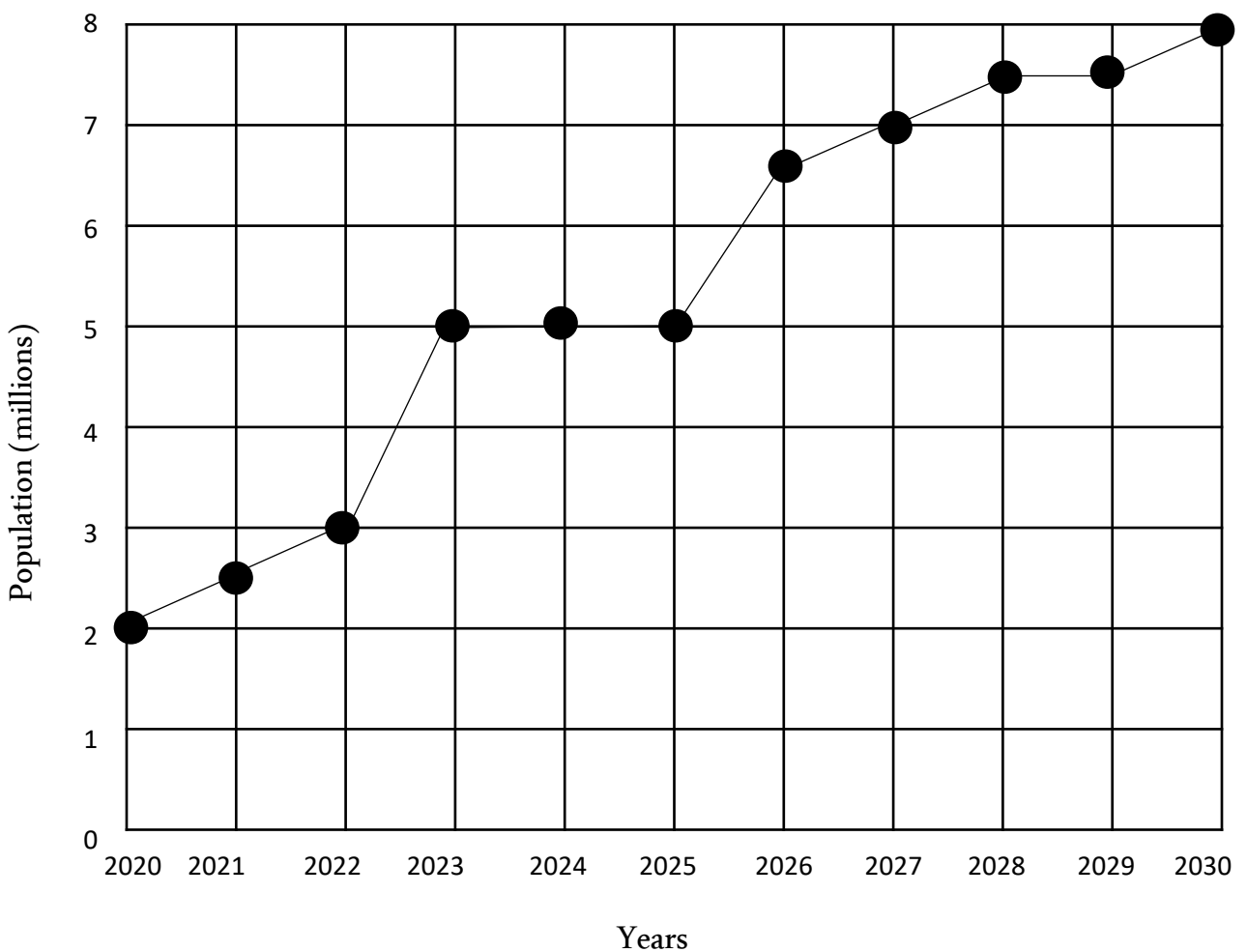


# Line Graphs

Look at the line graph below. Take note of the y-axis and x-axis labels. Then, look at the line graph itself- what irregularities do you see? Use your imagination to explain these irregularities. Tell a story that would explain the line graph below.



Write your story in the box below, remember to explain why the line graph looks the way it does- i.e. why did the population not increase between 2023-2026? Why did the population increase by more in some years, and less in others ? etc.



