The background features a collage of various statistical charts and graphs. There are several bar charts with blue bars and numerical labels, some with line graphs overlaid. A magnifying glass is positioned over one of the charts, highlighting specific data points. The overall theme is data analysis and statistics.

# STATISTICS CURRICULUM

**8 UNITS**  
**21 WEEKS**

**SPECIAL EDUCATION**

JOY  
2  
TEACH





## For students who:

- lack pre-requisite skills
- take alternate assessments
- are in special education
- short-attention span
- benefit from the use of pictures for support
- middle/high school



## Why you need this bundle:

- If you teach multiple grade levels, you have all you need in one place.
- Having the same layout for each unit reduces students' anxiety and allows them to focus on the content.
- Aligned with extended learning standards.
- Saves you money
- Picture/visual support for struggling learners



This curriculum includes 8 different units that are typically taught in this order. It includes:

1. Introductory (2 weeks)
2. Dot plots & Histograms (2 weeks)
3. Central Tendency (3 weeks)
4. 2-Way Frequency Tables (3 weeks)
5. Scatter Plots (3 weeks)
6. Box Plots (2 weeks)
7. Probability (3 weeks)
8. Surveys (3 weeks)

All units have  
printable  
AND digital  
versions



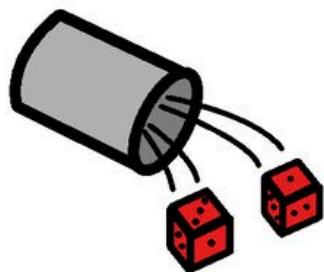
All the units have a book and specific activities to review skills. There are many scaffolded activities that allow students to get a lot of practice on that skill. Each unit includes:

- Detailed lesson plans
- A book PLUS a pre-recorded PowerPoint show and movie version
- Vocabulary board
- Vocabulary cards and cut/paste activities
- Various practice worksheets
- Fill-in-the-blank worksheets for review
- Vocabulary puzzles
- Assessments (3 versions)



# Probability

By  
Christa Joy  
Special Needs for Special Kids



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## Table of Contents

Pages	Activity
4-48	Probability
49-51	Vocabulary board
52-58	Vocabulary cards
59-72	Vocabulary cards cut and paste
73-78	Probability circle map
79-86	Label a probability line
87-90	Sorting certain and impossible events
91-95	Identifying dependent and independent events
96-104	List all the possible outcomes
105-115	Labeling and reading a Venn diagram
116-128	Determine probability from Venn diagram
129-141	Sudoku puzzles
142-147	Close worksheets
148-165	Assessment
166-167	Terms of Use

Every unit has many scaffolded activities that include picture and color support.

*Also included with this unit is a power point show that is narrated and has automatic advancement of slides. Let me know in the feedback if this was helpful 😊*

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## Day 8

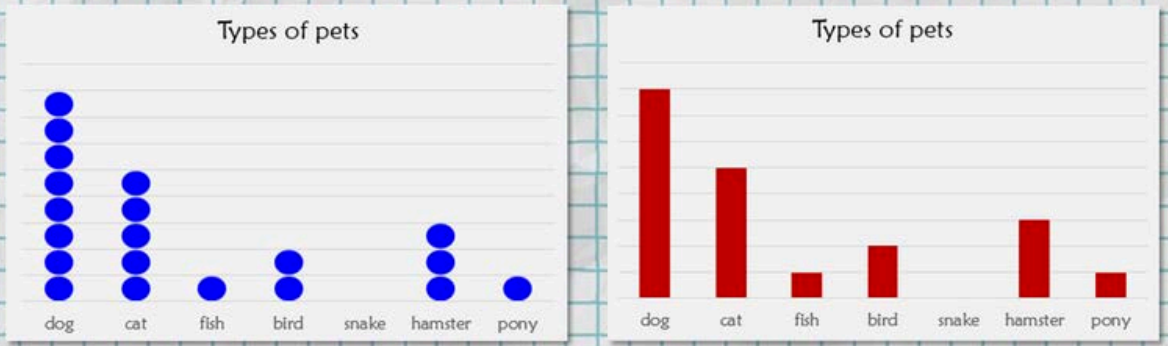
Activity	Notes	Materials
Read or listen to a recording of the book (10 minutes)	<ul style="list-style-type: none"> <li>Read through the story, asking lots of questions</li> <li>Continue to make connections between book and vocabulary board</li> </ul>	<ul style="list-style-type: none"> <li>Book</li> <li>Vocabulary board</li> </ul>
Vocabulary cards Puzzle Game (10 minutes)	<ul style="list-style-type: none"> <li>Give each student a pile of pieces</li> <li>Have them reassemble the pieces into the correct symbols                             <ul style="list-style-type: none"> <li>They may have to ask each other if someone else has the second half to a piece they have. Great for increasing communication and sharing.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Vocabulary cards (set where each card is cut in half)</li> </ul>
Tallying worksheet review (5 minutes)	<ul style="list-style-type: none"> <li>Review the worksheet completed yesterday</li> </ul>	<ul style="list-style-type: none"> <li>worksheet from yesterday</li> </ul>
Presenting results (10 minutes)	<ul style="list-style-type: none"> <li>Students will practice looking at surveys results and completing a simple bar graph in order to summarize and present the results.</li> <li>Complete 1-2 worksheets in the set</li> <li>Differentiated versions are included</li> </ul>	<ul style="list-style-type: none"> <li>Worksheet</li> <li>Scissors</li> <li>Glue</li> </ul>
Engaging Learning Experience: Task 5 (10-15 minutes)	<ul style="list-style-type: none"> <li><b>Task 5:</b> Students will begin to tally their survey data.</li> <li>Go back to the tallying worksheet set as a review.</li> <li>There are templates provided for this task.</li> </ul>	<ul style="list-style-type: none"> <li>Task 5 templates</li> </ul>
Sharing (10 minutes)	<ul style="list-style-type: none"> <li>Each student shares some of their tallied data with the group using the communication method of their choice</li> </ul>	<ul style="list-style-type: none"> <li>Tallied data from their surveys</li> <li>Communication devices</li> </ul>

