

# 4-12 Mathematics

## Fall Break

## ACTIVITIES

### Fall Trail Challenge: Speed & Distance

Pick a trail and measure how far you travel!

Grades 4-6: Count your steps over 10 meters and estimate total steps for the trail.

Grades 7-8: Time yourself and calculate your speed.

Grades 9-12: Explore distance, speed, and motion with formulas—compare walking and jogging!

### Leaf Lengths

Find and measure 3 different leaves.

Grades 4-6: Record in centimeters and order from smallest to largest.

Grades 7-8: Find the mean, median, and range of the 3 leaves.

Grades 9-12: Collect 10+ leaves, calculate standard deviation, and represent data in a graph.

### Patterns in Nature

Find patterns in leaves, pinecones, or flowers.

Grades 4-6: Count repeating shapes or lines of symmetry.

Grades 7-8: Identify Fibonacci numbers in seeds/petals.

Grades 9-12: Research and explain the mathematical model behind the pattern (e.g., spirals approximating the golden ratio).



Click the image to learn more about the **FREE** resources available through Varsity Tutor. Tutoring, live classes, challenges, and more..

## Make Mathematics Count, GA!

Click for a special series that support parents with understanding the expectations and resources of teaching and learning mathematics in GA