



# UNIT 10

## *Statistics*



# *Alaskan Math Standards (GLE's) for This Unit*

*These Alaskan math standards underly the language development of the unit. Many of these standards are addressed during the regular math program and in the concrete introduction of the key vocabulary words for the unit.*

**The student demonstrates understanding of position and direction by:**

[7] G-8 graphing or identifying values of variables on a coordinate grid (M5.3.6)

**The student demonstrates an ability to analyze data (comparing, explaining, interpreting, evaluating or making predictions; or drawing or justifying conclusions) by:**

[7] S&P-2 using information from a variety of displays (e.g., as found in graphical displays in newspapers and magazines) (M6.3.2)

[7] S&P-3 determining range, mean, median, or mode (M6.3.3)

**The student demonstrates an ability to problem solve by:**

[7] PS-1 selecting, modifying, and applying a variety of problem-solving strategies (e.g., working backwards, drawing a picture, Venn diagrams and verifying the results) (M7.3.2)

[7] PS-2 evaluating, interpreting, and justifying solutions to problems (M7.3.3)

**The student demonstrates an ability to classify and organize data by:**

[7] S&P-1 [collecting, L] displaying, organizing, or explaining the classification of data in realworld problems (e.g., science or humanities, peers or community), using circle graphs, frequency distributions, stem and leaf, [or scatter plots L] with appropriate scale (M6.3.1)

# *Alaskan Language Standards (GLE's) for This Unit*

AK.R.3.1. Reading: The student uses strategies to decode or comprehend the meaning of words in texts. (E.B.1)

[7] 3.2.2. Reading aloud short factual information (e.g., reports, articles) (L)

AK.R.3.3. Reading: The student restates/summarizes and connects information. (E.B.3)

AK.R.3.5. Reading: The student follows written directions. (E.C.2)

[7] 3.5.1. Completing a task by following written, multi-step directions (e.g., answer a multi-faceted text question) (L)

[7] 3.5.2. Identifying the sequence of steps in a list of directions (e.g., what is the first step, what is the second step)

[7] 3.3.4. Applying rules of capitalization (e.g., titles and proper nouns)

AK.W.3.4. Writing: The student revises writing. (E.A.5, E.A.8)

**AK.E.A. A student should be able to speak and write well for a variety of purposes and audiences. A student who meets the content standard should:**

E.A.1. Apply elements of effective writing and speaking. These elements include ideas, organization, vocabulary, sentence structure, and personal style.

E.A.2. In writing, demonstrate skills in sentence and paragraph structure, including grammar, spelling, capitalization, and punctuation.

E.A.3. In speaking, demonstrate skills in volume, intonation, and clarity.



# **INTRODUCTION OF MATH VOCABULARY**

# Measurement

## Concrete Introduction of Key Vocabulary

**Note:** A vocabulary graphic is provided in this unit for each of the key words.

Definitions for all of the key words can be found in the glossary at the back of this program.

### COMBINATIONS

*Put sandwich ingredients on a table in front of the students. Have them determine if the order in which you put the sandwich ingredients together makes any difference. For example, does it matter if you put the cheese on and then the meat, or the meat and then the cheese? Lead the students to understand that in this case order is not important. Use this to introduce combinations in math (i.e.  $2+3$  or  $3+2$ ).*

### LINE GRAPH

*Show the students a globe of the earth. Direct their attention to the lines of longitude and latitude. In particular, have them find their community and the nearest longitude/latitude lines near it. Use this to introduce a line graph to the students. Show examples of line graphs.*

### MODE

*Place 10 or more food items that are the same on a table (i.e. candies, mini-bars, etc.). Add 2 or 3 different items to those on the table. Have the students identify the most frequent food item. Use this to introduce mode to the students.*

# Measurement

## Concrete Introduction of Key Vocabulary

**Note:** A vocabulary graphic is provided in this unit for each of the key words.

Definitions for all of the key words can be found in the glossary at the back of this program.

### RANGE

*Give each student a small amount of trail mix. Each student should separate the ingredients of his portion. When this is done, they should count the number of each ingredient. Have them identify the smallest number and the greatest number of items. Use this to introduce range to the students.*

### MEAN

*Put play money in a box and have five students reach into the box to get a handful of money. Each student should count his/her money. Write the five totals on the board; divide the total by five (for the five totals) to reach the mean in relation to the money. Repeat.*

### MEDIAN

*Place a tray of soil on a table where the students can readily see it. Using your hands, create a 4 lane highway in the sand. When completed, draw the students' attention to the land between the sets of lanes — the median. Use this to introduce median as a mathematical concept.*

# Measurement

## Concrete Introduction of Key Vocabulary

**Note:** A vocabulary graphic is provided in this unit for each of the key words.

Definitions for all of the key words can be found in the glossary at the back of this program.

### AXIS

*Mount a map of Europe on the board. Direct the students' attention to Germany and Italy. Use your finger to draw a line from one country to the next, creating a line of axis. Introduce these as two of the countries that made up the axis powers in World War II. Relate axis to lines of symmetry on a graph. Show examples.*

### PARABOLA

*Show the students the picture of the St. Louis Arch, from the end of this unit. Give a student a straw or other bendable item. The student should bend it to create an arch or parabola. Show the use of parabolas on graphs.*

### (TO) PLOT

*Mount a highway map of Alaska on the board. Tell the students that they are in a specific location, such as Haines. Have them suggest the route(s) that could be used to reach Fairbanks. Use this to introduce plotting a route on a map. Relate this to plotting on a graph.*





