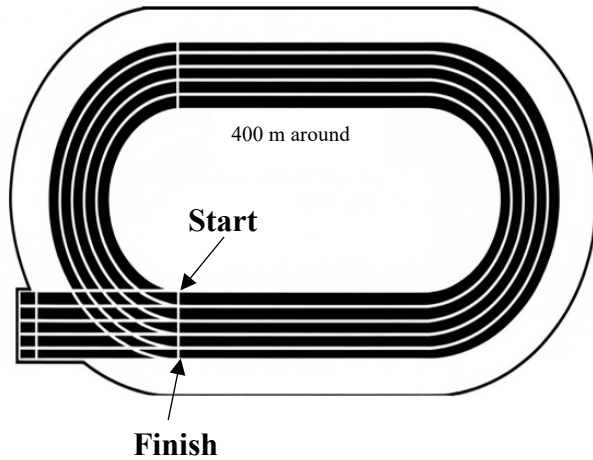


# Displacement and Direction

Engage

## What To Do:

1. Look at the picture below and answer the questions.



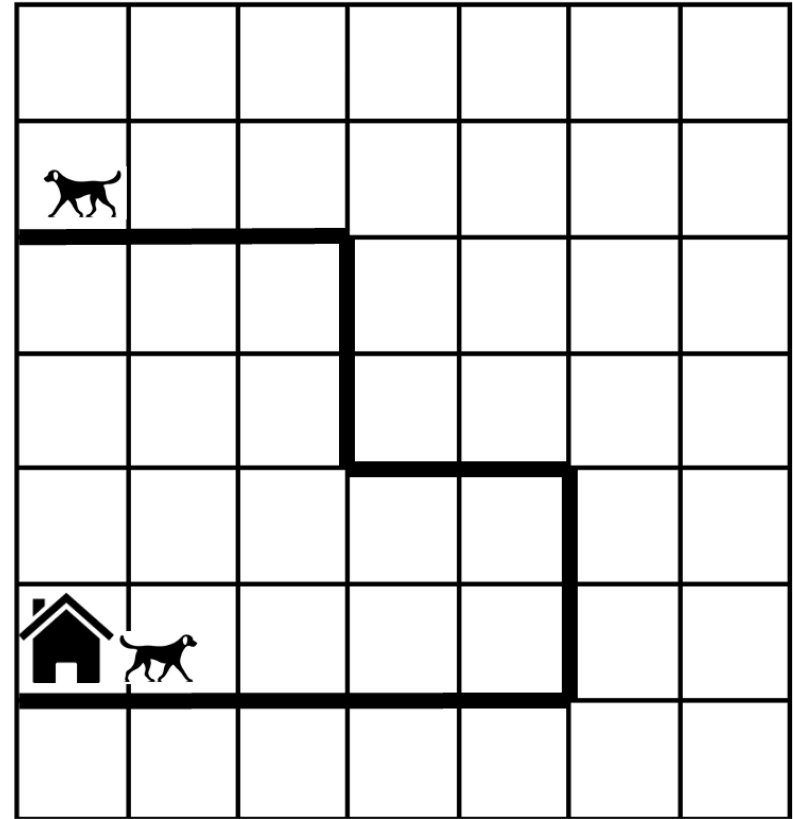
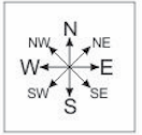
## Questions:

1. What is a runner's beginning position in a race around this track?  
\_\_\_\_\_
2. What is a runner's final position in a race around this track?  
\_\_\_\_\_
3. How does the runner's final position compare to the starting point?  
\_\_\_\_\_
4. How far did the runner travel in the race? \_\_\_\_\_

Explore

## What To Do:

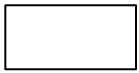
Look at each scenario and answer the questions



