



Math on the Trail

Cub Scouts · Elective · Webelos rank

Name

Started

Completed

Math on the Trail shows how math helps you plan a hike. You'll measure your walking speed, test your prediction, and think about what slows hikers down. It's a fun way to use numbers outside.

Requirements

Every official requirement, in plain language. Check the official wording when you sign off (scouting.org/cub-scout-adventures/math-on-the-trail/). Tips and examples are ideas, not extra requirements.

- ☐ 1 Walk 1/4 mile to find your walking pace; use it to predict how long 2 miles would take you

Tip: Use a school track (one lap is often about 1/4 mile) and time yourself. Multiply to predict 2 miles.

Example: If one quarter mile takes you 5 minutes, then 1 mile takes 4 times that (20 minutes), and 2 miles takes 8 times that (40 minutes). Write your prediction before you walk.

- ☐ 2 Walk 2 miles and record how long it took

Tip: Walk 2 miles on a flat route with an adult and compare your time to your guess.

Example: Walk your 2 miles with your adult and record your time. Compare it with your guess: did you slow down at the end, stop to tie a shoe, or speed up on a downhill?

- ☐ 3 Predict how much time a two-day hike on a 20-mile trail would take you, and list every factor you considered

Tip: Use your 2-mile time to estimate 20 miles. Think about hills, rest breaks, heavy packs, and weather.

Example: If 2 miles takes you 40 minutes, 20 miles would be about 400 minutes of walking, close to 7 hours. Then add time for hills, a heavy pack, rest and lunch breaks, rough trail, and weather.