

Heart Rate

The Heart Rate Sensor measures the heart rate by monitoring the change in infrared light transmission through the blood vessels.

Materials List

- 1: Xplorer Datalogger (PS-2000)
- 1: Heart Rate Sensor (PS-2105)
- something with a heart beat to measure!







Site Selection

- Sensor range is from 30-200 beats per minute, with 1 beat per minute accuracy.

Sample Preparation

- ➡ If the beats per minute are erratic, reposition the clip higher on your ear, or move it to your hand. You may also try your fingertip.
- ➡ *If you are in a brightly lit room, shield the clip from interfering ambient light.*

Measurement & Recording

1. Press  to turn on the datalogger and attach the heart rate sensor.
2. Place the sensor clip on your earlobe or the webbing between your thumb and forefinger. *The sensor "sees" the variation in blood flow in these extremities as the heart beats.*
3. Perform any designated activity, then wait 5 seconds for sensor readings to stabilize (for each trial). *This device is not intended for continuous sampling.*
4. Press  to start logging data; wait 30 seconds; press  to stop logging data.
5. Record the time of day, sampling notes, and heart rate in beats per minute (beats/min).
- ⊕ *Normal resting heart rates are between 60 and 80 beats per minute in humans.*
6. Press  to turn off the datalogger.

Clean-up & Completion

1. Unplug the sensor from the datalogger and replace items in the original storage bag(s).