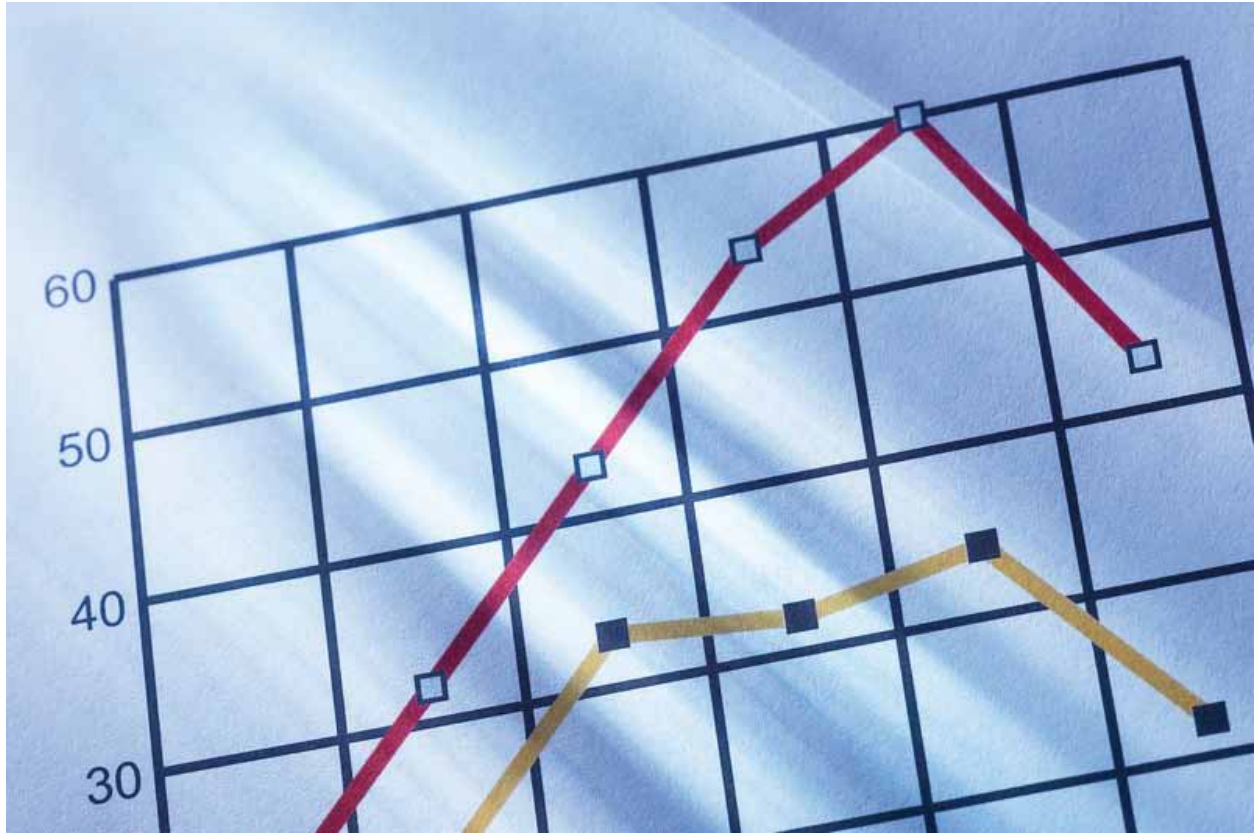
# VOCABULARY PICTURES







## COMBINATIONS





## LINE GRAPH



1 2 3 4 4 4 5 6 7 8 9

—



## **MODE**





7

3

9

—

6

4



## RANGE



101

50         /      =     

75

84



## MEAN



3, 5, 7, 12, 13, 14, 21, 23

—



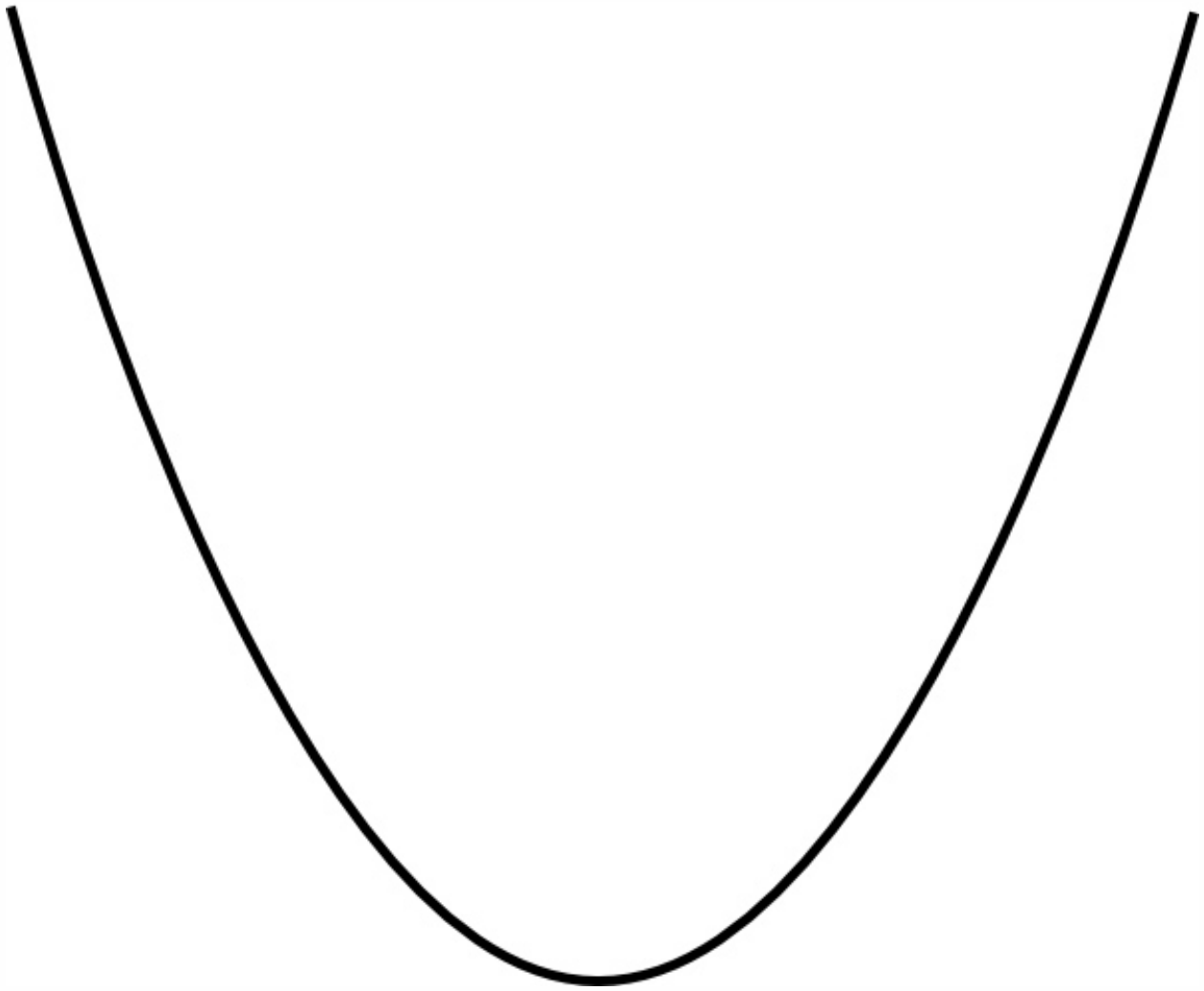
## MEDIAN





## AXIS







## **PARABOLA**





## **(TO) PLOT**



# LANGUAGE ACTIVITIES

# Language and Skills Development

## LISTENING

*Review the key math words introduced in this unit. If the vocabulary pictures were not presented during the introduction, show them to the students at this time.*



### Mini Pictures

Provide each student with a copy of the mini-pictures page from the Student Support Materials. When you say the key words, the students must find the pictures for them. Then, have the students cut out the pictures. Say the keywords and the students should hold up the pictures for them.

### Number That Word

Mount the vocabulary graphics on the board. Provide each student with three blank flashcards. Each student should write the numbers 1, 2, and 3 on his/her cards - one number per card. Point to one of the vocabulary graphics. Then, say three vocabulary words. Each student should show the number card that matches the picture you pointed to. Repeat with other graphics and vocabulary words.

### Back-to-Back Race

Have two pairs of students stand in the center of the classroom. The students in each pair should stand back-to-back with arms interlocked. Lay the vocabulary illustrations on the floor in a scattered form. Say one of the vocabulary words. The two pairs of students must then race to the illustration for the vocabulary word you said without unlocking their arms. The first pair to reach the correct illustration wins the round. Repeat with other pairs of students.

### Airplane Land

Scatter the vocabulary pictures on the floor. Have the students sit in a large circle around the pictures. Prepare two paper airplanes. Give the airplanes to two students. Say one of the vocabulary words. The students should toss their airplanes, attempting to land them on the picture for the vocabulary word you said. Repeat until all students have participated.



# *Language and Skills Development*

## **Fanball**

Tape the vocabulary pictures to the floor and group the students around them. Give a “hand fan” and an inflated balloon to two students. Say one of the vocabulary words. The two students should then use their fans to move the balloons to the picture that represents the vocabulary word you said. The first player to fan his/her balloon over the correct picture wins the round. Repeat.

## **Circle Hop**

Scatter the vocabulary pictures on the floor. Using masking tape, make a circle around each picture. Have two or more students stand in the center of the classroom. Say one of the vocabulary words. The students should then hop to the circle which contains the picture that represents the vocabulary word you said. Then, remove the picture from the circle and say another vocabulary word. Continue until all the pictures have been removed from the floor. The students must remember where the graphics were in order to hop to the correct masking tape circles.

# Language and Skills Development

## SPEAKING



### Illustration Build-Up

Mount the vocabulary illustrations on the chalkboard. Point to two of the illustrations. The students should then say the vocabulary words for those two illustrations. Then, point to another illustration. The students should repeat the first two vocabulary words and then say the vocabulary word for the third illustration you pointed to. Continue in this way until the students lose the sequence of words.

