. Next multiple (MHR) by 0.60 = lower end of the target heart rate zone

_____ MHR	Multiply	.60	=	
-----------	----------	-----	---	--

3. Next multiply (MHR) by 0.90 = upper end of the target heart rate zone

_____ MHR	Multiply	.90	=	
-----------	----------	-----	---	--

4. These two numbers (#2 and #3) represent your target heart rate zone.

You should strive to stay between these numbers during your workout.

5. Target heart rate zone = _____ to _____ beats per minute

CARDIOVASCULAR ENDURANCE WORKSHEET

___/10 Points

Directions: Record your heart rate after completing each of these activities for 1 minute.

Activity	Heart Rate	Are you in the target heart rate zone?
Lay down (Resting Heart Rate)	A	
Seated	B	
Casual Walk	C	
Speed Walk	D	
Fast Jog	E	
Sprint	F	
Casual Walk	G	
Seated	H	
Lay down (Recovery Heart Rate)	I	

Graph your heart rate data. Show your HR max using a dashed line and shade in your target heart rate zone.



HEART RATE EXERCISE ANALYSIS

___/4 Points

Use data from p. 27

1. Which of the activities was your heart rate the lowest, highest? Why?

Lowest _____

Highest _____

2. Why does the heart rate vary depending on the exercise?

3. Which activities were you in your THZ? P. 26

4. Compare your heart rates with a partner. Are they similar or different? Why?



___/8 Points

HEART RATE QUIZ

Use the information in the scenario below to answer each question. Refer to your packet as needed.

Tommy is a 14 year old freshman who enjoys swimming, hiking, and playing lacrosse.

1. What is Tommy's maximum heart rate zone? _____.
2. What is Tommy's lower ("60%") heart rate zone? _____.
3. What is Tommy's higher ("90%") heart rate zone? _____.
4. Tommy's high resting heart rate indicates what level of fitness _____.
5. Tommy's heart rate taken just after waking up in the morning is called _____.
6. The formula for calculating MHR is 220 minus your _____.
7. Name one area of the body where you can detect your pulse. _____.
8. The highest number of beats your heart should beat per minute is your _____.

Physical Fitness Questionnaire

Directions: Check the box that best reflects your attitude or opinion regarding physical fitness.

	4 Most of the time	3	2	1 Never
1. Being physically active makes me feel better physically and emotionally.				
2. I currently participate in a sport or exercise more than 3 days per week.				
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CCPS High School Physical Education Course Selection Planning Guide

Reminder to students:

- Courses can be repeated for credit (except PE 1).
- Students can sign up for maximum 4 per year (1 per quarter)

	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Physical Education 1 <i>(prerequisite for all electives)</i>	X			
Personal Fitness				
Team Sports				
Individual/Dual Sports				
Barbell and Cross Training				
Weight Training				
Advanced Weight Training**				
Gymnastics (SCHS only)				
Organization and Administration of Physical Education				

**Weight training prerequisite

NAME: _____

MOD: _____

Page	Portfolio Task	Point Value
1	Physical Fitness Questionnaire	/5
2	Benefits of Exercise	/5
5	Health Related Fitness Assessment – Pre test	/20
5	Health Related Fitness Assessment – Post test	/20
7	Personal Fitness Goals	/8
8	Evaluating Your Fitness Goals	/8
10	FITT Principle	/5
11	FITT Principle Quiz	/10
12	Principles of Training	/4
14	How to Measure Pulse or Heart Rate	/4
15	How to Determine Target Heart Rate Zone	/5
16	Cardiovascular Endurance Worksheet	/10
17	Heart Rate Exercise Analysis	/4
18	Heart Rate Quiz	/8
19	Physical Fitness Questionnaire	/5
	TOTAL POINTS	/121
	PORTFOLIO TOTAL POINTS	/121