DATE: NAME: CLASS:

GENERAL
SCIENCE INQUIRY

Interpreting Line Graphs

BLM G-26

Goal • Practise interpreting scientific line graphs.

Introduction

Interpreting data from a line on a line graph depends on skillfully estimating values along the "line of best fit". This involves checking the location of the line in relation to the scales along the two axes.

What to Do

- Refer to the graph you drew in BLM G-25, Constructing a Line Graph, to answer the following questions.

Questions

1. a. What general pattern is formed by the line for Data Set #1?

_____

. **b.** Relate this pattern to the source of the data. What does the pattern say about the way the cyclist performed in the race?

_____

_____

2. The process of determining the value of a point on the line between marked data points is called interpolation.

a. Select a place on the line for Data Set #1 between two data points. From that place, draw a light horizontal line to the *y*-axis and a light vertical line to the *x*-axis.

b. About how many seconds had the cyclist been racing?

_____

c. About how many metres had the cyclist covered?

_____

3. How many seconds has each cyclist raced when the total distance covered is:

	Cyclist #1	Cyclist #2
a. 37 m	_____ s	_____ s
b. 16 m	_____ s	_____ s

4. How many metres has each cyclist covered when the approximate time raced is:

	Cyclist #1	Cyclist #2
a. 7 s	_____ s	_____ s
b. 15 s	_____ s	_____ s

5. On the back of this page, explain how line graphs could be useful for predicting scientific trends. Provide a specific example to illustrate your explanation.

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