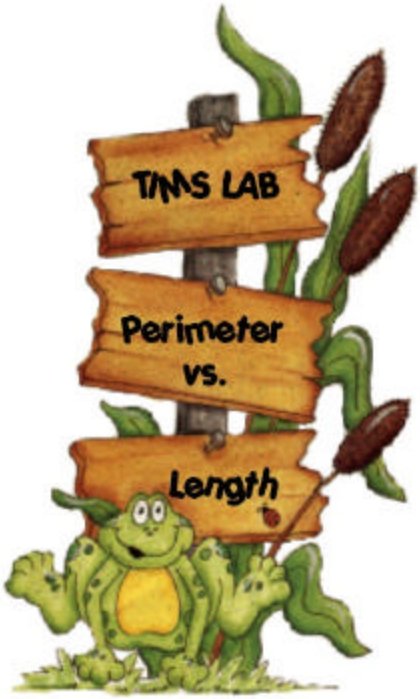
# Oak Grove Elementary
# Grade 4




# TIMS Math Lab:
# Unit 2:
# Perimeter vs. Length

**Name:** _____

**Date:** _____

## Draw

**(Page 33 in SG)**

**1. Draw a picture of the lab.**

- **Be sure to show the variables, length (L), perimeter (P), and width (W).**
- **Show your kind of airplane and at least one of your runways. Show how wide your runways will be.**

**2.**

**A) Which variable, length (L), width (W), or perimeter (P), will stay the same for all of your runways?**

**B) Which two variables will change from runway to runway?**


**(Page 34 in SG)**

**Use square-inch tiles to make 4-5 runways for your kind of airplane. Decide how long to make your runways. You might make one runway 1 inch long, another 2 inches long, and another 4 inches long. Or, you might make runways 2, 4, and 8 inches long. However, do not make runways that are longer than 12 inches or you may have trouble graphing your data. Discuss with your group how long your runways should be.**

**3. Make your runways. Find the length and perimeter of each runway. Keep track of your data in this data table:**

| ***W*** **Width of Runway (in inches)** | ***L*** **Length of Runway (in inches)** | ***P*** **Perimeter of Runway (in inches)** |
|---|---|---|
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## Graph

**(Page 34 in the SG.)**

**4. Draw a point graph for your data. Put length (L) on the horizontal axis (bottom) and perimeter (P) on the vertical axis (side). Remember to include a title for the graph, label the axes and include units.**

**5. Look at your points on your graph. Describe your point.**

**6. If your points form a line, use a ruler to draw a line through your data points. Extend the line in both directions.**

## Discuss

**(Page 34 in your SG)**

**Questions 7-11 are for runways the same width as yours.**

**7. How wide are your runways?**

**8. What is the perimeter of a runway that is 4 inches long?**

**9. Use your graph to find the perimeter of a runway that is 10 inches long. Use dotted lines on your graph to show your work.**

**10. What is the perimeter of a runway that is 100 inches long? Explain how you found your answer.**

**11. Give a rule for finding the perimeter of a runway for your type of plane, no matter what the length.**