

# Vocabulary Quilt

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Grade 5 Math Unit 4

Statistics and Data Analysis

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# Statistics

Statistics is the study  
of data.





A collection of facts, such as values  
or measurements.

# Data

Sport	people
Soccer	100
Tennis	45
Gymnastics	54
Swimming	82
Track	68



Gymnastics



Track

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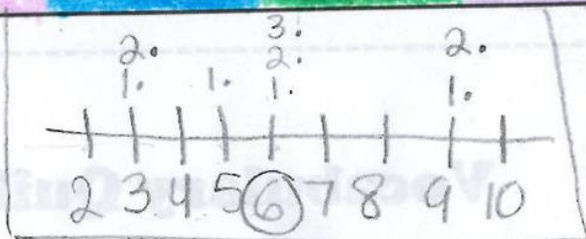
## Mean

The mean is the average of numbers:  
a calculated "central" value of a set of numbers.  
Add up the digits and then divide by the  
number of digits.

$$1+4+6+6+8+9 = 34 \div 6 = 5.7$$



Example →



**M O D E**

**Key** 

M = Most  
O = Occurred

Definition

The number which appears most often in a set of numbers.




 - 
 
 = ④ range = 4

Definition:

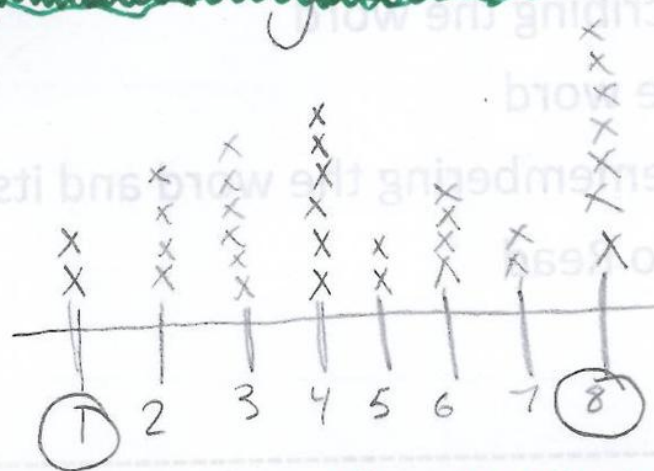
The difference  
 between  
 the greatest  
 number and  
 the least  
 number  
 in a set  
 of data