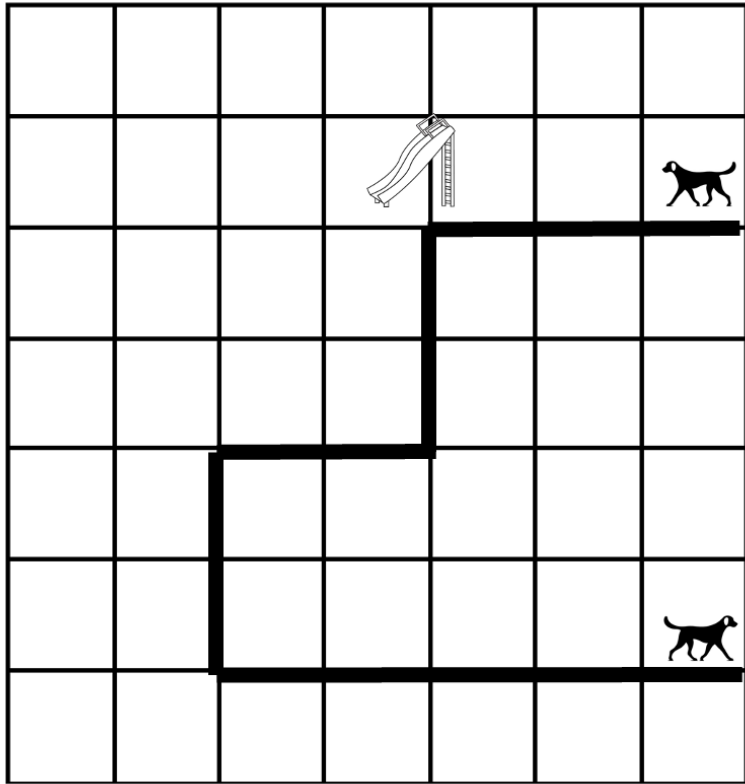
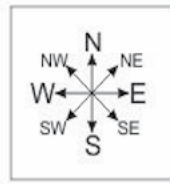
A dog left home and wandered around the neighborhood.

## Questions:

1. How many squares did the dog walk in total? \_\_\_\_\_
2. How many squares from the beginning position of the dog is the final position of the dog? \_\_\_\_\_
3. Use the compass rose at the top of the page to determine what direction the dog is from its beginning position to its final position? \_\_\_\_\_

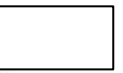


The dog continued to wander the neighborhood and visited a park and played with the kids that were there.

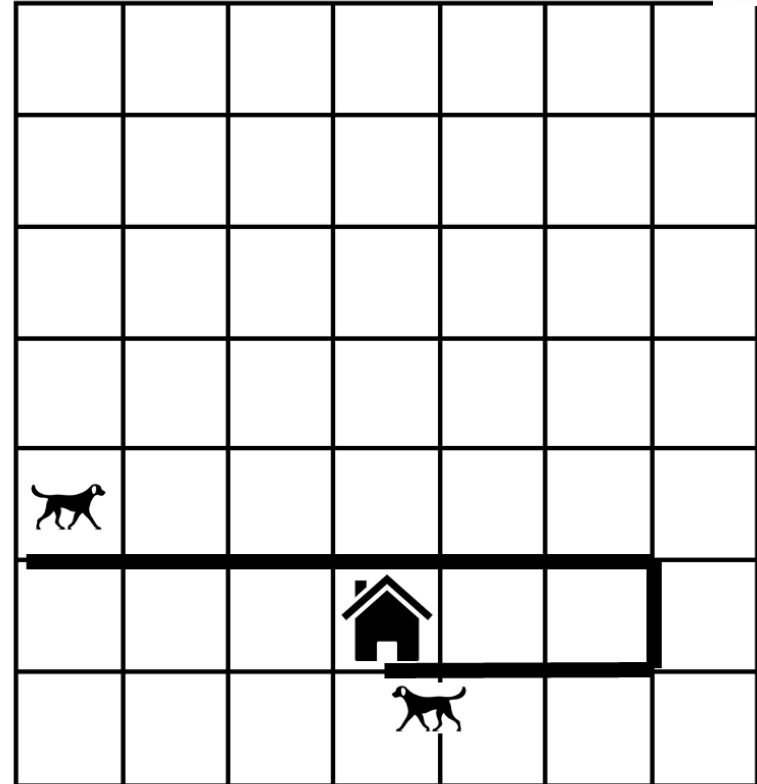
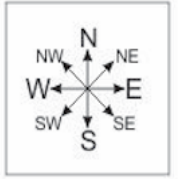


