“Making Connections”
NYSED Lab

The new NYSED monument, possibly?
(LE teacher humor, you wouldn’t understand…)
First, Look for a pattern…

Taking your pulse is rather simple. Use the index and middle finger of one hand to palpate (feel) the arterial pulse in your radial artery on your wrist.

Count for 15 seconds and multiply by 4 to determine the number of times your heart beats in one minute.

<table>
<thead>
<tr>
<th>Pulse Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trial #1  ____X 4 = _____ bpm</td>
</tr>
<tr>
<td>Trial #1  ____X 4 = _____ bpm</td>
</tr>
<tr>
<td>Trial #1  ____X 4 = _____ bpm</td>
</tr>
</tbody>
</table>

Note: The NYSED “Making Connections” Lab measures for 20 seconds and multiplies by 3, but any calculation that leads to a count of 60 seconds is acceptable.
Collect “Class Data” and prepare a “histogram” of your results…

<table>
<thead>
<tr>
<th>Pulse Rate per minute (range of averages)</th>
<th>&lt;51</th>
<th>51-60</th>
<th>61-70</th>
<th>71-80</th>
<th>81-90</th>
<th>&gt;90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students in this range</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

And now, develop and draw your histogram… Don’t Forget To Title Your Histogram!
How many times in one minute can you squeeze a clothespin??

- Go to: http://www.exploratorium.edu/hockey/fitness2.html

- An interesting take on the entire lactic acid build-up argument.
And now, make a hypothesis...

**Student A**
If you exercise first, then you should be able to squeeze a clothespin more times in one minute.

**Student B**
If you rest first, then you should be able to squeeze a clothespin more times in one minute.

Explain why…

Explain why…
Design an controlled Experiment...

- Experimental Design Diagram
Now, do your “experiment” and collect your data...

3... 2... 1... GO!!! Start counting the number of Squeezes for one FULL minute and record your data.