Range



strategy

Think of  
 the  
 data  
 and subtract  
 the highest  
 and lowest  
 numbers



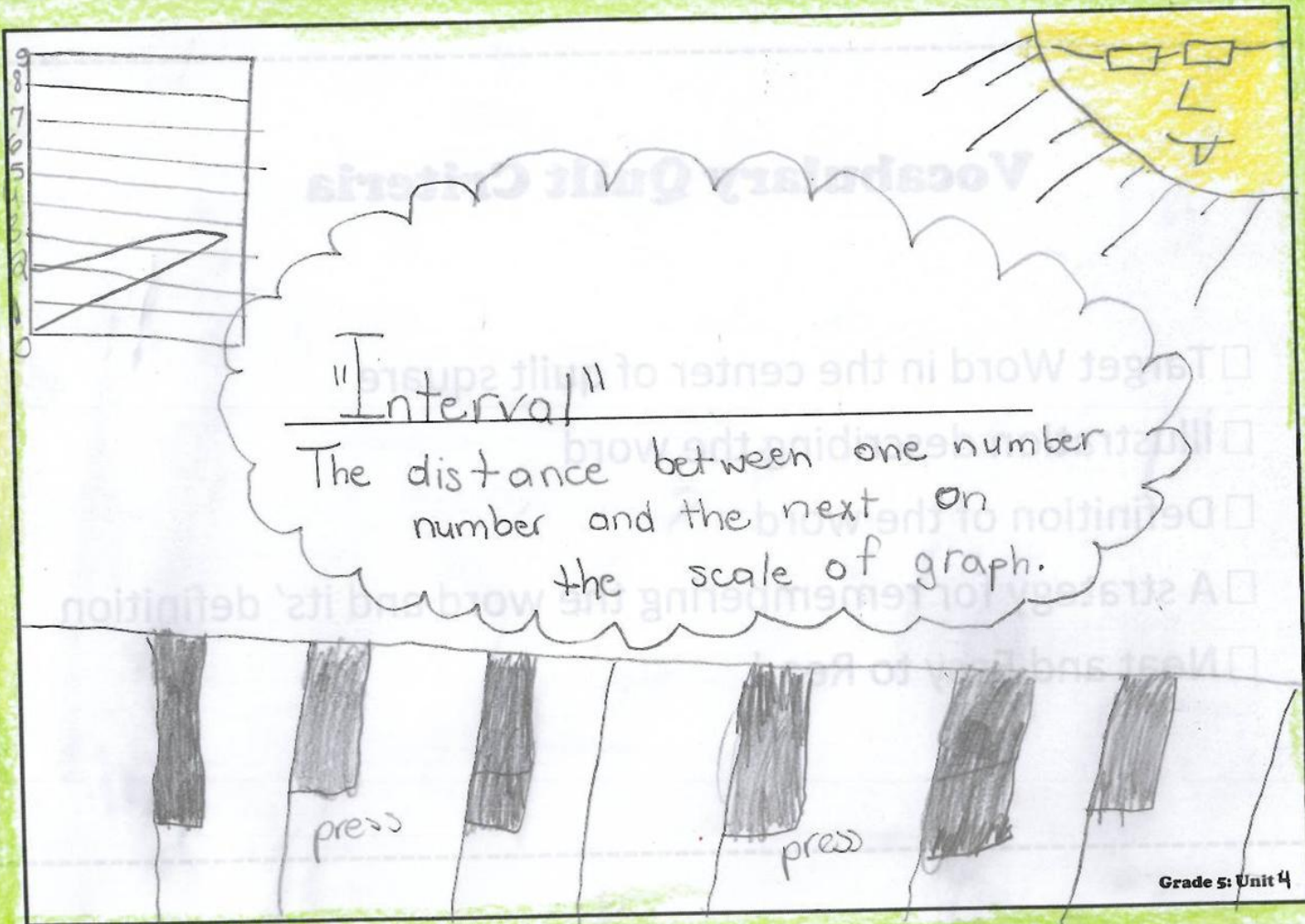
$8 - 1 = ⑦$

range = 7





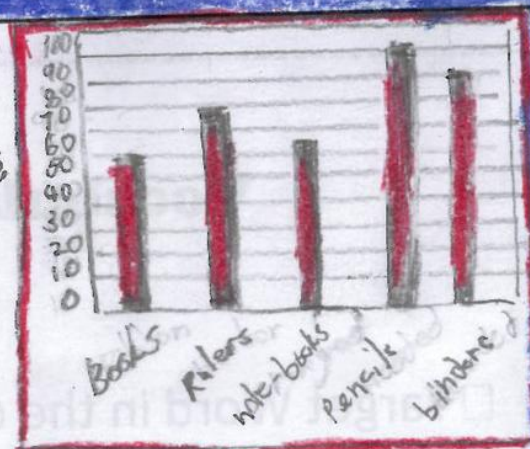






In school there are 50 books,  
70 rulers, 60 in a half note-books,  
90 pencils, and 80 binders.

# Scale



The scale is the series of numbers  
starting at 0 placed at fixed distance  
on a graph.





Intersect

Intersect

lines that intersect





FN

a squirrel marathon

10 miles	Daniel
12 miles	Chip
9 miles	Boom
14 miles	Fin
18 miles	Rotle

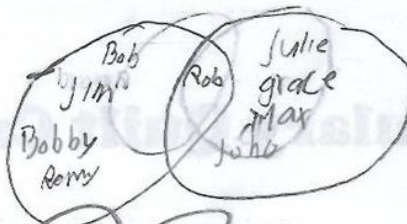
### Table

A table is a chart. A table is a way of organizing and displaying information.



To remember Venn diagrams  
is to see that the two Vs  
mean two circles.

Example



## Venn Diagram

Venn Diagram is a drawing that shows  
relationships among sets of objects.



One simple way to keep track of things that you are counting is to make tally marks.

# Tally Marks

ex:

instruments	tally	number of students
piano		8
guitar	I	6
flute		3
trumpet		5

Make a tally mark for each student who plays that instrument. Instead of every fifth tally mark, draw a slash through four marks.

After you've surveyed everyone, write the number of tally marks for each item.



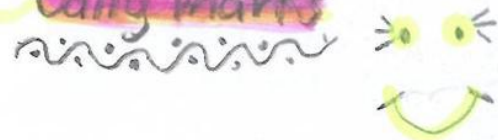
**Tally Chart** Every student of the school has a favourite drink.

Ex. drinks	tally	numbers of students
Coke		9
Orange juice		7
Milk		8
Ice tea		6



### Tally Chart

When you collect data, you need a way to keep track of the information as you collect it. One simple way to keep track of things that you are counting is to make tally marks.



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**Tally Chart**



Alex



## circle Graph

I remember it by the phrase:

I ♥ Pie! And pie is a circle

otherwise know as a pie graph.












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A Pictograph  
is a way of  
representing  
data using figures  
to match the different  
kinds of data.