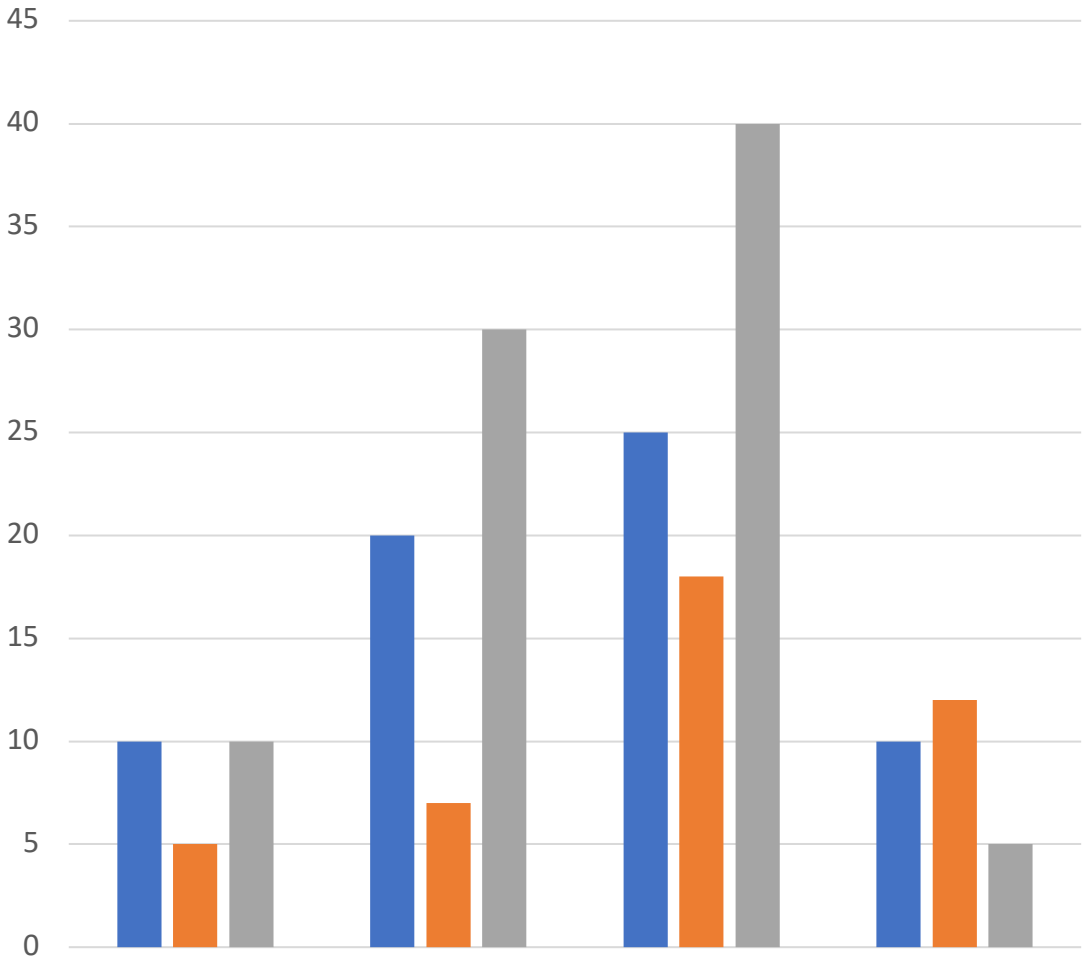
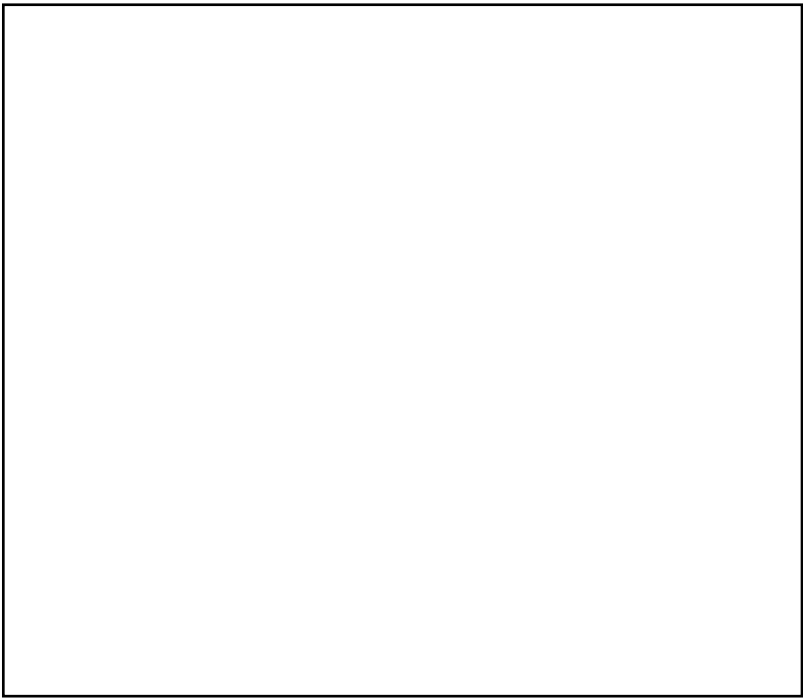
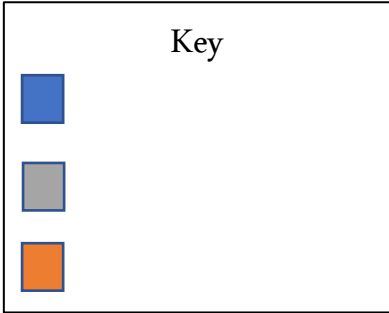
# Bar Graph



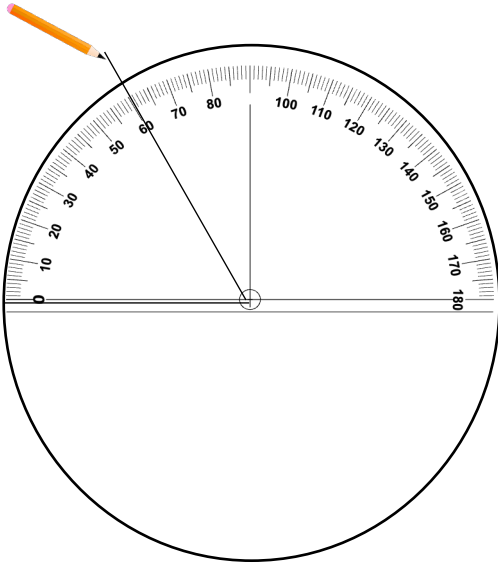
Take a look at the bar chart below. Look at the bars and groupings and begin to think about what this could represent. Use your creativity to label the x-axis and the y-axis. Lastly, make your key below that gives each color a meaning. Have fun and illustrate your theme/story of this bar chart below!

