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### Getting Fourth Graders Excited About The Cardiovascular System- PhUn Week Poster Session EB 2012

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# Getting 4<sup>th</sup> Graders Excited About the Cardiovascular System

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## Day 1-Presentation Topics

•What is a physiologist, education , careers, how the cardiovascular and respiratory systems work together, blood pressure and the scientific method.

**Hypothesis:** Heart rate, breathing rate and blood pressure increase with exercise.

•The students measured their resting rates.

## Day 2- Perform Experiment and Collect Data

•The class worked in pairs, one exercised for five minutes while the other cheered them on

•At the end of exercise, the exercising student took their own breathing rate while their partner measured their heart rate and blood pressure with monitor. They then switched roles.

## Day 3- Data Analysis with 4<sup>th</sup> grade math

The histograms were projected to the class.

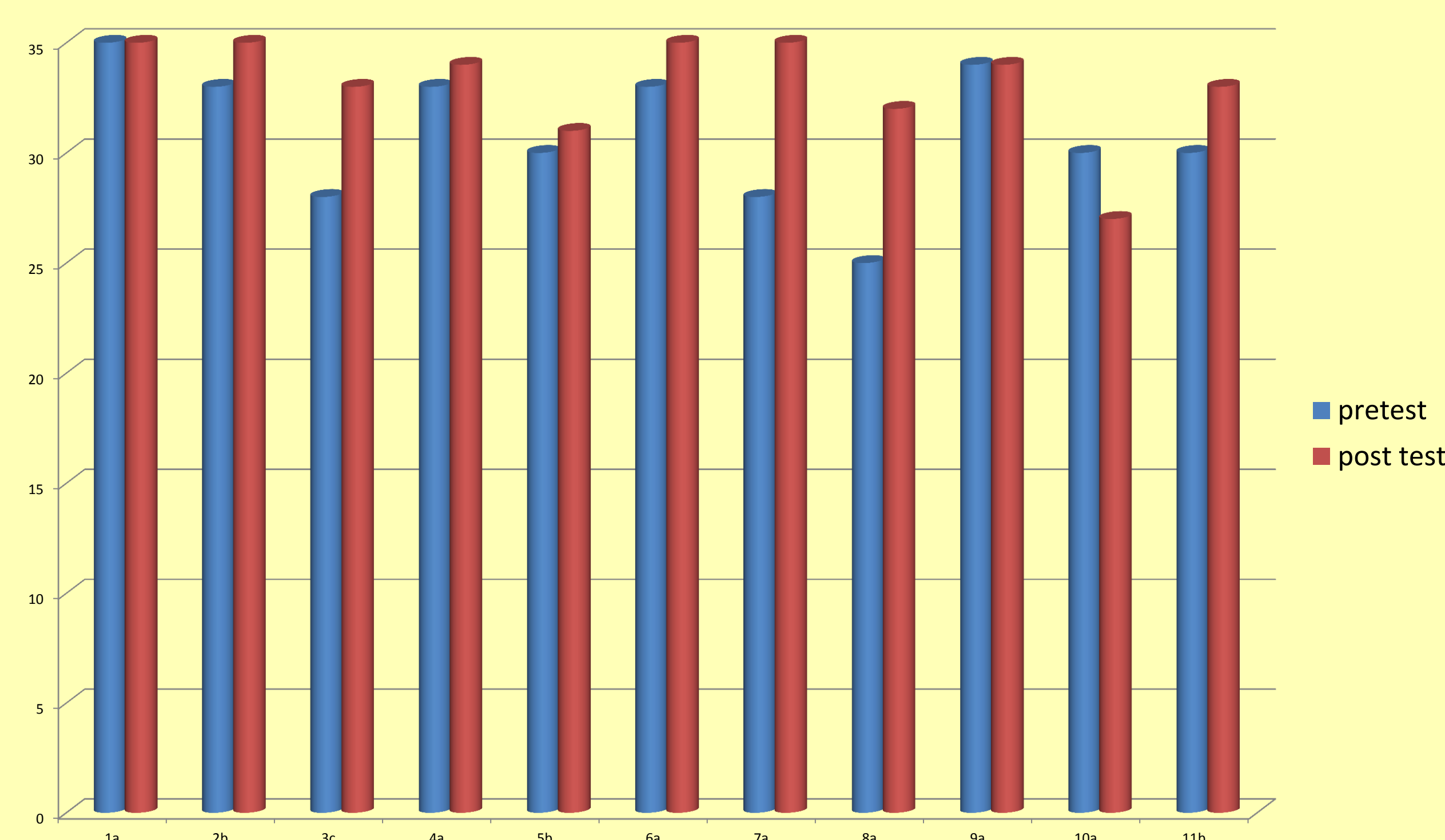
•Results were discussed as a group . The mean, mode, median and range were used to analyze data.

•The students determined their hypothesis was proven.

•Lab reports were passed in for a grade.

•Post tests were taken to determine if students gained knowledge.

Learning outcomes measured  
Quantitative Pretest vs. Post test



Very happy students after a PhUn week.

Post test provided some Qualitative data

*Most common answers give n to the following questions*

*Why do we need math to help explain (analyze) our data?  
To prove that our hypothesis was right and to convince others.*

*What did you like most about PhUn week ?*

*Exercising outside and using the heart rate blood pressure monitors.*