### Picture Bingo

Give the students the mini pictures used earlier. Each student should place them face down on his/her desk. Then, have each student turn one picture face up. Say a vocabulary word. Any student or students who have the picture for that word face up must say a complete sentence using that vocabulary word. Those pictures should then be put to the side and other pictures turned over. Continue in this way until a student or students have no pictures left on their desks.

### Centered Speaker

Group the students into two teams of equal numbers. The two teams should stand, facing one another, about ten feet apart. Have one student stand between the two teams as IT for the first round of the activity. Give each player in Team One a number. Then, give each player in Team Two a number. The numbers you give the players should be “scattered” so that, for example, number One in each team is not directly opposite one another. Call a number. The two players from the teams who have that number must then exchange places as quickly as possible. However, IT must attempt to reach one of the vacated positions before the other player arrives. The player who is “stuck in the middle” becomes IT, and must then identify a vocabulary picture that you show him/her. To add spice to this activity, all students in each team may pretend to run when you call a number. In this way, IT will not be as certain as to which players are exchanging places. Repeat until many students have identified vocabulary pictures.



# *Language and Skills Development*

## **Stick of Chance**

Before the activity begins, obtain four or five popsicle sticks. Break the popsicle sticks into different lengths. Hold the popsicle sticks in your hands so that they all appear to be the same length. Have individual students remove the sticks from your hands. The “winner” is the student who receives the longest stick; he/she must then identify a vocabulary picture you point to, or repeat a sentence that you said at the beginning of the round. Repeat this process until many students have responded in this way.

## **Half Match**

Before the lesson begins, prepare a photocopy of each of the vocabulary pictures. Cut each of the photocopied pictures in half. Give the picture halves to the students (a student may have more than one picture half). Say one of the vocabulary words. The two students who have the halves of the picture for that word must show their halves and repeat the word orally. Continue in this way until all of the vocabulary words have been reviewed. This activity may be repeated more than once by collecting, mixing, and redistributing the picture halves to the students. This activity may also be adapted for team form. To do this, cut each of the vocabulary pictures in half. Place half of the pictures in one pile and the other halves in another pile (one pile for each team). Say a vocabulary word. When you say “Go,” the first player from each team must rush to his/her pile of picture halves. Each player must find the half of the picture for the vocabulary word you said. The first player to correctly identify the picture half and to repeat the vocabulary word for it wins the round. Repeat until all players have played.

# Language and Skills Development

## READING

*Introduce the math sight words to the students — match the sight words with the vocabulary graphics. The sight words are included in the Student Support Materials, attached to these lesson plans.*



### Sight Recognition

#### Funnel Words

Group the students into two teams. Give the first player in each team a funnel. Mount the sight words on the walls, board, and windows, around the classroom. Say one of the sight words. The students with the funnels must then look through them to locate the sight word you named. The first student to do this correctly wins the round. Repeat with other pairs of students until all players in each team have played.

#### String Along

Join all of the students together with string (the students do not need to move from their seats). Before tying the ends of the string together, insert a roll of tape over one of the ends of the string. Tie the ends of the string together. Turn your back to the students. The students should pass the roll of tape along the string as quickly as possible. When you clap your hands, the student left holding the tape must then identify a sight word you show him. Repeat this process until many students have responded and until all of the sight words have been correctly identified a number of times.

#### Student Support Materials

Have the students complete the sight recognition and encoding activities in the Student Support Materials. When finished, review their work.

### Decoding/Encoding

#### Letter Encode

Give each student his/her envelope that contains the alphabet letters. Show a picture from this unit. The students must use the cut-out letters to spell the word for the picture. Review the students' work. Repeat, until all of the words have been spelled.



# *Language and Skills Development*

## **Flashlight Encode**

Cut each of the sight words in half. Mount all of the word halves in a scattered form on the chalkboard. Stand in front of the chalkboard with two flashlights. Shine the light of one flashlight on a word half. Then, shine the light of the other flashlight on its matching half. The students should say the sight word. However, when the lights of the two flashlights are shining on word halves that do not go together, the students should remain silent. If four flashlights are available, this activity may be done in team form. In this case, give the first player in each team two flashlights. Say a sight word. The first player in each team must then use his/her two flashlights to illuminate the word halves for the sight word you said. The first player to do this correctly wins the round.

## **Student Support Materials**

Have the students complete the sight recognition and encoding activities in the Student Support Materials. When finished, review their work.

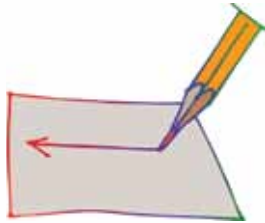
## **Reading Comprehension**

### **Student Support Materials**

Have the students complete the sight recognition and encoding activities in the Student Support Materials. When finished, review their work.

# Language and Skills Development

## WRITING



### Say Again

Group the students into two teams. Whisper a sight word to the first player in each team. When you say “Go,” the first player in each team must whisper the same sight word to the next player in the team. The students should continue in this way until the last player in the team hears the sight word. When the last player in the team hears the sight word, he/she must rush to the chalkboard and write the word on the board. The first team to do this correctly wins the round. Repeat until each player has written a sight word in this way.

### Numbered Pictures

Mount the vocabulary pictures on the chalkboard and number each one. Provide each student with writing paper and a pen. Call the number of a picture. Each student should write the vocabulary word for the picture represented by that number. Repeat until all vocabulary words have been written. Review the students’ responses.

### Back Writing

Group the students into two teams. Have the first player from each team stand in front of the board. Use the index finger of your writing hand to “write” the first letter of a sight word on the two players’ backs. When you have done this, say “Go.” Each of the players should then write a sight word on the board that begins with that letter. Repeat with other pairs of players until all players in each team have played and until all sight words have been written a number of times.

### Yarn Spell

Group the students into two teams. Give the first player in each team lengths of yarn or string. Say a vocabulary word. When you say “Go,” the first player in each team must then use the yarn or string to “write” the word on the floor. The first player to complete his/her word wins the round. Repeat this process until all players in each team have played. If pipe cleaners are available, they may be used in place of the yarn or string (have both long and short lengths of the pipe cleaners ready for the activity).



# *Language and Skills Development*

## **Every Second Letter**

Write a sight word on the board, omitting every second letter. Provide the students with writing paper and pens. The students should look at the incomplete word on the board and then write the sight word for it on their papers. Repeat using other sight words.

This activity may also be done in team form. In this case, have the incomplete words prepared on separate flash cards. Mount one of the cards on the board. When you say “Go,” the first player from each team must rush to the board and write the sight word for it—adding all of the missing letters. Repeat until all players have participated.

## **Student Support Materials**

Have the students complete the sight recognition and encoding activities in the Student Support Materials. When finished, review their work.



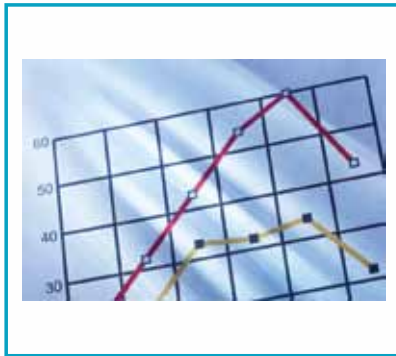


# STUDENT SUPPORT MATERIALS

Listening • Mini Pictures

# Listening: Mini Pictures

Have the students cut out the pictures. Say the key math words from this unit, and the students should hold up the pictures for them.