Draw an image that represents your bar graph's story

Create your key



# Pie Chart



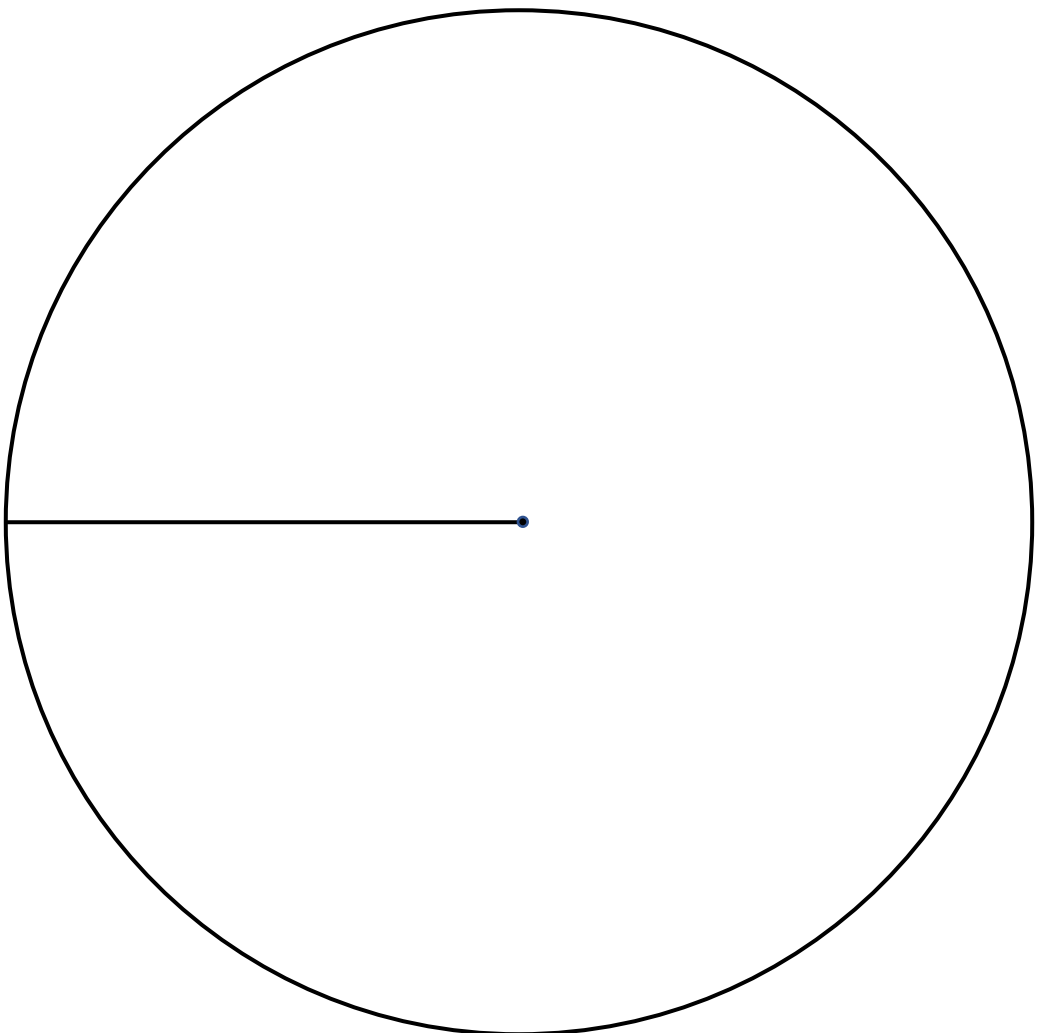
Use your protractor as seen in the example to the left. Line your protractor up on the line and mark the correct degree. Each time you add a new part of your pie chart, put your protractor on a new line.



Use your creativity to describe what this pie chart might represent, give each colour a value or category it might represent.

Red- 60°  
Brown- 90°  
Green- 50°  
Orange- 100°  
Yellow- 60°

Use these  
degrees and a  
protractor to fill  
in the pie chart.



# Scatter Plot



Scatter plots do a great job showing correlation. Correlation means that there is a connection/relationship between two or more things. Look at the scatter plot below, we can see a correlation: when the x-axis gets bigger, so does the y-axis. Use your imagination and creativity to tell some stories that would be represented by the scatter plot below.

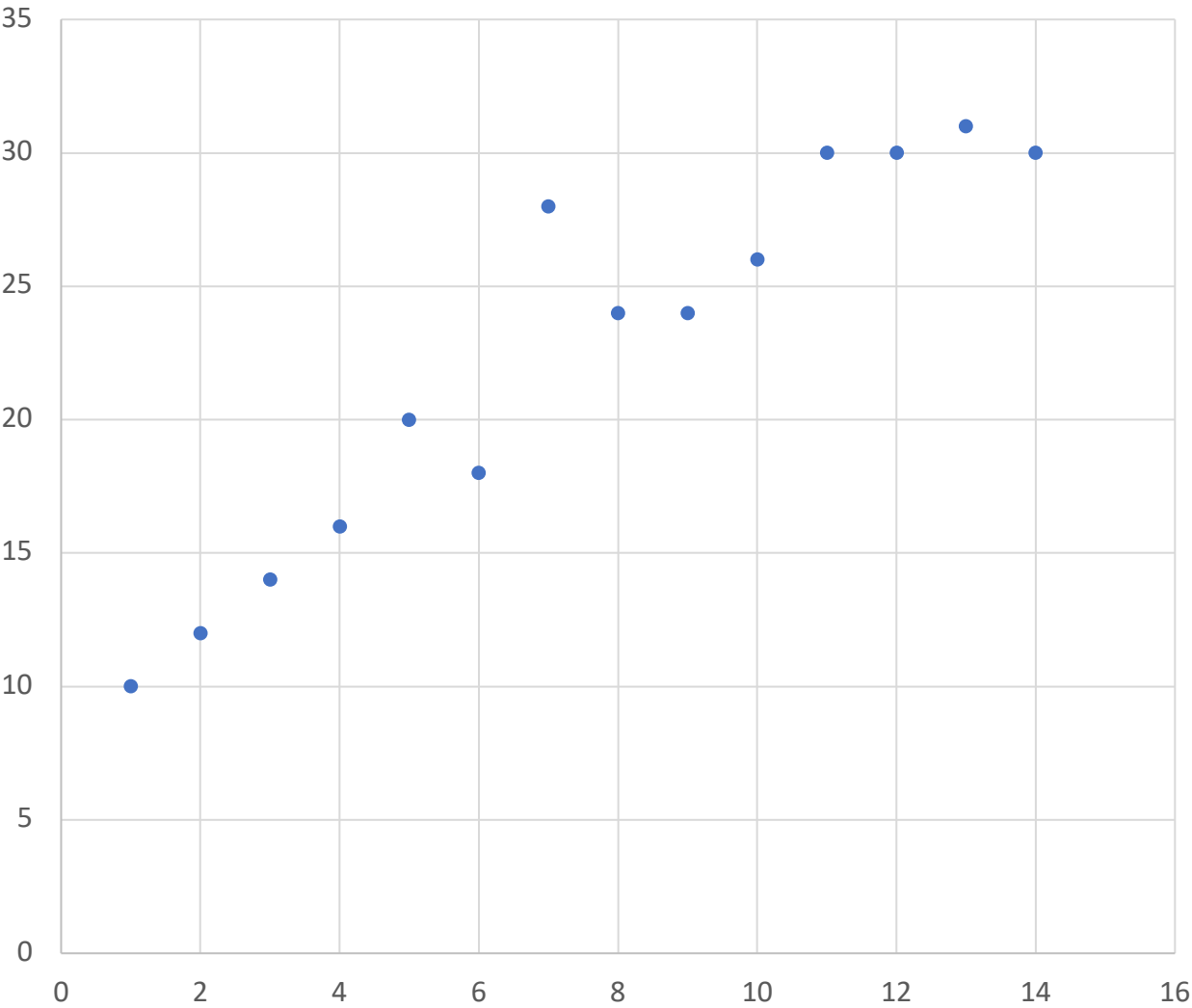
Example: Possibility      x-axis months of school      y-axis average # of books read by students in a 5th grade class

