

Name _____ Date _____ Class Period _____

FITT Principle for Flexibility and Warming Up

FITT Principle for Flexibility

F	Frequency of Exercise	How Often	Minimum two to three times a week Best to do some stretching daily
I	Intensity of Exercise	How Hard	You should stretch to the point where you feel tension, not pain.
T	Time of Exercise	How Long	15–30 minutes total Static stretches of warm muscles; 20–60 seconds, three sets
T	Type of Exercise	Which Exercises	After warm-up: dynamic stretch, prepares body for exercise After cooldown: static stretch, most improvement gains for flexibility

The most significant influence on your flexibility is an active or inactive lifestyle. As you increase or continue your physical activity, your muscles and connective tissues stay elastic. If you decrease your physical activity, your muscles and connective tissues lose elasticity. If you remain inactive, you will also add body fat, which further limits flexibility. A moderate to high level of flexibility is important for efficient physical movement. You need to stretch a minimum of two to three times a week.

The balance between muscular strength and flexibility is very important. If you have **muscle imbalance**, a condition in which one muscle group becomes too strong in relation to a complementary group, you are more prone to pain or injury. This may also occur in someone who is **hyper-flexible**, which is an excessive amount of flexibility.

Note: Stretching should not be painful. Pain means something is wrong!

FITT Principle for Warming Up

Stretching is not warming up. It is an important part of warming up, however. Warming up is literally the process of warming up your core body temperature.

It is very important that you perform the general warm-up before you stretch. Cold muscles do not stretch very well, so it is not a good idea to attempt to stretch before your muscles are warm. Warm muscles that are stretched are less likely to be injured.

Name _____ Date _____ Class Period _____

When possible, the warm-up exercises should involve large muscle groups that will be used during activity. A complete warm-up and dynamic stretch can typically be performed in five to ten minutes.

Since warm-ups are so important before dynamic stretching and working out, it is important to know how to warm up. A warm-up is any low-intensity, continuous activity that warms up the body. Walking, jogging, cycling, and slow rope jumping are commonly used. Other activities might include dribbling a basketball or soccer ball, calisthenics, and low-level tag or other games.

After a warm-up, a dynamic stretch is performed to prepare the body for the workout. **Dynamic stretching** consists of controlled leg and arm movements that take you gently to the limits of your range of motion.

Warm-up and Dynamic Stretch Activity

The purpose of this activity is to experience a fun warm-up and dynamic stretch using a basketball. You will use your heart rate monitor to determine when your body would be ready to move from the warm-up to the dynamic stretch. You will be looking for a slow but progressive increase in your heart rate that will take five to ten minutes. As you reach approximately 125 BPM, you know your body is ready to stretch and perform another activity.

Warm-up

Activity	Description	Time	Heart Rate
1. Prior to Activity	Get a pre-exercise heart rate.		
2. Dribble Dominate	Dribble a basketball with your dominant hand while moving forward at a slow pace.	1 minute	
3. Dribble Nondominate	Now dribble with your non-dominant hand, moving a little faster.	1 minute	
4. Alternating Dribble	Dribble on one side for three to five dribbles, then dribble on the other side.	1 minute	
5. Bounce Pass	Bounce pass and catch with a partner, easy passes, but instead of standing still, keep moving.	1 minute	
6. Chest Pass	Do the same drill, but use a chest pass.	1 minute	

Flexibility–Activity 2

Name _____ Date _____ Class Period _____

How much has your heart rate increased since pre-activity?

Do you feel your body has become warm and your heart rate has increased enough to perform dynamic stretching? How do you know?

Dynamic Stretching If you feel you need more time to warm up, repeat the basketball dribbling and passing activity. When you feel warm, try the following stretches. All dynamic stretches should be slow and controlled.

Activity	Description	Time	Heart Rate
1. Standing Basketball Extensions	Lift basketball high, to your waist, to the right (trunk rotation), to the waist, to the left (trunk rotation), to the waist, out in front, to the waist. Repeat.	1 minute	
2. Lunge	Stand in a lunge position with basketball down touching legs; lift back heel off floor while you lift (curl) basketball to chest; take heel back to floor and return basketball back to extended arms by legs. Repeat.	1 minute	
3. Lunge, other leg		1 minute	
4. Straddle Stretch	Sit on floor with legs in straddle and body upright; reach basketball as far as you can; and place to the left of left foot; return to upright position; reach basketball in between your feet; return to upright position; reach basketball to right of right foot; return to upright position; take ball up and behind your head; return to upright position.	1 minute	

Flexibility–Activity 2

Name _____ Date _____ Class Period _____

Evaluation

1. What happened to your heart rate during dynamic stretch? Why?

2. What is the most significant influence on flexibility?

3. Why is the balance between flexibility and muscular strength so important?
