## The Vitruvian Man - Scientific Method Activity

Vitruvius, a Renaissance architect, described the dimensions of the human body. They are listed below. His theory was illustrated by the artist and scientist, Leonardo Di Vinci in the year 1490.

Your task is to design an experiment to test Vitruvius's theories. You need to propose a **problem and hypothesis**, decide what **materials** you will need to test your hypothesis, design a **procedure**, collect **data** (repeated trials), **analyze** and graph your data, **discuss** your data (and any possible sources of error) and draw **conclusions**. Finally, prepare and submit a lab report that documents your experiment.

## Vitruvius's Theories

- From fingertip to fingertip, the span of a person's arms is equal to his/her height.
- From the roots of the hair to the bottom of the chin is the tenth of a person's height
- From the bottom of the chin to the top of the head is one eighth of a person's height
- The distance from the bottom of the chin to the nose and from the roots of the hair to the eyebrows should be equal, each comprising 1/3 the length of the face.
- From the bottom of the knee to the bottom of the foot is equal to  $\frac{1}{4}$  of a person's height.
- The distance from the outer edge of one shoulder to the outer edge of the opposite shoulder is equal to  $\frac{1}{4}$  of a person's height.

## Variables to Consider

- Gender
- Age
- Race
- Diet
- Birth Month (why not?)