**Questions:**

1. In this scenario how many squares did the dog walk to get to the park? \_\_\_\_\_
2. How many squares did the dog walk to get from the park to the final position? \_\_\_\_\_
3. Use the compass rose at the top of the page to determine what direction the dog is from its beginning position to its final position? \_\_\_\_\_



The dog had a busy day and decided to walk home.



**Questions:**

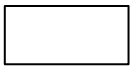
1. In this scenario how many squares did the dog walk to get home? \_\_\_\_\_
2. Use the compass rose at the top of the page to determine what direction the dog is from its beginning position to its final position? \_\_\_\_\_
3. How many squares away from home is the dog at this time? \_\_\_\_\_

FORCE AND MOTION IDEAS	<i>Explain</i>
	DISTANCE
	DISPLACEMENT
	DIRECTION

## DISPLACEMENT

## DIRECTION

[illegible]



Write and draw a scenario in space and grid below. Pass it to your partner to determine the distance, displacement and direction.

Scenario:

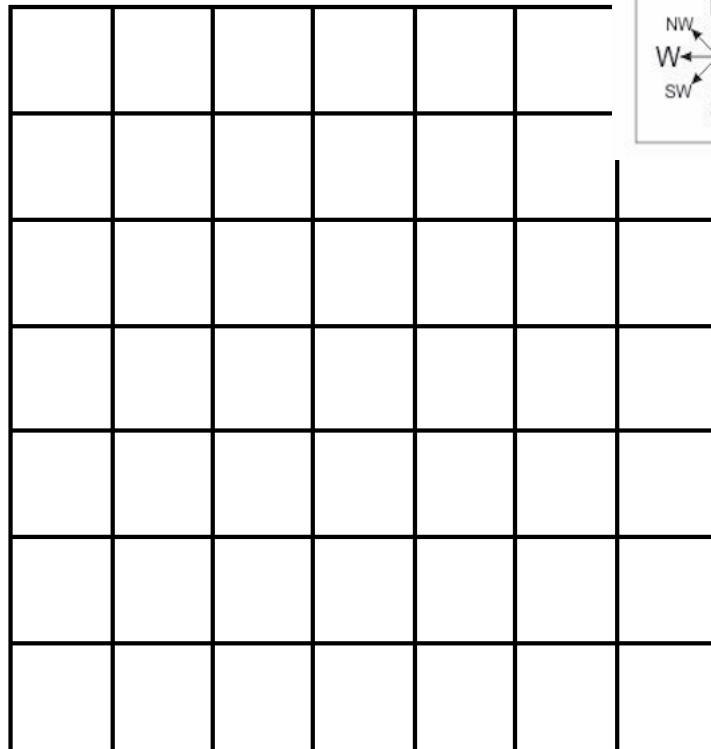
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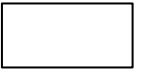
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Distance \_\_\_\_\_  
Displacement \_\_\_\_\_  
Direction \_\_\_\_\_



Evaluate

Name \_\_\_\_\_ period \_\_\_\_\_

## ***EXIT TICKET***

Displacement and Direction

- The total length of the path traveled is known as –
  - Distance
  - Displacement
  - Direction
  - Deposition
- The straight line change in position from a starting point to an ending point is known as –
  - Distance
  - Displacement
  - Direction
  - Deposition
- The line or course along which something moves is known as –
  - Distance
  - Displacement
  - Direction
  - Deposition
- A runner ran 1500 meters in a straight line from her house to the grocery store that is located northeast of her house. What is her distance, displacement and direction?
  - 0 meters, 1500 meters, southeast
  - 1500 meters, 1500 meters, southwest
  - 1500 meters, 0 meters, southeast
  - 1500 meters, 1500 meters, southeast