Possibility 1:    x-axis \_\_\_\_\_      y-axis \_\_\_\_\_

Possibility 2:    x-axis \_\_\_\_\_      y-axis \_\_\_\_\_

Possibility 3:    x-axis \_\_\_\_\_      y-axis \_\_\_\_\_

Possibility 4    x-axis \_\_\_\_\_      y-axis \_\_\_\_\_



# TreeMap

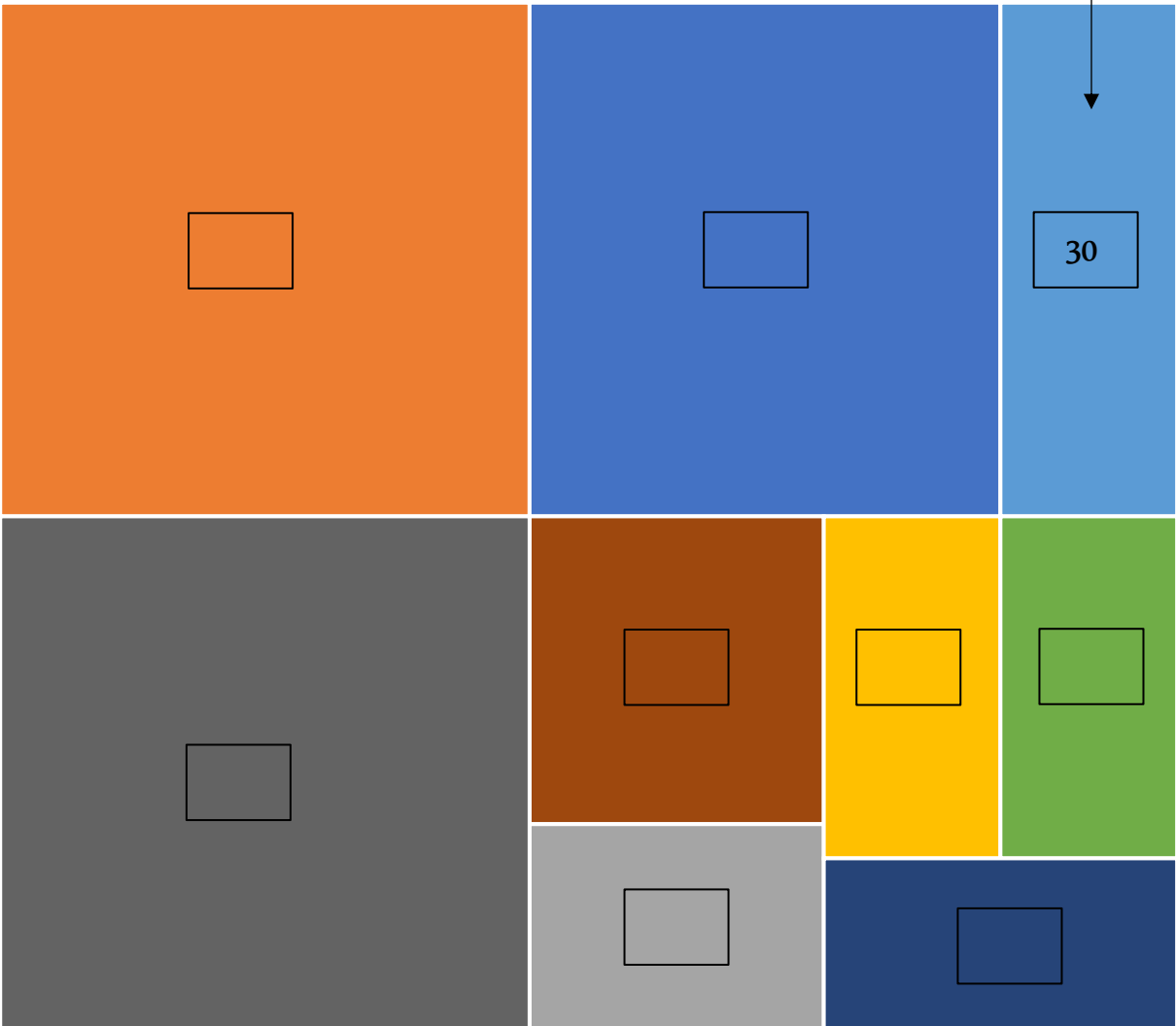
Tree Maps are a great way to show your data in a unique and eye-catching way. Similar to bar graphs, each square represents a different category (i.e. ice-cream flavor, type of pet, etc.) Look at the tree map and use your imagination to come up with a story in which this tree map would represent your data.



Tell your story below. Illustrate parts of your story, too!

