The air temperature increased steadily for several hours and then remained constant. At the end of the day, the temperature increased slightly before dropping sharply. Choose the graph that best represents this situation.




## Draw a graph:

- You throw a ball straight up in the air. It comes back down, but gets stuck in a tree before it hits the ground.


Time

## ALWAYS LOOK HERE FIRST!!! THE DEPENDENT VARIABLE TELLS YOU WHAT THE GRAPH IS MEASURING!!



Time

## Matching a Graph to a Story

A. Tom took his dog for a walk to the park. He set off slowly and then increased his pace. At the park Tom turned around and walked slowly back home.
B. Tom rode his bike east from his home up a steep hill. After a while the slope eased off. At the top he raced down the other side.
C. Tom went for a jog. At the end of his road he bumped


Time into a friend and his pace slowed. When Tom left his friend he walked quickly back home.

## Matching in Groups

- Match the stories to the graphs!!!
- Call me over when you think they're right.


## Early Finishers

Draw a graph to match each story. For both graphs, your x-axis should be "Time" and your y -axis should be "Distance from home."

1) "Tom's house was at the top of a hill. He left his house, and walked down the hill."
2) "Tom was at the store. He ran all the way to the bottom of the hill. He then walked slowly up the hill to his house."
"Tom's house was at the top of a hill. He left his house, and walked down the hill."

"Tom was at the store. He ran all the way to the bottom of the hill. He then walked slowly up the hill to his house."


Time

## Trends in the graphs?

For all questions, assume the $y$-axis is "Distance from home."

- On this type of graph, what does a horizontal line mean?

The person is stopped.

- If one section of the graph is steeper than another, what does that mean?

The person is going faster.

- If the graph is decreasing, what does that mean?

The person is getting closer to home.

- If the graph touches the x-axis, what dops that mean?

The person is at home.
Distance
from
Home

## HOWEVER:

All of this changes if the $y$-axis was labeled differently! Let's look at some examples.

## How would this graph look?

Tom left his house, running at a fast, constant speed.


Distance
from
home

Time

## Draw a graph:

You leave home, walking at a slow constant rate. After a few blocks, you see a scary lion. You turn around and run straight home.


Time

## Draw a graph:

You leave home, walking at a slow constant rate. After a few blocks, you see a scary lion. You turn around and run straight home.


## Draw a graph:

You leave home, walking at a slow constant rate. After a few blocks, you see a scary lion. You turn around and run straight home.


Time

## Homework

Worksheet