## Pictograph

Different kind of Cherries				
Sour Cherry				
Sweet-heart				
Lapins				

A Picture graph  
Pictograph



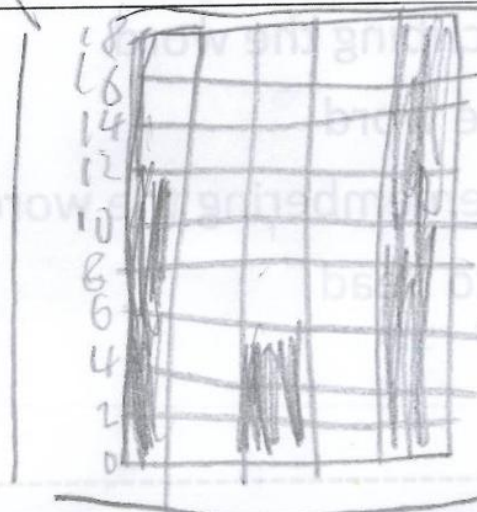
strategy

V  
book in  
a math book

A graph that uses horizontal  
or vertical bars to display  
countable data

# BAR GRAPH

scale →  
number  
line →



title

Fernando

name of thing

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Narwhal Graph

Narwhals colors

# Line Graph

A way to remember a line graph is that a line graph is made out of lines and points.

A line graph is a graph that uses points connected by lines to show how something changes in value over time.

Number of Narwhals

Narwhal Data

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15, 16, 21, 23, 23, 26, 26, 30, 32, 41

Stem	Leaf
2	1 3 3 6
3	0 2
4	1



# Stem and Leaf Plot !!!

A Plot where each data value is split into a "leaf" and a "stem".



A Stem and Leaf Plot reminds me of a tree

I love Stem and Leaf Plot !!!





# Frequency Table

A Frequency Table  
shows something  
that happens  
Frequently

Favorite Color	tally	number
red		10
purple		15

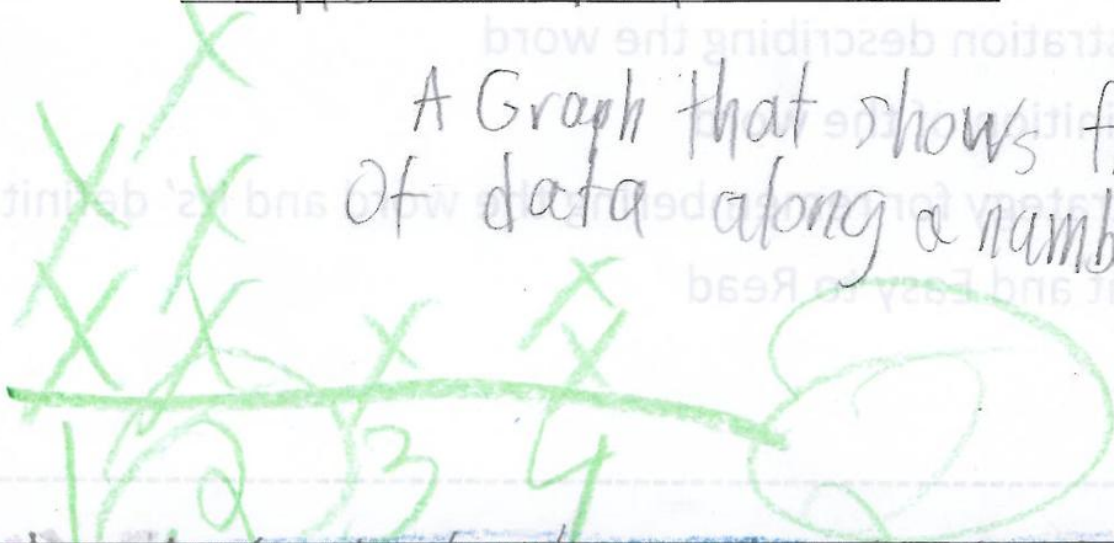
A table that  
uses numbers to record  
data about how often  
something happens.

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# Line Plot

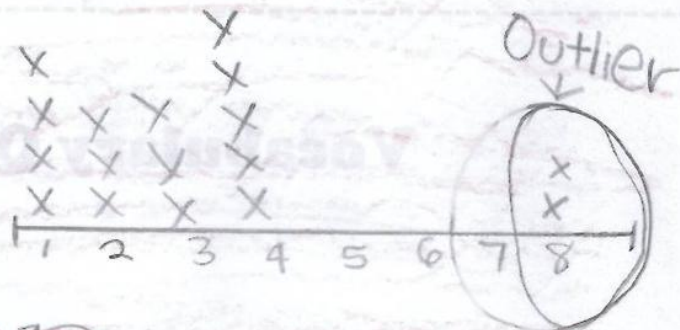
A Graph that shows frequency  
of data along a number line.





Out can mean  
not in so...  
Outlier means  
a # that is  
not in a  
piece of  
data

# Outlier



An Outlier is a  
number separated  
from a piece of data.