Use this value to estimate the value of the other squares in the tree map. (tip: all squares are rounded to the nearest ten)

Tree Map Title:



# Line Graphs

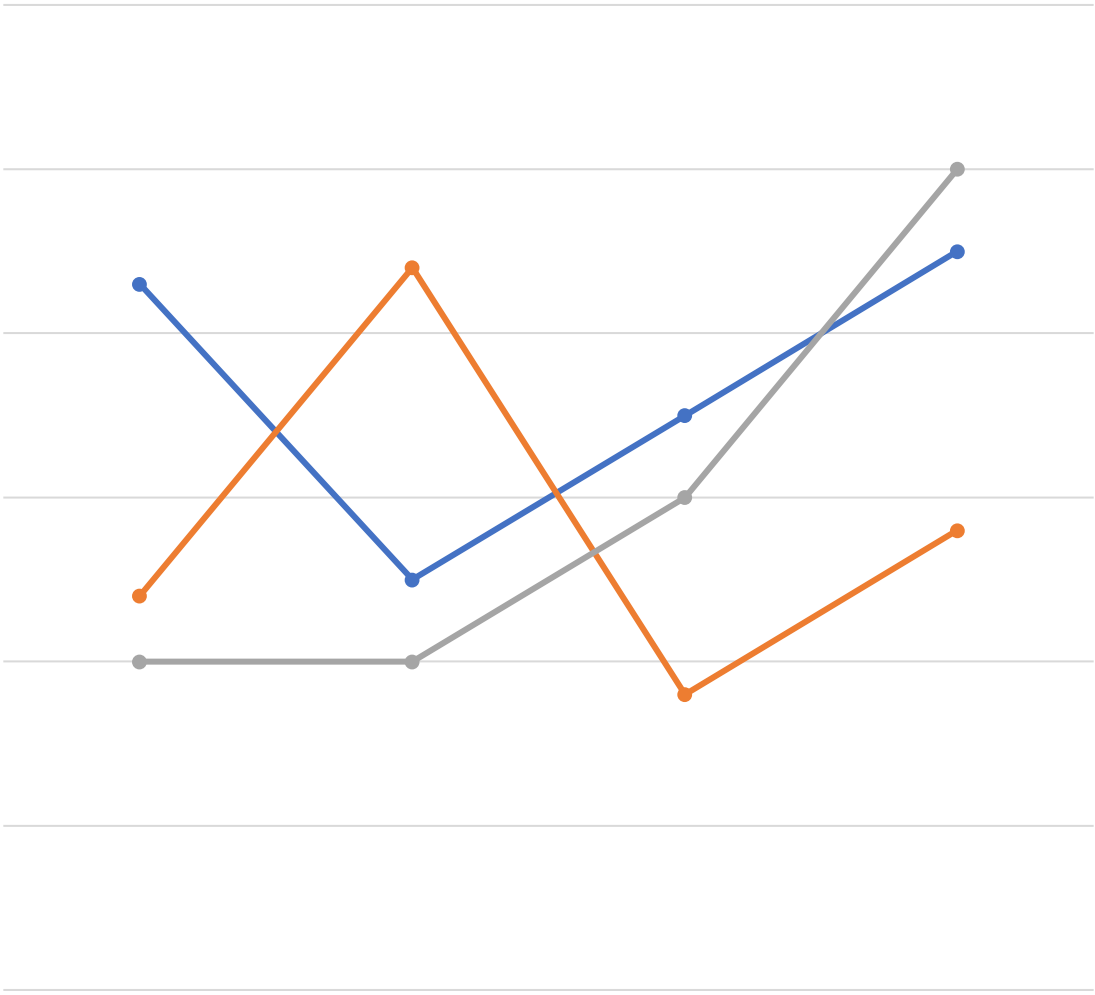


You're on your own! Create a key, label and name your x-axis and y-axis, and then tell the story of your graph. Have fun and let your imagination run while (but it must match the graph below!)

Tell the story of the line graph in the box below

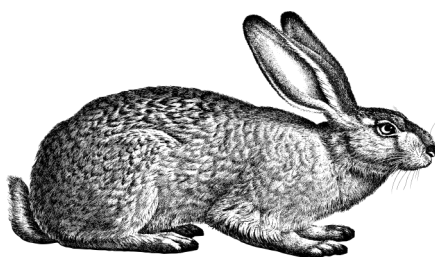
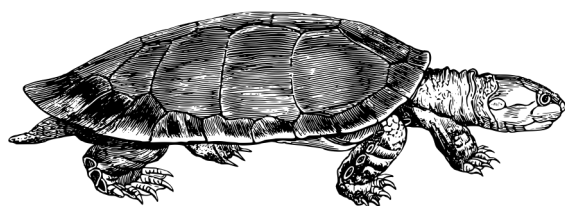
Key