1 2 3 4 4 4 5 6 7 8 9

—

7  
3  
9  
6  
4

—

101

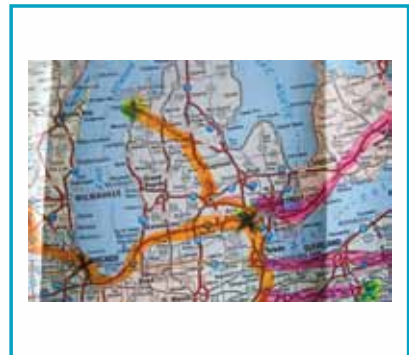
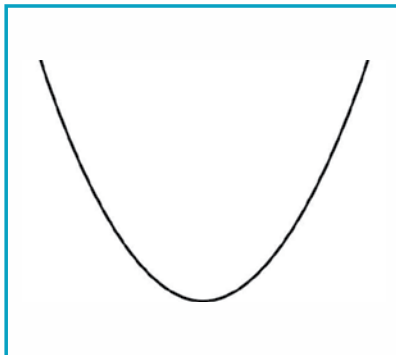
50 — / — = —

75

84

3, 5, 7, 12, 13, 14, 21, 23

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# STUDENT SUPPORT MATERIALS

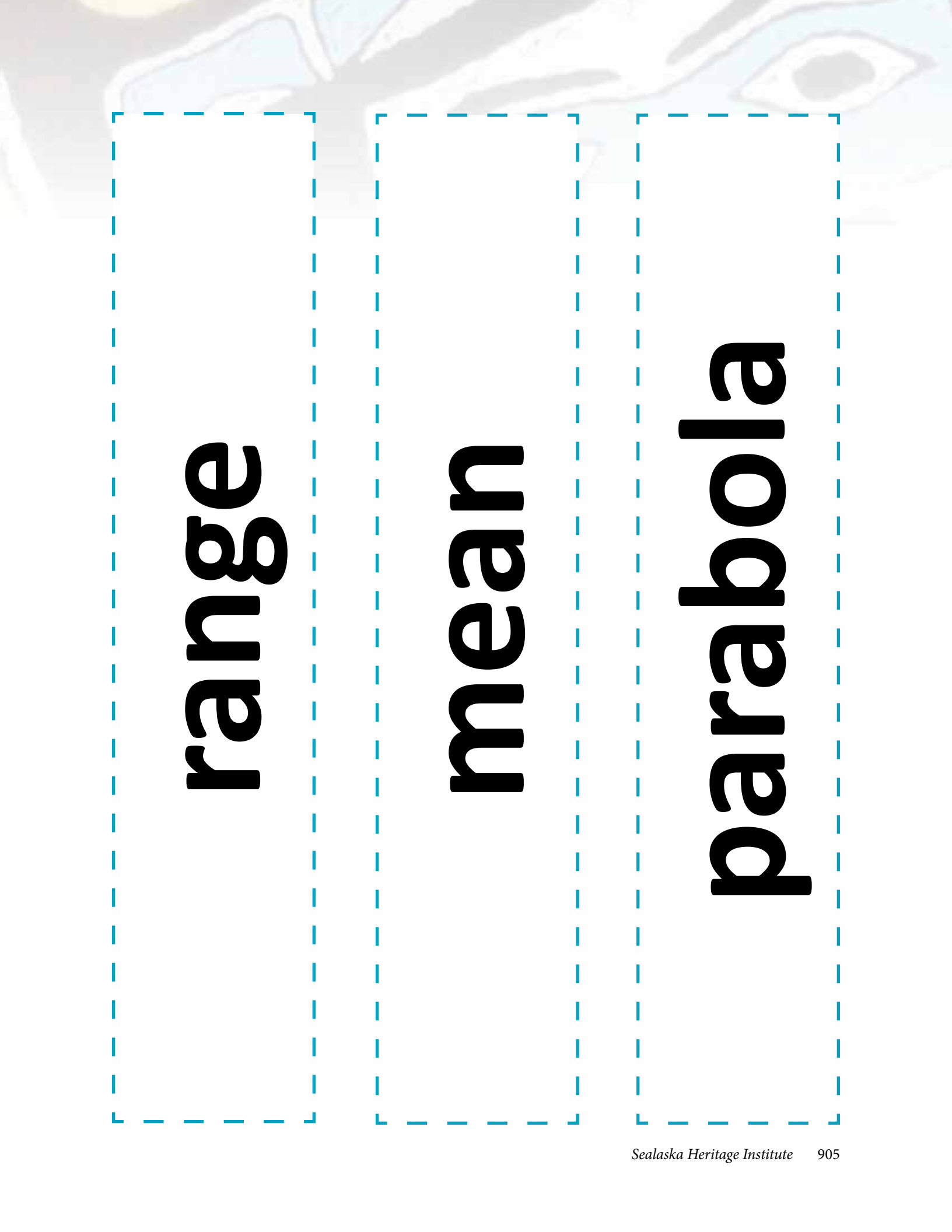
**Sight Words**

**combinations**

**line graph**

**axis**

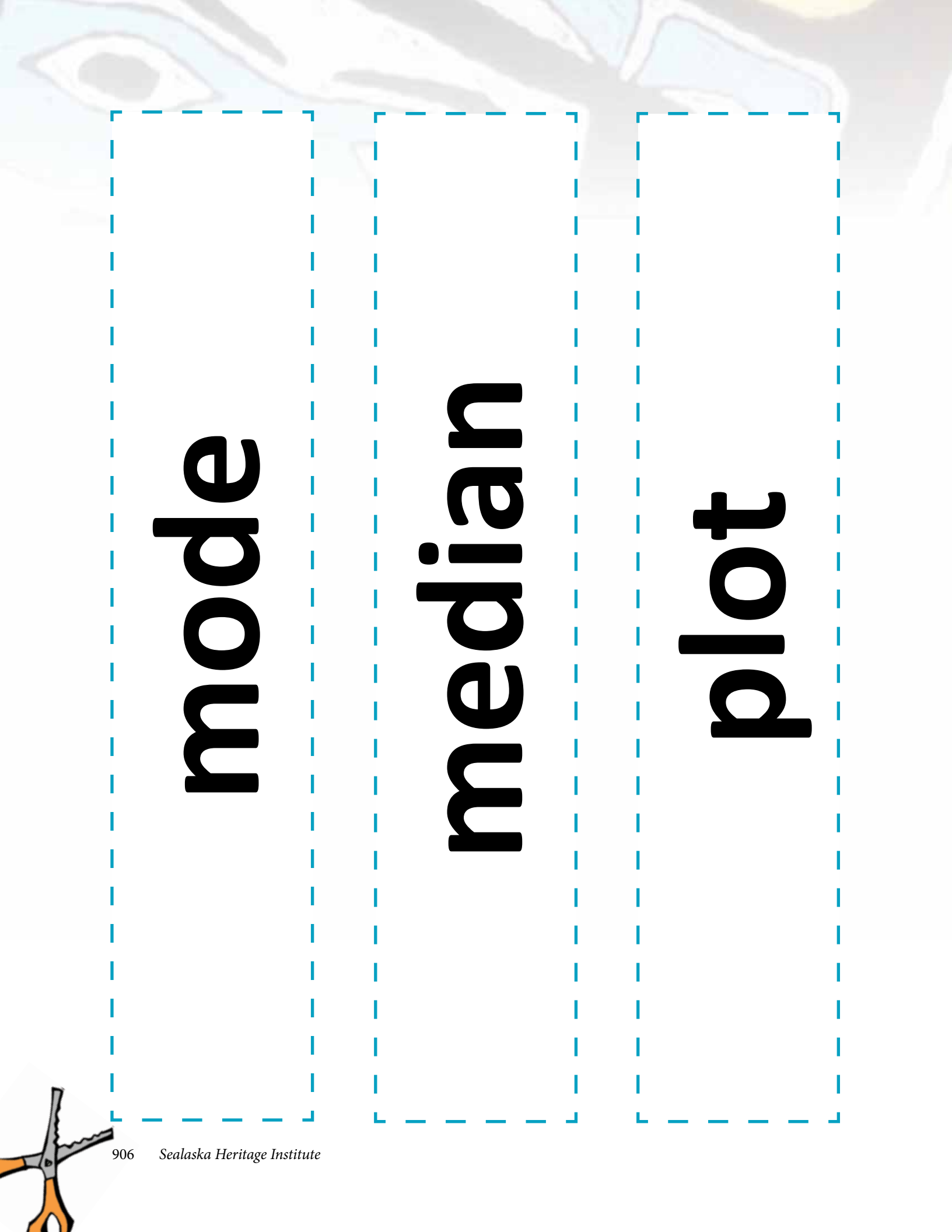




**range**

**mean**

**parabola**



**mode**

**median**

**plot**





# STUDENT SUPPORT MATERIALS

Reading • Sight Recognition

# Sight Words Activity Page



Have the students circle the word for each picture.

