Why is it important to warm up before exercise?

A warm up is the act of preparing for an athletic event or workout by exercising or practicing for a short time beforehand. Warming up helps reduce your risk of injury and the aches and pains that come with exercise. The physiological reason to warm up is to assist your circulatory system in pumping oxygen-rich blood to your working muscles. The idea is to increase circulation throughout the body in a gradual manner. A proper warm up safely prepares the body for the increased demands of exercise. Cold muscles do not absorb shock or impact as well, and are more susceptible to injury.

A warm-up helps you prepare both mentally and physically for exercise and reduces the chance of injury. During a warm up, any injury or illness you have can often be recognized, and further injury prevented. Other benefits of a proper warm up include:

- Increased movement of blood through your tissues, making the muscles more pliable.
- Increased delivery of oxygen and nutrients to your muscles. This prevents you from getting out of breath early or too easily.
- Prepares your muscles for stretching
- Prepares your heart for an increase in activity, preventing a rapid increase in blood pressure
- Prepares you mentally for the upcoming exercise
- Primes your nerve-to-muscle pathways to be ready for exercise
- Improved coordination and reaction times

Physical Education Portfolio Handout #1

<u>Directions:</u> Read the following quote from "SPARK" and write a brief summary explaining the statement.

"We all know that exercise makes us feel better, but most of us have no idea why. We assume it's because we're burning off stress or reducing muscle tension or boosting endorphins, and we leave it at that. But the real reason we feel so good when we get our blood pumping is that it makes the brain function at its best, and in my view, the benefit of physical activity is far more important and fascinating than what it does for the body." Dr. John Ratey MD from Spark