## LECTURE 6&7: NEWTON'S FIRST LAW AND NEWTON'S SECOND LAW REPORT

| 1.  | Purpose:                                |   |   |                 |                       |  |  |
|-----|---|---|---|-----------------|-----------------------|--|--|
| ••• | • | •••••                                   | •••••••                                 | ••••••          | •••••                 | •••••  |  |
| ••• | • |   | • |                 |                       | ••••••   |  |
| ••• | •••••                                   | • | •••••                                   | •••••           | •••••                 | •••••  |  |
| ••• | ••••••                                  | •••••                                   | •••••                                   | ••••••          |                       |  |  |
| 2.  | NEWTON'S                                | S FIRST LAW                             |   |                 |                       |  |  |
|     | $\Delta x = \cdots \ldots \ldots (cm)$  |   |   |                 |                       |  |  |
|     |   | $\Delta t_1(s)$                         | v <sub>1</sub> (cm/s)                   | $\Delta t_2(s)$ | v <sub>2</sub> (cm/s) | $\delta = \frac{ \mathbf{v}_2 - \mathbf{v}_1 }{\mathbf{v}_1} (\%)$ |  |
|     | 1                                       |   |   |                 |                       |  |  |
|     | 2                                       |   |   |                 |                       |  |  |
|     | 3                                       |   |   |                 |                       |  |  |
|     | 4                                       |   |   |                 |                       |  |  |
|     | 5                                       |   |   |                 |                       |  |  |
| Di  | scussion of                             | results                                 |   |                 |                       |  |  |
| ••• | • |   |   |                 |                       |  |  |
| ••• | •••••                                   | •••••                                   | •••••                                   | •••••           | •••••                 |  |  |

| 3  | NFW.    | TON'S | SECON | ND I AV | ۱/ |
|----|---------|-------|-------|---------|----|
| J. | IV L VV | 10113 | JECOL |         | v  |

$$s = \cdots \dots (m)$$
 $M = \cdots \dots (kg)$ 
 $m = \cdots \dots (kg)$ 

|   | t (s) | Measured $a = \frac{2s}{t^2} (m/s^2)$ | Calculated $a_{ m N}$ (m/s²) | $\delta = \frac{ \mathbf{a} - \mathbf{a}_{\mathbf{N}} }{\mathbf{a}_{\mathbf{N}}} $ (%) |
|---|-------|---------------------------------------|------------------------------|--|
| 1 |       |                                       |                              |  |
| 2 |       |                                       |                              |  |
| 3 |       |                                       |                              |  |
| 4 |       |                                       |                              |  |
| 5 |       |                                       |                              |  |

| Discussion of resi | ults |  |  |
|--------------------|------|--|--|
|                    |      |  |  |
|                    |      |  |  |
|                    |      |  |  |
|                    |      |  |  |