



Cardio Comparisons

Background: In this activity, children will become familiar with cardiovascular activities and how their heart rate changes as they are doing cardiovascular activities. They will use a data table and graph to measure their heart rate as they perform various activities. Cardiovascular simply refers to your heart. Cardiovascular activities get your heart pumping faster. Your heart beats to pump oxygen-filled blood through your arteries to the rest of your body. During exercise, your heart rate is usually higher than your resting heart rate because your muscles need more oxygen. The more you exercise, the more efficient your heart will become. If you are active at least 20 minutes a day, three times a week, your heart will be able to pump more blood with each beat.

Materials

- Stopwatch
- Data Table & Graph
- Pencil
- Jump Rope
- Floor Mat
- Stair step

Procedure

1. First, have students take their baseline heart rate. You do this by locating your pulse on the underside of your wrist with 2 fingers. Count the number of beats that occur within 10 seconds. Multiply this number by 6. Have each student record this on their data table.
2. Have students perform each activity listed on the data chart. Make sure they take their heart rate again after each activity.
3. Now have each student plot their heart rate on the graph.

Questions to Ask

- Which activity raised your heart rate the most? Least?
- What was your average heart rate? (divide the sum of the heart rates by the number of activities)
- Which activity did you enjoy the most?
- What activities do you do each week that raise your heart rate?
- What do you think would happen to your heart rate if you rested for a long time between each activity?

Resources

- <http://kidshealth.org/> is a great website for kids to learn more about health education
- How Does Your Heart Work? (Rookie Read-About Health) by Don L. Curry, Jayne Waddell, and Jeanne, Ph.D. Clidas
- The Busy Body Book: A Kid's Guide to Fitness by Lizzy Rockwell

Cardio Comparisons Data Table

Physical Activity	Heart Rate (bpm)
Baseline Heart Rate (before doing the activities)	
Walking in place (1 min.)	
Jumping Rope (1 min.)	
Sit-ups (1 min.)	
Step up and down (1 min.)	

Cardio Comparisons Data Table

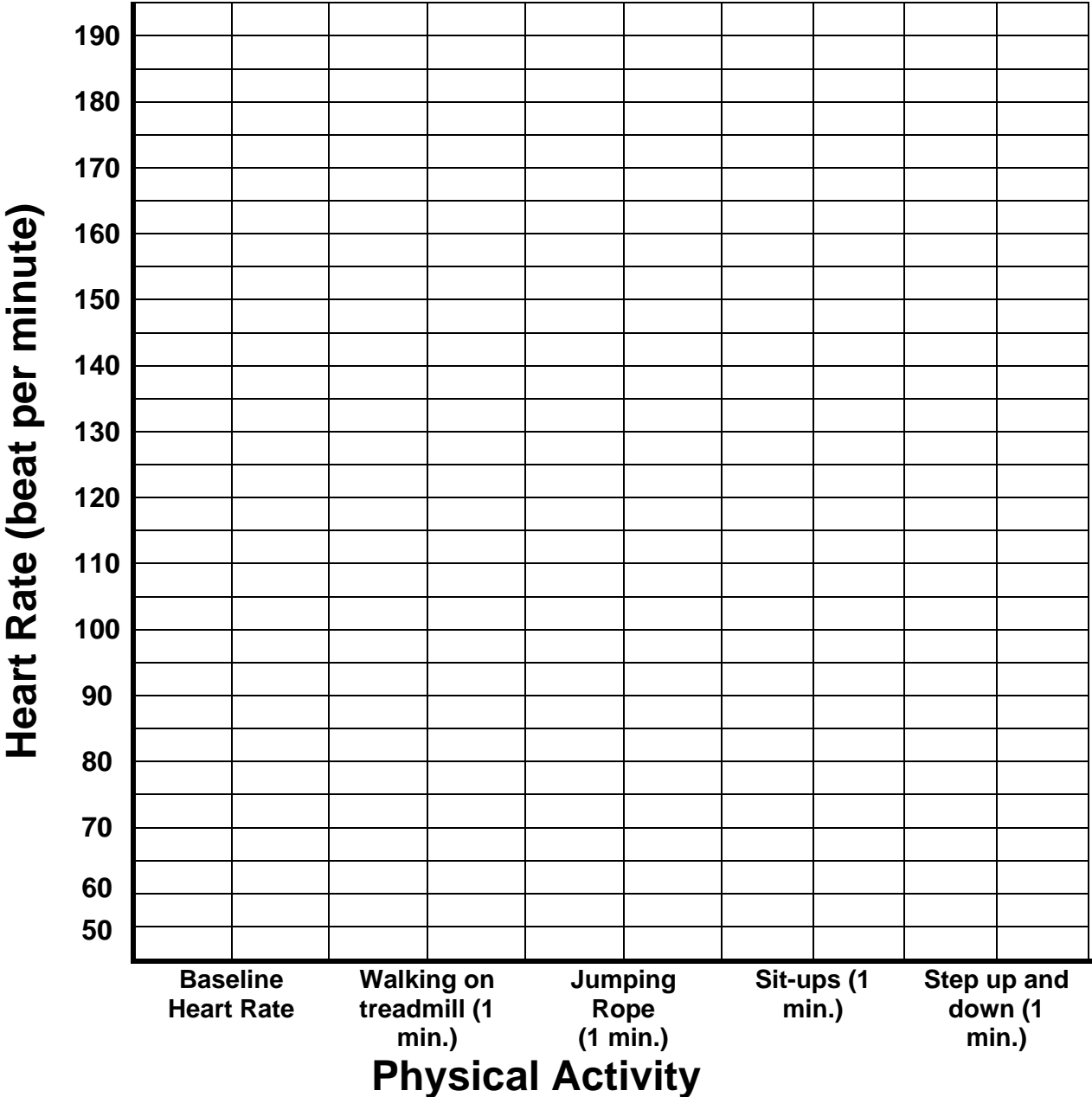
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Power Science Lab

Cardio Comparisons Graph



To record your data on the graph, make a dot on the line above each activity at the height that matches the number of beats per minute you measured.