3, 5, 7, 12, 13, 14, 21, 23

—

combinations  
line graph  
axis  
range  
mean  
median  
mode  
parabola  
plot

combinations  
line graph  
axis  
range  
mean  
median  
mode  
parabola  
plot

combinations  
line graph  
axis  
range  
mean  
median  
mode  
parabola  
plot

combinations  
line graph  
axis  
range  
mean  
median  
mode  
parabola  
plot

1 2 3 4 4 4 5 6 7 8 9

—

combinations  
line graph  
axis  
range  
mean  
median  
mode  
parabola  
plot

101

50        /     =    

75

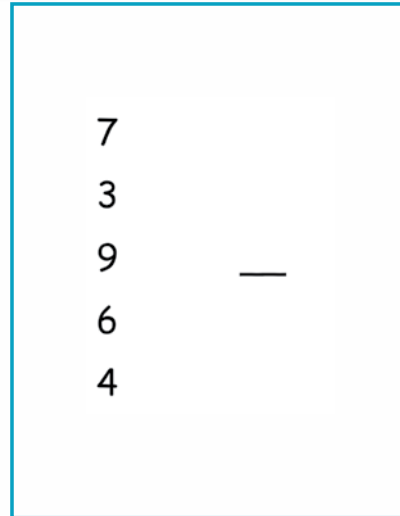
84

combinations  
line graph  
axis  
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mean  
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parabola  
plot

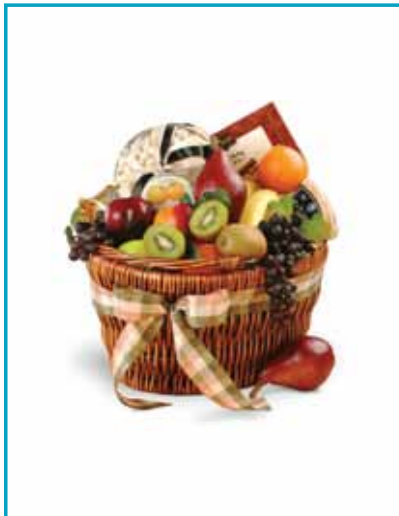
# Sight Words Activity Page



combinations  
line graph  
axis  
range  
mean  
median  
mode  
parabola  
plot



combinations  
line graph  
axis  
range  
mean  
median  
mode  
parabola  
plot



combinations  
line graph  
axis  
range  
mean  
median  
mode  
parabola  
plot

# Sight Words Activity Page

Write the numbers on their correct vocabulary graphics.



7  
3  
9     —  
6  
4

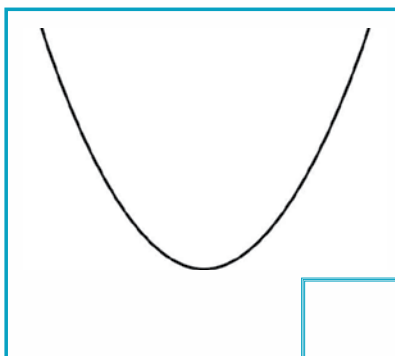
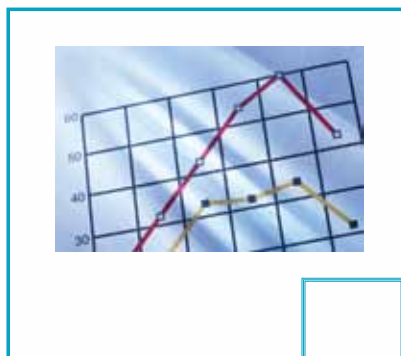


1 2 3 4 4 4 5 6 7 8 9

—

3, 5, 7, 12, 13, 14, 21, 23

—



101  
50    — / — = —  
75  
84

- |                |             |
|----------------|-------------|
| 1. combination | 6. median   |
| 2. line graph  | 7. mode     |
| 3. axis        | 8. parabola |
| 4. range       | 9. plot     |
| 5. mean        |             |





# Sight Words Activity Page



Highlight or circle the words in this word find.

combinations  
plot  
parabola

mean  
mode  
median

line graph  
axis  
range

g p a n b o o n a t a x i s n n x i  
m n n t p a r a b o l a a a o l h b  
i o r r t m t h a a g d o g d i m t  
h e a h o a i e x t s i x c o n p l  
t t l i n e g r a p h p m e i o l l  
t a m e d i n n e b n n g e a l i o  
m n d n n r p i e r a n g e c e o i  
i m a n c o m b i n a t i g i a d a  
n a e g s g g p l o t o g a a r a b  
l a i c o m b i n a t i o n s a s t  
a a b x n e p a r a b o l o n i e c  
p o a o t g h o m x r c a m b d t e  
s s l n g e a m o d e n o g s e e s  
p m m e a n e r e b i i n l s n g m  
b a e g a a i a n a c a a l m a m r  
a t e o l a x e i l a l s d i a d s  
i p e x n a p o n n m e d i a n a e  
o t a d l i n e a n a i l r e i p n  
n a o e p i a l i n e g r a r o e d  
b n o o e d c e a a r e x m n g m o

# Sight Words Activity Page

ANSWER KEY



combinations  
plot  
parabola

mean  
mode  
median

line graph  
axis  
range

g p a n b o o n a t **a x i s** n n x i  
m n n t **p a r a b o l a** a a o l h b  
i o r r t m t h a a g d o g d i m t  
h e a h o a i e x t s i x c o n p l  
t t **l i n e g r a p h** p m e i o l l  
t a m e d i n n e b n n g e a l i o  
m n d n n r p i e **r a n g e** c e o i  
i m a n c o m b i n a t i g i a d a  
n a e g s g g **p l o t** o g a a r a b  
l a i **c o m b i n a t i o n s** a s t  
a a b x n e p a r a b o l o n i e c  
p o a o t g h o m x r c a m b d t e  
s s l n g e a **m o d e** n o g s e e s  
p m **m e a n** e r e b i i n l s n g m  
b a e g a a i a n a c a a l m a m r  
a t e o l a x e i l a l s d i a d s  
i p e x n a p o n n **m e d i a n** a e  
o t a d l i n e a n a i l r e i p n  
n a o e p i a l i n e g r a r o e d  
b n o o e d c e a a r e x m n g m o





# STUDENT SUPPORT MATERIALS

Reading • Encoding

# Encoding Activity Page

Have the students cut out the word parts and glue them into their correct words.



\_\_\_\_\_binations

line gra \_\_\_\_\_

ax \_\_\_\_\_

ran \_\_\_\_\_

m \_\_\_\_\_ n

is	ge	od
----	----	----

ia	bo
----	----



# Encoding Activity Page



med \_\_\_\_\_ n

m \_\_\_\_\_ e

para \_\_\_\_\_ la

\_\_\_\_\_ ot

ea	com
pl	ph



# Encoding Activity Page

Have the students cut out the word halves and glue them together to create the key words for this unit.



**combi**

**is**

**line gr**

**ot**

**ax**

**nations**

**ran**

**an**

**me**

**de**





# Encoding Activity Page



**medi**

**bola**

**mo**

**aph**

**para**

**ge**

**pl**

**an**



# Encoding Activity Page

Cut out and encode the syllables of the words OR number the syllables in their correct sequence.



bi || tions || com || na

---

di || an || me

---

ra || la || pa || bo

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# STUDENT SUPPORT MATERIALS

**Reading Comprehension**

# What's the Answer?



Read the text and then select the correct answer for it. Fill in the bullet beside the answer of your choice.

