LINEAR MOTION

STUDY #1 - CONSTANT VELOCITY

OBSERVATION QUESTION 1

a) ________________________________________________

b) ________________________________________________

c) ________________________________________________

d) ________________________________________________

e) ________________________________________________

OBSERVATION QUESTION 2

<table>
<thead>
<tr>
<th></th>
<th>DISTANCE BETWEEN SPARKS, $\Delta s$ (cm)</th>
<th>TIME BETWEEN SPARKS, $\Delta t$ (s)</th>
<th>DISTANCE/TIME $\Delta s/\Delta t$ (cm/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>$\Delta s_1$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>$\Delta s_1$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>$\Delta s_1$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>$\Delta s_1$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Study #2 - ACCELERATION

OBSERVATION QUESTION 3

a) ________________________________________________

b) ________________________________________________
STUDY #3 - FALLING BODIES

OBSERVATION QUESTION 4

<table>
<thead>
<tr>
<th>d</th>
<th>t</th>
<th>t</th>
<th>t</th>
<th>ave</th>
<th>t</th>
<th>g = \frac{2d}{t^2}</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

e) % error = __________
f) ______________

STUDY #4 - GRAPHING EXPERIMENTAL DATA

OBSERVATION QUESTION 5

a) Use graph paper, provided in manual.

\[ d = __________ \quad \text{(ave time)}^2 = __________ \]
\[ t_1 = __________ \quad g = __________ \]
\[ t_2 = __________ \]
\[ t_3 = __________ \]

2.14
c) ____________________________

d) Use graph paper, provided in manual.

e) ____________________________

f) ____________________________

g) Slope ____________________ g ____________________

h) ____________________________

STUDY #5 - HOW TO WIN A FORTUNE AT YOUR LOCAL PUB.

OBSERVATION QUESTION 6 (the dollar bill)

a) Time ____________________

b) L/2 ____________________

c) ____________________________

OBSERVATION QUESTION 7 (the ruler)

a) Length ____________________________

b) ____________________________
Summary:

There were FIVE studies with a total of SEVEN observation questions to be answered. (The last two questions were optional.)

PLEASE CLEAN UP WHEN FINISHED!
DON'T FORGET TO TAKE YOUR NOTEBOOKS AND CALCULATORS WITH YOU