

Galileo's Race Track

"The pupil must be able to measure data accurately and record it in a graph format"

In 1593 The Italian scientist Galileo Galilei tilted a table, set up a race track and timed how long it took to run down. You will repeat this lab.

- Step 1 Tilt your class table 10 cm using the wooden blocks
- Step 2 With masking tape set up a start line and SIX finish lines ranging down the table
- Step 3 Let the golf ball roll down the ramp each distance and time how long it takes.
- Step 4 REPEAT Step 3 twice more and decide which time is "best"
- Step 5 Record the distance and time on the graph table (on the back of this page)
- Step 6 Prepare a graph with time on the bottom axis and distance up the side.

(It will be a curved graph)

Answer the following

1. If the table were tilted more what would happen to your graph?

2 Look at your graph and decide which individual reading was worst. Record it here.

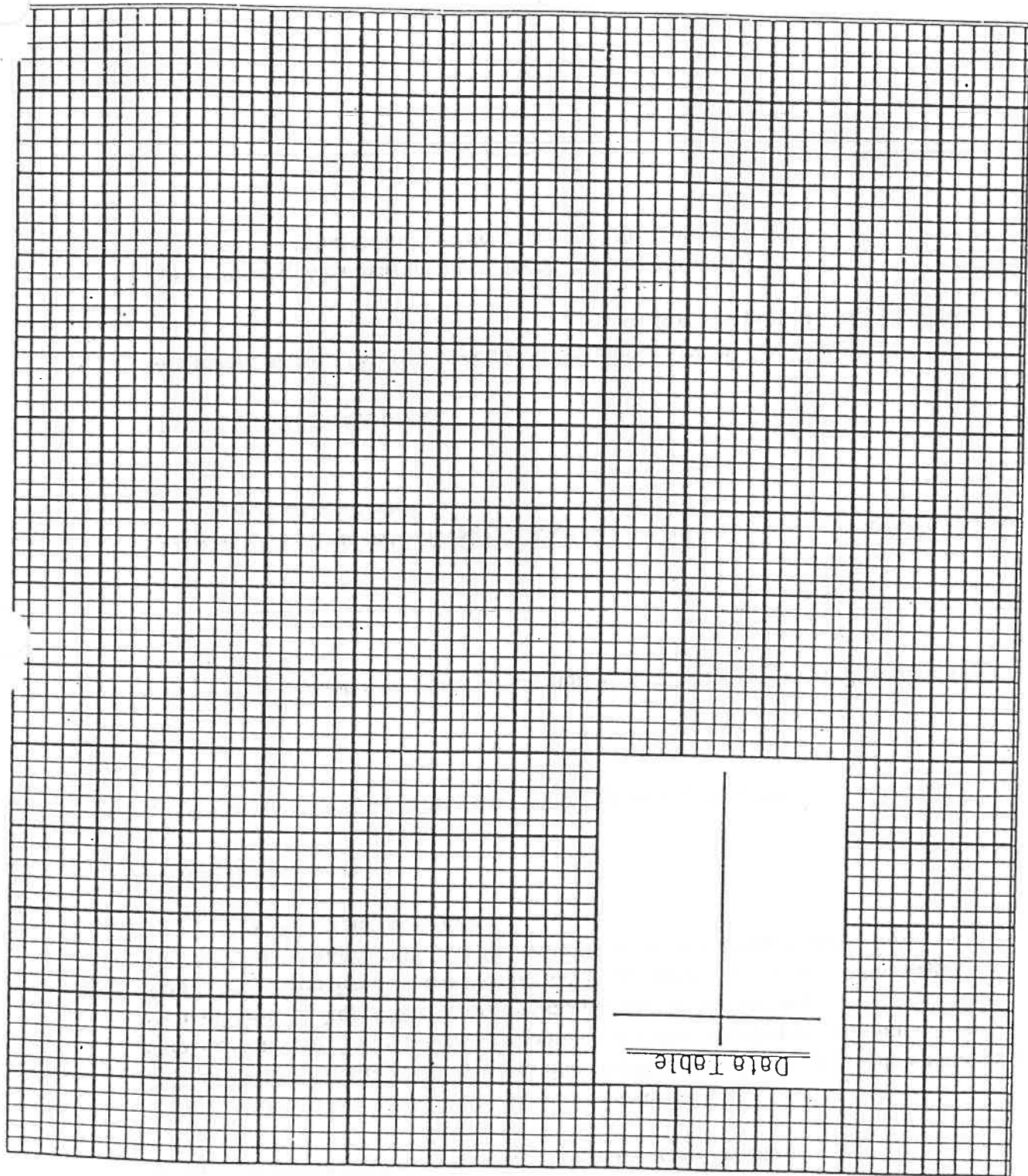
3. Look at your graph and ESTIMATE the time it would take for a golf ball to roll down

a) a 55 cm race track

b) a 160 cm race track.

Conclusion: Write a two part conclusion describing a) what you learned
b) how you proved what you learned

Improvements: What was the most unreliable part of this lab?
What would you do to improve this unreliable part?



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PHYSICS GRAPH PAGE

_____ TITLE

_____ SUBTITLE