Learn by Doing - Activity Sheet #006

How Long Will It Take to Get There?

Name: _____ Date: _____

An adult must supervise. Choose a relatively level, clear pedestrian path away from vehicles, traffic and road crossings. Identify the start and destination clearly. An adult or a child under adult supervision may operate the stopwatch. The timekeeper must stand safely beside the path during the timed experiment. Never watch a phone or timer while walking. Use a shorter route if a long path is unsuitable.

1. Your first prediction

Predicted time: _____ min _____ s. Why?

_____

_____

2. How long is one of your steps?

Your steps vary. Do three trials to find a length that better represents them. Keep the same counting rule; do not count your starting stance. For each trial, divide distance by steps: the result is in meters per step (m/step).

Trial	Path length (m)	Number of steps	Average step length (m/step)
1			
2			
3			

Overall average step length: add all distances, then add all steps. Divide the total distance by the total number of steps.
My calculation: _____ m/step

3. Measure your walking speed

Use your result from section 2.

Steps during the timed walk	_____
Actual elapsed time (s), then time ÷ 60 (min)	_____ s = _____ min
Distance (m) = number of steps × average step length (m/step).	_____
Speed (m/min) = distance (m) ÷ elapsed time (min)	_____

4. Calculate, test and compare

Establish the actual route distance. The activity's 400 m is a rounded example.

Distance to destination (m)	_____
Source or method used to establish distance	_____
Divide distance (m) by speed (m/min) to get the time in minutes. Then convert the decimal part to seconds. Estimated time ___ min ___ s	Calculation in minutes _____
Actual measured travel time (min and s)	_____
Difference between times (use matching units)	_____
Did the walk take more time, less time, or exactly as much time as you calculated?	_____

5. Reflect on your observations

Which was closer to the measured time, your first prediction or your calculated estimate?

_____

_____

Did your pace change? Did you stop along the way?

_____

_____

Was the route distance accurate? What would you change?

_____

_____

6. Real-World Challenge

A child walks at 50 m/min to a destination 300 m away. How long will it take?

_____

If speed doubles for the same distance, what happens to time? Why?

_____

_____