y- axis



x- axis

# Stories and their graphs 1

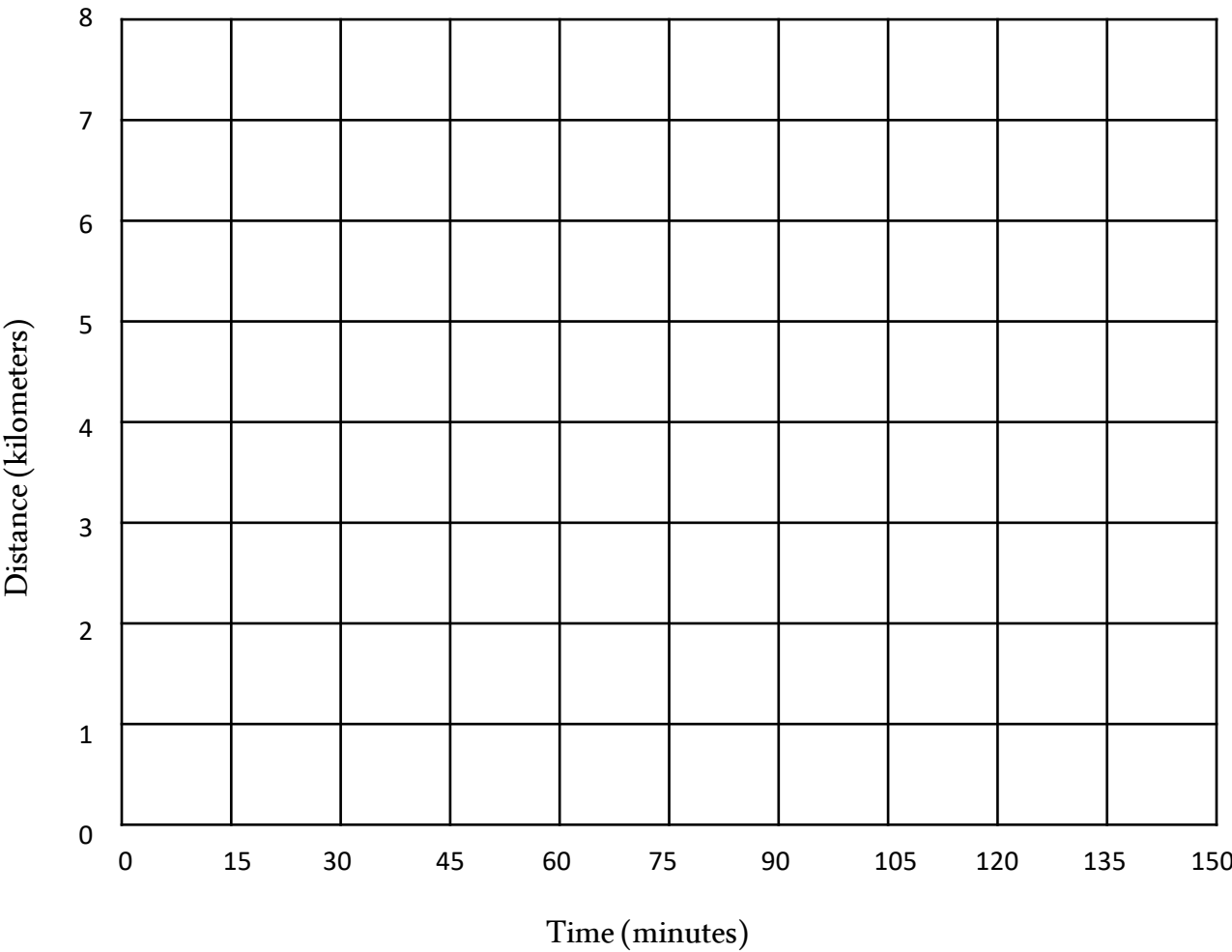


The Tortoise & The Hare

A Hare was making fun of the Tortoise one day for being so slow.  
"Do you ever get anywhere?" he asked with a mocking laugh.  
"Yes," replied the Tortoise, "and I get there sooner than you think. I'll run you a race and prove it."  
The Hare was much amused at the idea of running a race with the Tortoise, but for the fun of the thing he agreed. So the Fox, who had consented to act as judge, marked the distance and started the runners off.  
The Hare was soon far out of sight, and to make the Tortoise feel very deeply how ridiculous it was for him to try a race with a Hare, he lay down beside the course to take a nap until the Tortoise should catch up.  
The Tortoise meanwhile kept going slowly but steadily, and, after a time, passed the place where the Hare was sleeping. But the Hare slept on very peacefully; and when at last he did wake up, the Tortoise was near the goal. The Hare now ran his swiftest, but he could not overtake the Tortoise in time

Using your creativity, and the story above, draw a two-lined graph that shows how this race would have looked. Your lines and points should show a story of ‘slow and steady’, and ‘fast, but sporatic’.

Tortoise    - - - - -  
Hare        \_ \_ \_ \_ \_



# Stories and their graphs 2

This is a story of two friends, Bill and Brett. Now Bill and Brett were very different children. Bill was an organized student who always managed his time wisely. Brett, on the other hand, was quite a procrastinator. However, even with his procrastination, Brett always seemed to get what he needed to accomplish done.

Their teacher, Mr. Rolander, assigned the students a reading log at the beginning of the year. Over the next 10 weeks the students needed to read 50 hours of books.

For Bill this was easy. He did the math- calculating that he needed to read 5 hours a week, and broke it down further to 1 hour a day (he didn't want to read on the weekends). Bill did just that!

Brett on the other hand, read his 5 hours during his first week.... but then got bored, and put his journal in his drawer and soon forgot about it. It wasn't until week 6 that Brett was reminded about his reading journal! He frantically read over the next 4 weeks, and finished his last reading journal log on the very last day. Phew.

[illegible]



# Stories and their graphs 3

The annual jump rope competition at Gritarock High School was always a big deal to the community. The jump rope competition raised thousands of dollars every year.

How it works: students from each class jump rope as many times as they can for 10 minutes.

