Energy, Force and Motion
Terms, Definitions and Symbols

- **position**: (χ) (lower case "x") The location of an object at a given time
- **delta:** ($\triangle$) (triangle) change - - use subtraction
- **distance**: (d) (lower case "d") the amount of change of position
- **reference point**: ($\downarrow$) (use an arrow to point to it) measuring the same point of an object each time; the point of an object used to determine its position and change of position

- **variables**: factors that can CHANGE in an experiment

  a. **independent variable**: this is what you know BEFORE the experiment starts - goes on the x-axis (horizontal axis)

  b. **dependent variable**: changes in response to the independent variable (it "depends" on what the independent variable does) - goes on the y-axis (vertical axis)

- **time interval**: ($\triangle t$) (delta and lower case "t") how long it takes something to happen

- **speed:** (v) (lower case "v") the distance an object travels in a unit of time – OR – the rate at which something changes location (ex. meters per second)
- **average speed**: the total distance divided by the total time needed to travel the distance
- **velocity:** ($\bar{v}$) (lower case "v" with a line over it) the rate at which an object changes position over time in a given DIRECTION
- **acceleration**: (a) (lower case "a") change of velocity per unit of time