

| B        | I                                | N                | G                                | O         |
|----------|----------------------------------|------------------|----------------------------------|-----------|
| time     | Newton's<br>1st law<br>of motion | direction/speed  | opposite                         | joules    |
| balanced | speed                            | m/s <sup>2</sup> | Newton's<br>2nd law<br>of motion | newtons   |
| right    | unbalanced                       | <b>FREE</b>      | Newton's<br>3rd law<br>of motion | friction  |
| gravity  | rest                             | inertia          | force                            | left      |
| distance | acceleration                     | mass             | velocity                         | direction |

| B               | I                                | N           | G            | O                                |
|-----------------|----------------------------------|-------------|--------------|----------------------------------|
| unbalanced      | Newton's<br>2nd law<br>of motion | opposite    | balanced     | m/s <sup>2</sup>                 |
| direction/speed | velocity                         | joules      | acceleration | newtons                          |
| gravity         | Newton's<br>3rd law<br>of motion | <b>FREE</b> | friction     | Newton's<br>1st law<br>of motion |
| force           | mass                             | time        | direction    | rest                             |
| inertia         | left                             | right       | speed        | distance                         |

|              |                                  |                                  |          |                                  |
|--------------|----------------------------------|----------------------------------|----------|----------------------------------|
| <b>B</b>     | <b>I</b>                         | <b>N</b>                         | <b>G</b> | <b>O</b>                         |
| acceleration | mass                             | Newton's<br>2nd law<br>of motion | left     | Newton's<br>3rd law<br>of motion |
| time         | gravity                          | inertia                          | speed    | joules                           |
| right        | direction                        | <b>FREE</b>                      | rest     | force                            |
| unbalanced   | newtons                          | opposite                         | velocity | direction/spe<br>d               |
| friction     | Newton's<br>1st law<br>of motion | m/s2                             | balanced | distance                         |