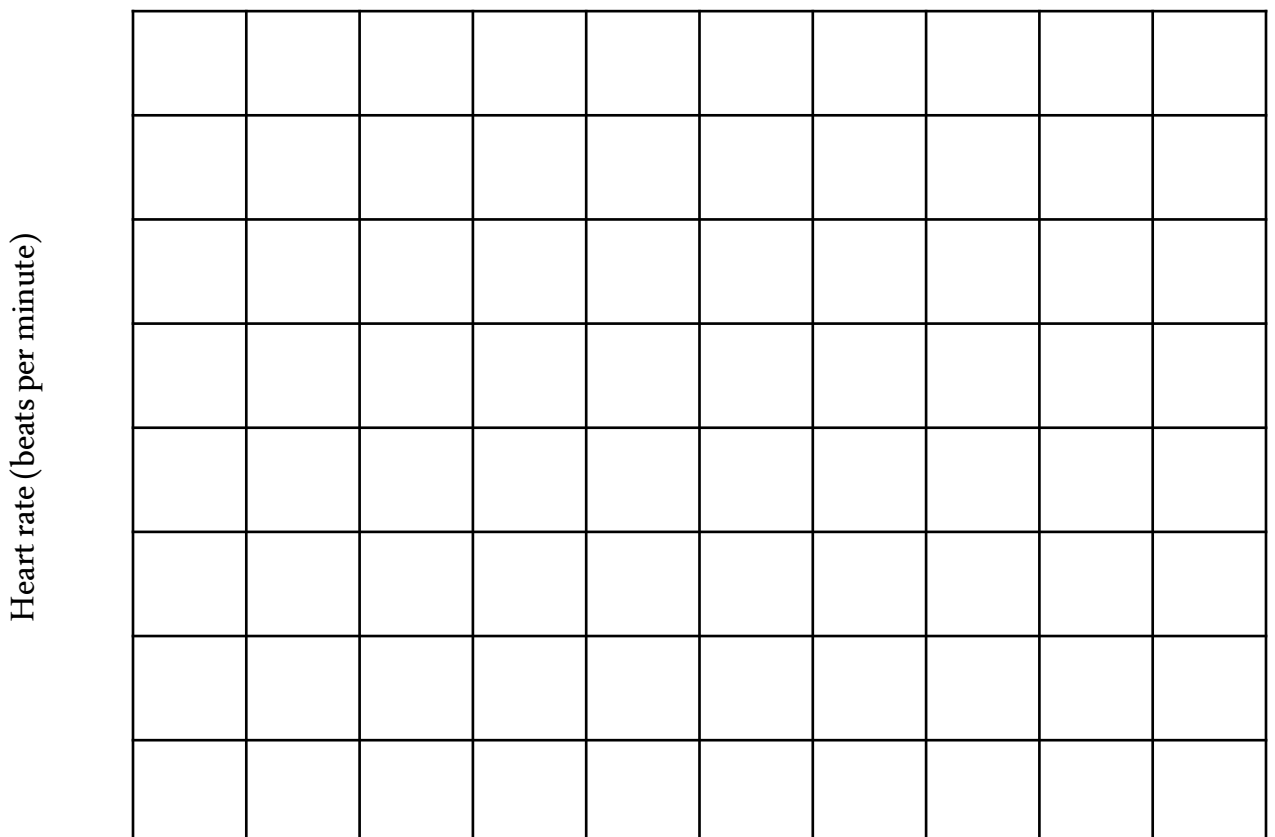
This year all eyes were on 3 students: Becky, Chad, and Harrold.

### Summary of the rope competition:

Becky jumped well, only needing to stop and catch her breath at the 4-minute and 7-minute mark.

Chad got off to a very strong start, taking his first break at the 6-minute mark. But soon after he needed another break at the 8-minute mark.

Harrold only took one break during this year's competition, stopping at the 5-minute mark to catch his breath.



# Stories and their graphs 4

Once upon a time, in the small town of Sunnyville, there was a group of adventurous fifth-grade students known as "The Explorers." These young explorers loved to go on exciting expeditions and discover new things about their town. One day, their teacher, Ms. Thompson, assigned them a special project: to create a pie chart representing the various activities they enjoyed the most.

The students were thrilled and began brainstorming the activities they loved doing together. After much discussion, they came up with five categories: Sports, Arts and Crafts, Science and Nature, Reading, and Community Service. The Explorers were a group of active kids, and they loved participating in sports. Soccer, basketball, and baseball were among their favorites. They allocated a significant portion of their pie chart to represent sports, which they colored green.

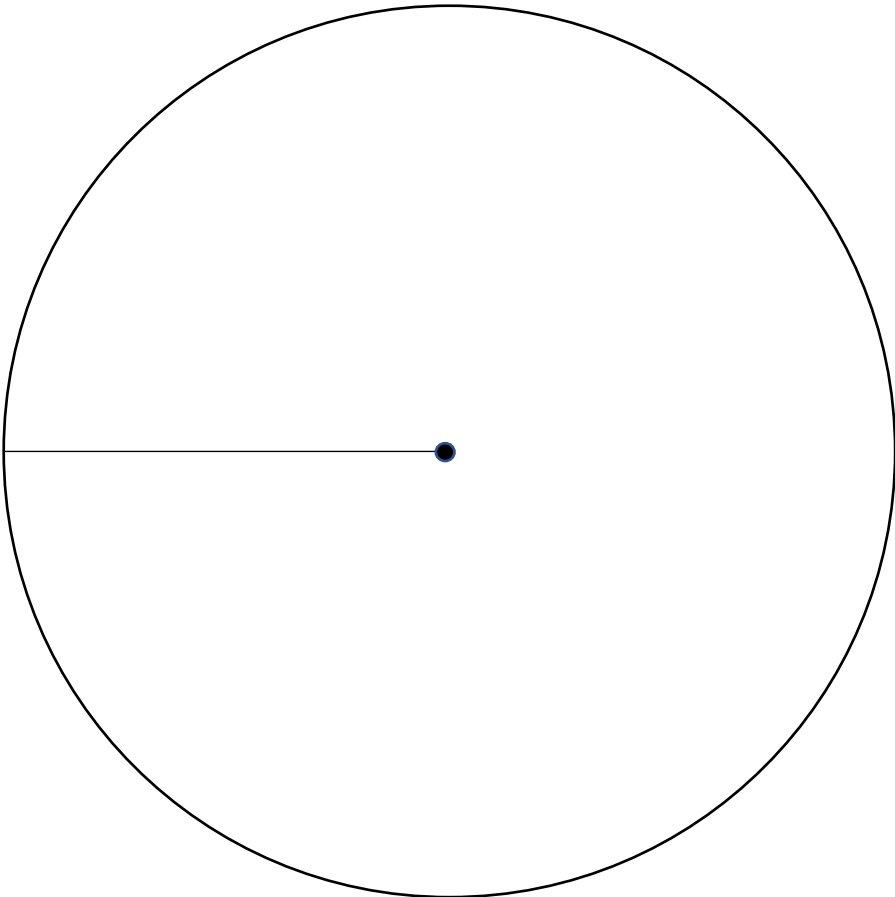
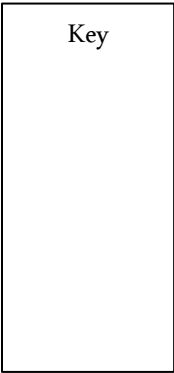
Another activity they enjoyed was expressing their creativity through arts and crafts. They loved painting, drawing, and making various crafts with their hands. They decided to assign a smaller portion of their chart to arts and crafts, coloring it blue.

