Jumping Jacks Activity

Step 1: Record Information (Teacher Led)
Step 2: Graph data values (Use the graph I've provided for you below)
**Step 3:** Complete Reflection Questions (on the back page)

Use formula: $\frac{y2-y1}{x2-x1}$ where (x_1, y_1) and (x_2, y_2).

Step 1: Do jumping jacks for 2 minutes, recoding how many you have done every 30 seconds.
Use the table to record your data.

Time (x)	Number of Jumping Jacks (y)
0 sec.	0
After 30 sec.	
After 60 sec.	
After 90 sec.	
After 120 sec.	

Step 2: Graph Data. [Label x and y axis according to table.]

Number of Jumping Jacks in 2 Minutes
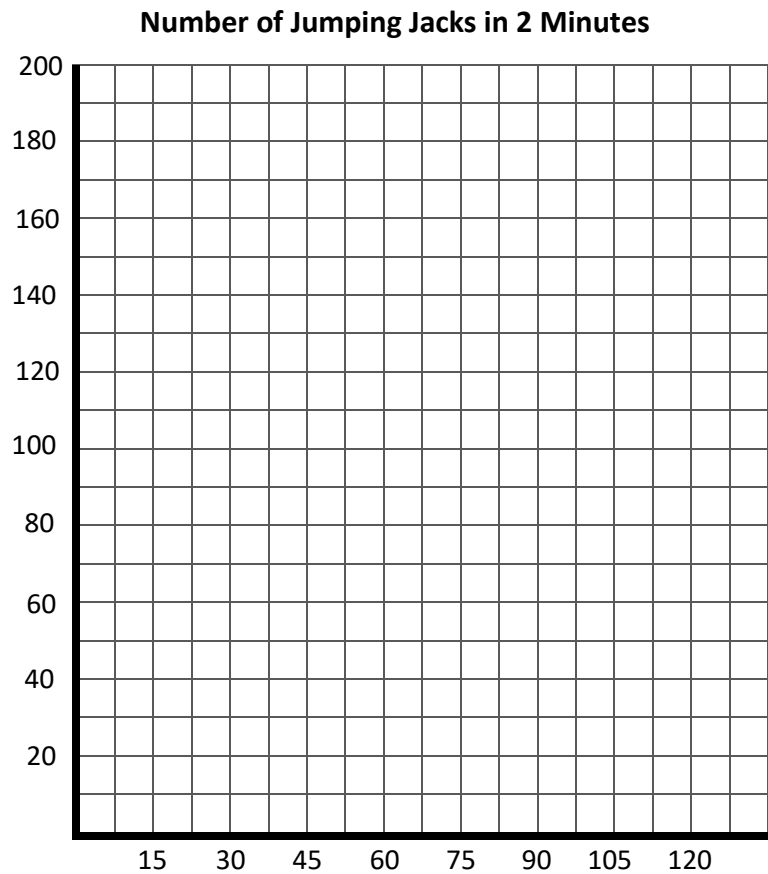
Jumping Jacks Reflection Questions

1. Use the two ordered pairs on your graph from 0 seconds to 30 seconds.
   Find the slope. (0, ___) (30, ___)

2. Use the two ordered pairs on your graph from 30 seconds and 60 seconds.
   Find the slope. (30, ___) and (60, ___)

3. Use the two ordered pairs on your graph from 60 seconds to 90 seconds.
   Find the slope. (60, ___) (90, ___)

4. Use the two ordered pairs on your graph from 90 seconds to 120 seconds.
   Find the slope. (90, ___) (120, ___)

5. Reflect on the changes in your speed during the 2 minutes that you recorded data. [You must include information from your calculations above AND your graph to support your claim.]

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Useful word phrases/Information to possibly use:
"steepness" "got tired" "rate of change" "increase of time" "increase" "decrease" "constant" "in shape" "not in shape" "exhausted" "jumping jacks per second" "speed" "sped up" "slowed down"