



## MONITORING SPORT PERFORMANCE

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Two energy systems are used throughout most competitive events: aerobic and anaerobic. The aerobic system is used when oxygen is sufficient to sustain the event. The anaerobic system kicks in when there is not quite enough oxygen for normal metabolic processes. When this happens, the fuel source shifts toward carbohydrate, which is quickly depleted; fat, a longer-lasting and more sustained energy source, is the primary source of fuel for the aerobic system. If you know the percentage of time you use these energy systems in your sport, you can train to improve your energy and therefore your performance.

To determine the contribution of each energy source, follow these steps:

1. Determine your aerobic and anaerobic average heart rate in beats per minute (bpm).
2. Record your heart rate throughout a scrimmage or game.
3. Have an assistant record time frames and events that occur during the scrimmage or game.
4. Compare the data from your monitor with the events that occurred in the scrimmage or game.

### **Instructions**

1. Put on a chest strap and wrist monitor, or just a chest strap if using a projection monitor.
2. When instructed to begin, turn on the stopwatch and recording functions on the wrist monitor. If you are using a projection monitor, make sure your heart rate is projected on the screen.
3. Participate in the event without paying any attention to the monitor unless told to do so by your record keeper (e.g., to be sure the stopwatch function is working and has not been interrupted).
4. Use the monitor throughout the entire event, including the warm-up period.

### **Questions**

- What was your average heart rate during the entire period?
- What was your average heart rate during the event?
- What was your average heart rate during nonplaying periods?
- What percentage of your playing period were you in your aerobic range?
- What percentage of your playing period were you in your anaerobic range?