- ① Combinations are collections of things in which
  - order is very important.
  - all things are congruent.
  - all angles are right angles.
  - order is not important.
  
- ② Line graphs compare
  - equivalent variables.
  - exponents of whole numbers.
  - two variables.
  - values of vertices.
  
- ③ An axis is a
  - diameter of a perimeter.
  - line of symmetry for a graph.
  - prism.
  - polyhedron.
  
- ④ A range is the difference between
  - the lowest and highest values.
  - the mean value.
  - dilation and a perimeter.
  - addends.
  
- ⑤ Another word for mean is
  - range.
  - average.
  - radius.
  - formula.
  
- ⑥ The median is the
  - dilation of shapes over time.
  - middle value in a list of numbers.
  - the center of a circle's radius.
  - the center of a circle.

# What's the Answer?



- 7 The mode is the number that can be seen in
- a polygon.
  - a polyhedron.
  - a ratio.
  - a list of numbers.
- 8 A parabola is shaped like an
- expression.
  - edge.
  - arch.
  - isosceles triangle.
- 9 When we plot, we can use
- a graph or map.
  - the product of addends in a trapezoid.
  - dilation.
  - parentheses and irregular polygons.

# What's the Answer?

## ANSWER KEY



- ① Combinations are collections of things in which
- order is very important.
  - all things are congruent.
  - all angles are right angles.
  - order is not important.
- ② Line graphs compare
- equivalent variables.
  - exponents of whole numbers.
  - two variables.
  - values of vertices.
- ③ An axis is a
- diameter of a perimeter.
  - line of symmetry for a graph.
  - prism.
  - polyhedron.
- ④ A range is the difference between
- the lowest and highest values.
  - the mean value.
  - dilation and a perimeter.
  - addends.
- ⑤ Another word for mean is
- range.
  - average.
  - radius.
  - formula.
- ⑥ The median is the
- dilation of shapes over time.
  - middle value in a list of numbers.
  - the center of a circle's radius.
  - the center of a circle.

# What's the Answer?



- 7 The mode is the number that can be seen in
- a polygon.
  - a polyhedron.
  - a ratio.
  - a list of numbers.
- 8 A parabola is shaped like an
- expression.
  - edge.
  - arch.
  - isosceles triangle.
- 9 When we plot, we can use
- a graph or map.
  - the product of addends in a trapezoid.
  - dilation.
  - parentheses and irregular polygons.

# Reading Comprehension Activity Page

Write the numbers/letters for sentence halves that match.



- |  |                                    |   |                                      |
|--|------------------------------------|---|--------------------------------------|
| ① In combinations,                     | ⑨ A person can plot values         | Ⓐ and highest values is the range.      | Ⓘ shape like an arch.                |
| ② A line graph plots two variables and | ⑧ The parabola is a                | Ⓑ a line on a graph.                    | ⓗ have to be in order.               |
| ③ An axis is                           | ⑦ The mode is the number that      | Ⓒ as the average.                       | Ⓙ each one is plotted along an axis. |
| ④ The difference between the lowest    | ⑥ To find the median, your numbers | Ⓓ shows up most in a list of numbers.   | Ⓚ on a map or graph.                 |
| ⑤ The mean is the same                 | ⑤ The mean is the same             | Ⓔ the order of things is not important. |                                      |

1→ \_\_\_\_\_ 2→ \_\_\_\_\_ 3→ \_\_\_\_\_ 4→ \_\_\_\_\_  
5→ \_\_\_\_\_ 6→ \_\_\_\_\_ 7→ \_\_\_\_\_ 8→ \_\_\_\_\_  
9→ \_\_\_\_\_



# Reading Comprehension Activity Page

ANSWER KEY



- |  |                                    |   |                                      |
|--|------------------------------------|---|--------------------------------------|
| ① In combinations,                     | ⑨ A person can plot values         | Ⓐ and highest values is the range.      | Ⓘ shape like an arch.                |
| ② A line graph plots two variables and | ⑧ The parabola is a                | Ⓑ a line on a graph.                    | ⓗ have to be in order.               |
| ③ An axis is                           | ⑦ The mode is the number that      | Ⓒ as the average.                       | Ⓙ each one is plotted along an axis. |
| ④ The difference between the lowest    | ⑥ To find the median, your numbers | Ⓓ shows up most in a list of numbers.   | Ⓚ                                    |
| ⑤ The mean is the same                 | ⑤ The mean is the same             | Ⓔ the order of things is not important. |                                      |

1 →     E          2 →     G          3 →     B          4 →     A      
5 →     C          6 →     H          7 →     D          8 →     I      
9 →     F

# Reading Comprehension Activity Page

Cut out the words and glue them under their definitions.



**This is the difference between the lowest and highest values.**

**In these, the order of things is not important.**

**This is the middle value in a list of numbers.**

**This compares two variables using an axis for each one.**

**This is the number that appears most in a list of numbers.**

**This is a line of symmetry for a graph.**

**We can do this on graphs and maps.**

**This is another way of saying average.**

**This is a shape that is sometimes used over a doorway.**

combinations	line graph	axis	range
mean	median	mode	
parabola	plot		



# Reading Comprehension Activity Page

ANSWER KEY



**This is the difference between the lowest and highest values.**

range

**In these, the order of things is not important.**

combinations

**This is the middle value in a list of numbers.**

median

**This compares two variables using an axis for each one.**

line graph

**This is the number that appears most in a list of numbers.**

mode

**This is a line of symmetry for a graph.**

axis

**We can do this on graphs and maps.**

plot

**This is another way of saying average.**

mean

**This is a shape that is sometimes used over a doorway.**

parabola



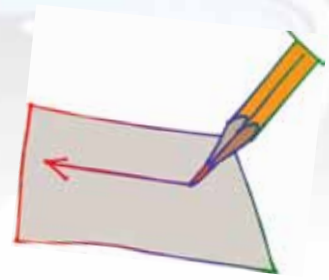


# STUDENT SUPPORT MATERIALS

**Writing**

# Writing Activity Page

Have the students complete the writing of the key math words.



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ax\_\_\_\_\_

ran\_\_\_\_\_

m\_\_\_\_\_n

me \_\_\_\_\_n

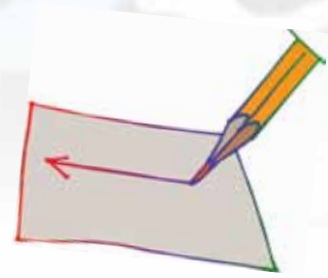
m\_\_\_\_\_e

para\_\_\_\_\_la

pl\_\_\_\_\_

# Writing Activity Page

Have the students complete the writing of the key math words.



**co** \_\_\_\_\_ **n**

**l** \_\_\_\_\_ **ph**

**a** \_\_\_\_\_ **s**

**r** \_\_\_\_\_ **e**

**m** \_\_\_\_\_ **n**

**pl** \_\_\_\_\_

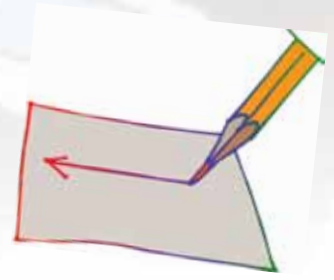
**m** \_\_\_\_\_ **an**

**m** \_\_\_\_\_ **e**

**pa** \_\_\_\_\_ **a**

# Basic Writing Activity Page

Have the students write the word for each picture.



