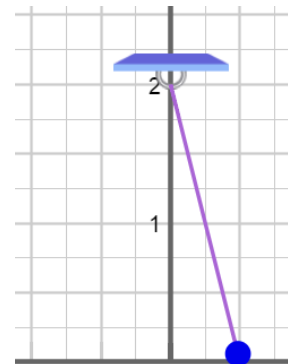


## Vocabulary: Period of a Pendulum



### Vocabulary

- Controlled experiment – an experiment in which only one variable is changed at a time.
  - Generally, in a controlled experiment, all conditions are kept the same except for the variable being tested.
  - In some cases, it is impossible to perform a perfectly controlled experiment. For example, a scientist cannot perform a controlled experiment on animal behavior in the wild because there are too many uncontrollable variables, such as weather and the presence of other animals.
- Mean – the sum of a set of numbers divided by the number of items in the set.
  - The mean of a set of numbers is also known as the set's *average*.
  - The symbol for the mean is  $\mu$ .
  - For example, the mean of 4, 4, 5, 7, and 10 is:
$$\frac{4 + 4 + 5 + 7 + 10}{5} = \frac{30}{5} = 6.$$
- Pendulum – a weight that can swing freely.
- Period – the amount of time required to complete a full cycle.
  - For a pendulum, the period is the time required for one full back-and-forth swing.



Pendulum