

[rates] [estimation] [probability] [QUESTIONS ONLY] [PRINT-FRIENDLY]

NAME	PERIOD	DATE
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PART A

1

2

PART B

1

2

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The Smell Race - continued

PART C

Random walk

A particle takes steps: +3, -2, +4, -1, -3, and +2 mm.

- 1 Find the net displacement and total distance traveled.

- 2 Is the final position the same as the total distance? Explain the difference.

PART D

Hot versus cold

In a model, particles in a warm sample move 1.5 times as fast as particles in a cool sample.

- 1 If the cool particles average 20 steps per second, what is the warm average?

- 2 What changes about particle motion when temperature rises in this model?