1 2 3 4 4 4 5 6 7 8 9

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7  
3  
9 —  
6  
4

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3, 5, 7, 12, 13, 14, 21, 23

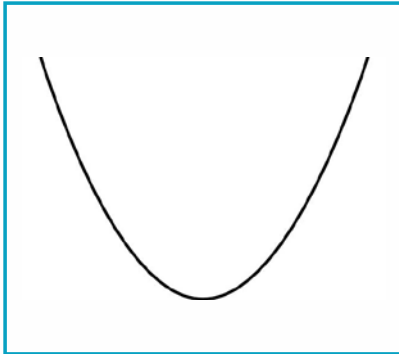
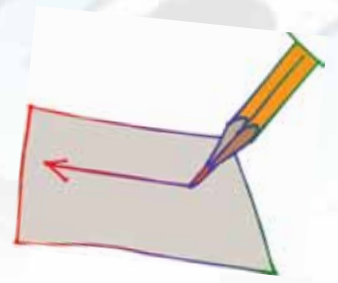
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# Basic Writing Activity Page

Have the students write the word for each picture.



101

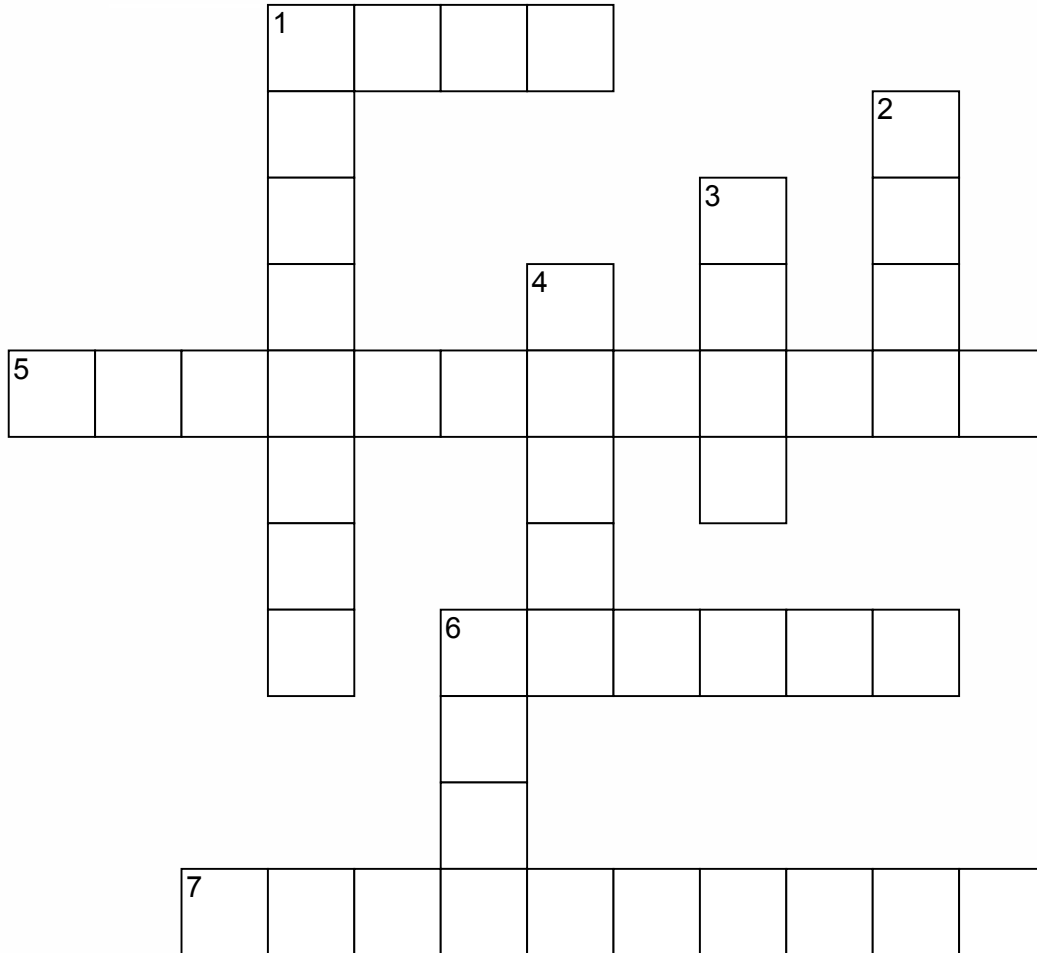
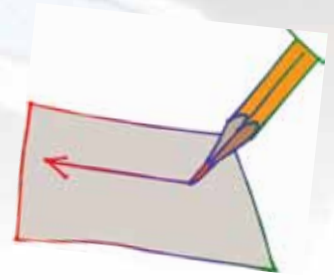
50     $\underline{\quad} / \underline{\quad} = \underline{\quad}$

75

84

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# Crossword Puzzle



www.CrosswordWeaver.com

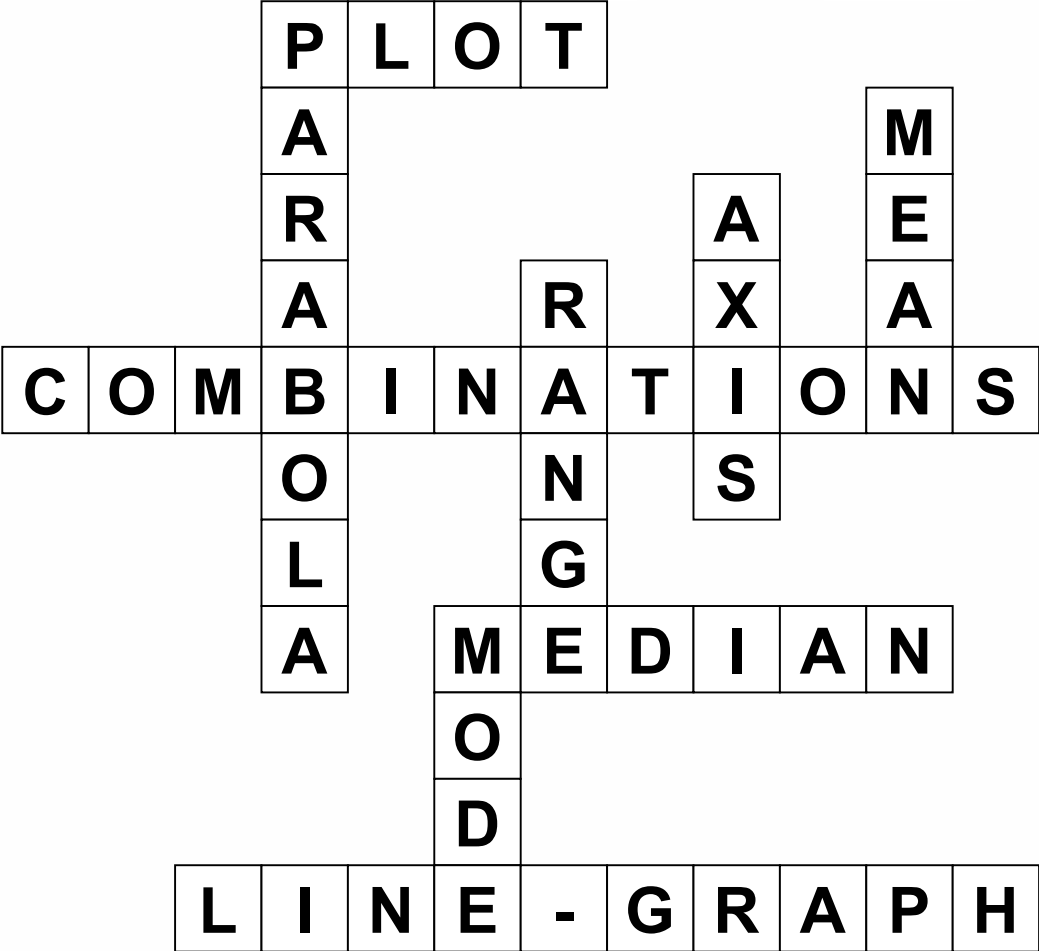
## ACROSS

- 1 We can do this on graphs and maps.
- 5 In these, the order of things is not important.
- 6 This is the middle value in a list of numbers.
- 7 This compares two variables using an axis for each one.

## DOWN

- 1 This is a shape that is an arch.
- 2 This is another way of saying "average."
- 3 This is a line of symmetry for a graph.
- 4 This is the difference between the lowest and highest values.
- 6 This is the number that appears most in a list of numbers.

