

How Does Your Heart Rate Compare with a Bear?

Materials: clock, watch or timer

Work with you partner to determine your resting heart rate.



1. Predict what your heart rate will be. How many times a minute does your heart pump blood through your circulatory system?
2. Measure each other's pulse.
 - One person rests their arm on the desk, with their elbow bent.
 - The other person puts their middle and index finger on the artery on the inside of the first person's wrist. They should feel the pulse beating.
 - Count the number of heart beats for 30 seconds.
3. Calculate your heart rate over 1 minute.
 - Multiply your count number by 2.
 - Add your heart rate to the chart below, Comparing Mammal Heart Rates.
4. Do a minute of physical activity, then find your active heart rate.

My predicted resting heart rate
(beats per minute)

My resting heart rate (bpm)

My active heart rate (bpm)

Think about how your heart rate compares with bears and other mammals.

1. Why do you think your heart rate was different from the black bear?
2. Study the chart Comparing Mammal Heart Rates. What do you think is one of the main factors that affects the resting heart rate of a mammal?
3. What other factors might affect the resting heart rate?
4. Write a hypothesis about the resting heart rate of mammals.
5. How could you test your hypothesis?

Comparing Mammal Heart Rates

<u>Mammal</u>	<u>Resting heart rate (bpm)</u>
Horse	38
Black bear	45
Moose	70
Dog, large	85
Human youth	_____
Beaver	100
Cat	150
Rabbit	205
Mouse	670