## Discovering STEM Program



## **Kit name: Stepping for Miles (Grades 6-8)**

<u>Description</u>: Marathon runners run more than 26 miles in each race. With this activity that explores ratios and conversions, you can figure out how many steps you would take while running a marathon by only running 30 feet.

## Alignment for <u>Stepping for Miles</u> (Grades 6-8) to the Common Core State Standards Mathematics http://www.corestandards.org

This kit addresses the following standards:

- <u>6.RP.A.3</u> Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations
- <u>6.RP.A.3a</u> Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios
- <u>6.RP.A.3d</u> Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities
- <u>7.RP.A.1</u> Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units
- 7.RP.A.2a Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.
- 7.RP.A.2c Represent proportional relationships by equations

When reserving kits, please be sure to:

- Return filled out reservation form
- review required kit materials prior to event
- return evaluation forms
- Replace consumables