# Crossword Puzzle Answers







# UNIT ASSESSMENT





# Statistics

**Unit Assessment Teacher's Notes**

**Grade 7 • Unit 10**

**Date:** \_\_\_\_\_

# Unit Assessment

Provide each student with a copy of the students' pages. Read the following instructions aloud. The students should answer the questions on their copies of the assessment.

## BASIC LISTENING

Turn to page 1 in your test. Look at the pictures in the boxes.

1. Write the number 1 by the picture for **COMBINATIONS**.
2. Write the number 2 by the picture for **LINE GRAPH**.
3. Write the number 3 by the picture for **AXIS**.
4. Write the number 4 by the picture for **RANGE**.
5. Write the number 5 by the picture for **MEAN**.
6. Write the number 6 by the picture for **MEDIAN**.
7. Write the number 7 by the picture for **MODE**.
8. Write the number 8 by the picture for **PARABOLA**.
9. Write the number 9 by the picture for **PLOT**.

## SIGHT RECOGNITION

Turn to page 2 and 3 in your test. Look at the pictures in the boxes. Circle the word for each picture.

## DECODING/ENCODING

Turn to page 4 and 5 in your test. Look at the word parts in the boxes. Circle the other half or part of each word.





# Unit Assessment

*Provide each student with a copy of the students' pages. Read the following instructions aloud. The students should answer the questions on their copies of the assessment.*

## **READING COMPREHENSION**

Turn to page 6 in your test. Write each word under its definition.

*Refer to Student Support Materials for answer key.*

## **BASIC WRITING**

Turn to page 7 in your test. Look at the pictures in the boxes. Write the word for each picture.



*Teacher: To get a percentage for this student's assessment, divide the total number of questions correct by the total number of questions, then multiply this answer by 100 to determine the percentage of questions answered correctly.*



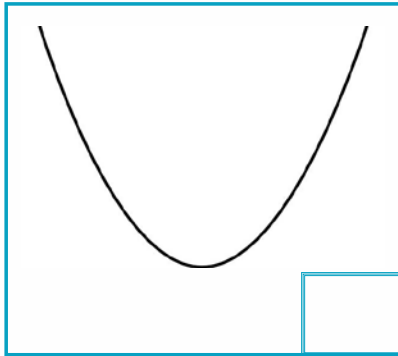


# MATH PROGRAM

Unit Assessment Student Pages  
Grade 7 • Unit 10

Date: \_\_\_\_\_ Student's Name: \_\_\_\_\_

Number Correct: \_\_\_\_\_ Percent Correct: \_\_\_\_\_



1 2 3 4 4 4 5 6 7 8 9

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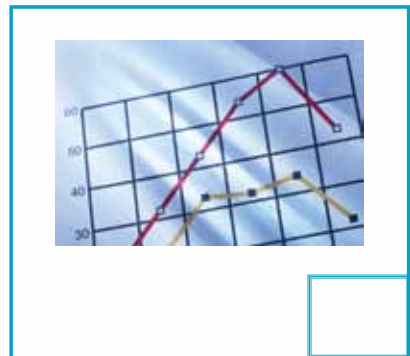
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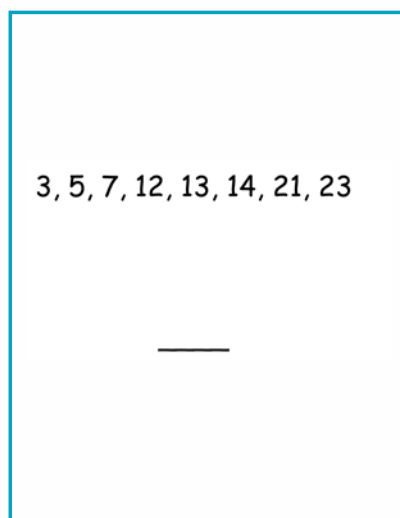
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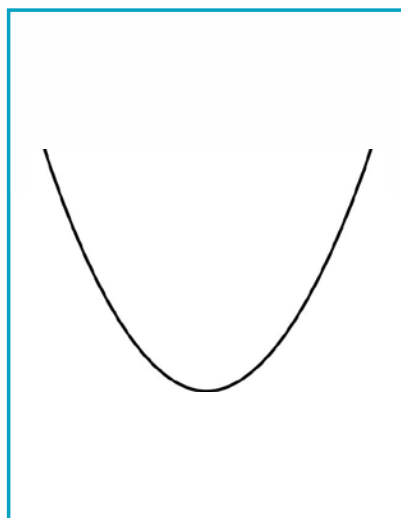
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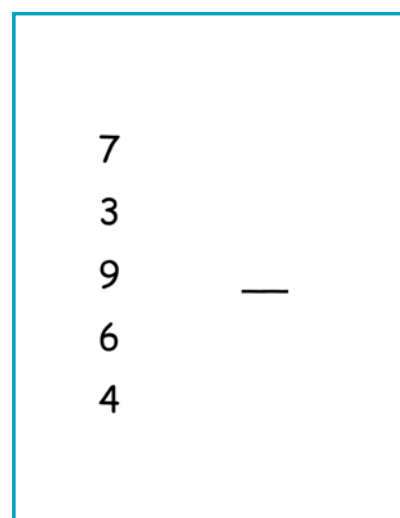
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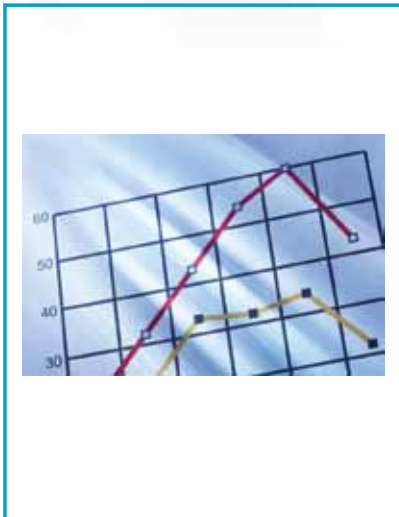
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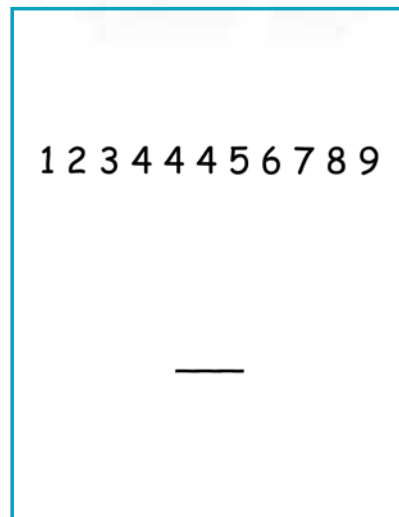
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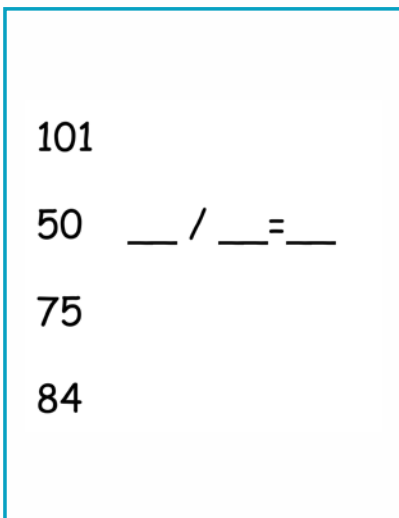
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**This is the difference between the lowest and highest values.**

**In these, the order of things is not important.**

**This is the middle value in a list of numbers.**

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**combinations**

**line graph**

**median**

**axis**

**mean**

**mean**

**range**

**parabola**

**mode**

1 2 3 4 4 4 5 6 7 8 9

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101

50 — / — = —

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3, 5, 7, 12, 13, 14, 21, 23

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