Science and nature were a big part of their explorations. They loved going on nature walks, observing plants and animals, and conducting simple experiments. They assigned an equal portion to science and nature, which they colored yellow.

The Explorers were also avid readers. They loved getting lost in different books and discussing their favorite stories. Reading took up a medium-sized portion of their pie chart, which they colored red.

Lastly, the Explorers believed in giving back to their community. They regularly participated in community service activities like cleaning up parks, helping at local shelters, and organizing donation drives. They wanted to emphasize the importance of community service, so they assigned a smaller portion of their chart to represent it, coloring it purple.

Ms. Thompson commended the Explorers for their creativity and teamwork. She encouraged them to continue exploring different interests and to use their pie chart as a reminder to maintain a healthy balance in their lives. And so, The Explorers lived happily ever after, cherishing their varied pursuits and inspiring others to do the same.



# Stories and their graphs 5

Once upon a time, in the enchanted land of Evergreen, there was a magical forest known as Whispering Woods. In this forest, a group of adventurous fifth-grade students called "The Nature Explorers" embarked on a journey to discover and document the diverse trees that thrived in their mystical surroundings.

Led by their teacher, Mr. Anderson, The Nature Explorers armed themselves with notebooks, magnifying glasses, and an insatiable curiosity. As they ventured deeper into the woods, they encountered an array of majestic trees, each possessing its unique characteristics.

The students decided to create a tree map to showcase the variety of trees they encountered. They divided their chart into four categories: Evergreen Trees, Deciduous Trees, Fruit-Bearing Trees, and Flowering Trees.

The first category, Evergreen Trees, represented the trees that maintained their vibrant green foliage throughout the year. The Nature Explorers identified towering Spruce, elegant Fir, and resilient Pine trees, which they marked with the color green on their tree chart. This was the most common tree, **representing half of the trees** the nature explorers recorded.

The second category, Deciduous Trees, encompassed the trees that shed their leaves in the fall. The students were captivated by the colorful transformations of these trees. They noted the regal Oak, the graceful Maple, and the slender Birch trees on their chart, highlighting them with a vibrant mix of red, orange, and yellow. The deciduous trees represented **one-eighth of the tree recorded**.

The third category, Fruit-Bearing Trees, celebrated the bounty of nature's gifts. The Nature Explorers discovered trees that provided delicious fruits. They marveled at the apple trees, pear trees, and cherry trees, with their branches laden with sweet, succulent produce. They used shades of purple to represent these fruitful wonders on their chart. The fruit bearing trees were the second most common type of tree recorded, **double that of the deciduous trees**.

The final category, Flowering Trees, celebrated nature's delicate and beautiful blossoms. The students were enchanted by the fragrant blooms that adorned these trees. They documented the blossoming Cherry trees, the elegant Magnolia trees, and the vibrant Dogwood trees, coloring them with shades of pink, white, and pastels.

Title:

# Storytelling project

Write 3 short stories

Include 3 corresponding types of graphs with your stories, these could be:

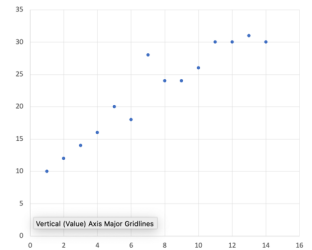
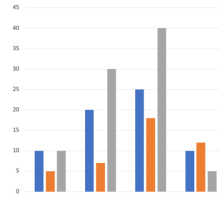
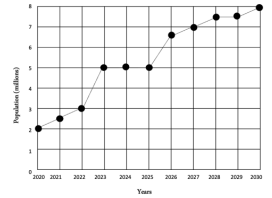
-Line graphs

-Pie graphs

-Bar graphs

-Tree maps

-Scatter plots



Brainstorming-

- You can make a line-graph of a suspenseful story, in which the x-axis is 'time' and the y-axis is your main character's heartbeat.
- You can tell a story about a soccer team and make a corresponding bar graph that shows how many goals they score.
- You can tell a story of friends visiting Disneyland and make a pie chart of the number of times they went on certain rides.

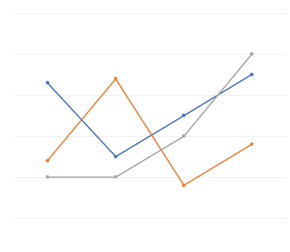
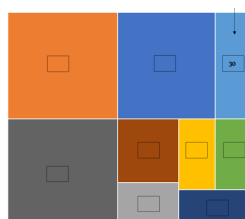
The options are endless!

You don't need to explicitly include numbers in your story to accommodate your graph (the data you use on your graph can be made up, however, it still needs to make sense to your overall story.)



Outline your story and plan it out before you begin writing. Make sure your story can be aligned with a type of graph! Think about what needs to be included in your plot to make a corresponding graph.

\*Tip- If you are struggling coming up with a story, try making your graph first... then write a fictional story that fits the graph.



# Storytelling Project Rubric

	Working Towards	Meeting	Exceeding
Creativity	My story(ies) is a re-told story that was previously discussed in class during the unit	Creative and unique!  My story is a reflection of my imagination.	Out of the box!  You’ve created a story and graph that is unlike any examples seen in class or throughout the unit.
Graphs	I used the same type of graph more than one time.	I included 3 different types of graphs that aligned with my story.	I included a scatterplot that aligned with my story, as well as two other types of graphs.
X & Y Axis	My x-axis and y-axis are labelled but some of them aren’t	My x-axis and y-axis are labelled and make sense in the context of my story as well as the graph.	I have included and labelled both x and y axis; the axes are very detailed and support a sophisticated graph.
Presentation	The graph appears rushed: i.e. lines aren’t straight, colouring is unorganized, the overall appearance needs more attention.	The graph is neat, with straight lines and it is clear that there was attention to detail by the creator.	The graph is exceptionally organized, with attention to detail that goes above and beyond.

**Title:**

**Graph:**

**Title:**



**Graph:**

[illegible]

**Graph:**