## lesson plans

Every unit has a detailed lesson plan with suggestions, a quick look, and a daily step-by-step guide.



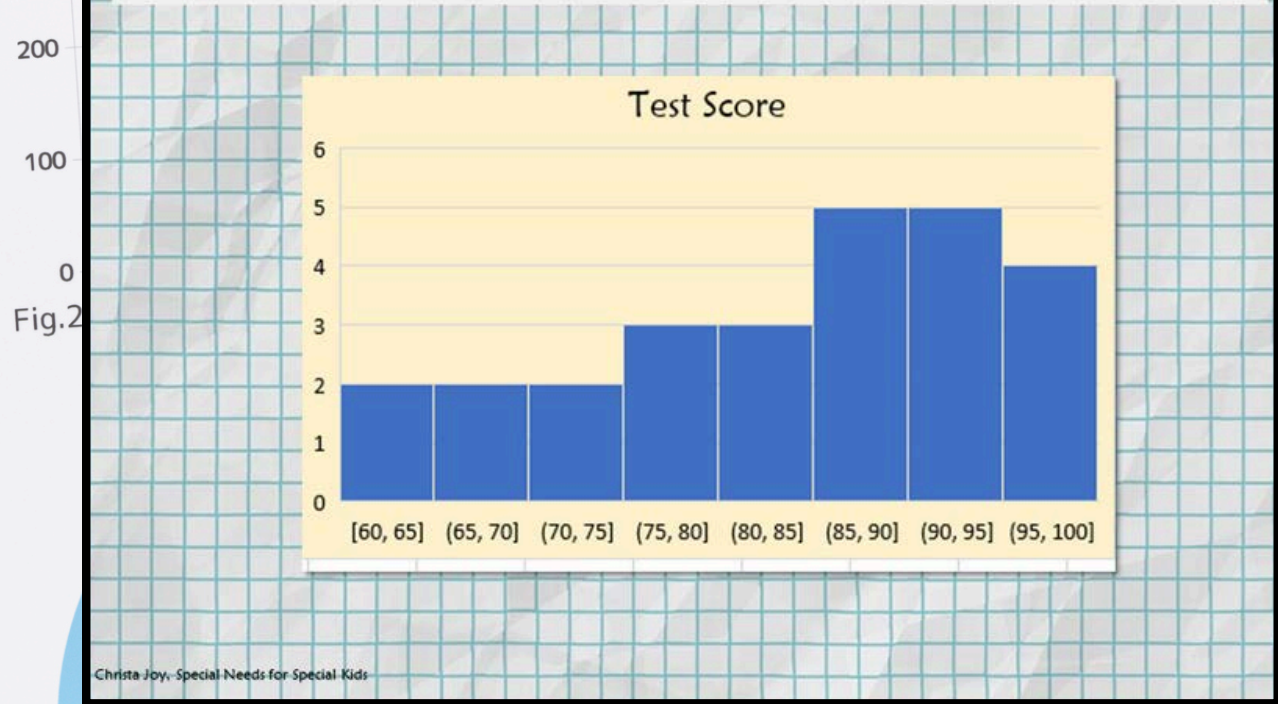
**Dot plots** are a special kind of graph that is made up of dots. It is actually very similar to a bar graph.



# books


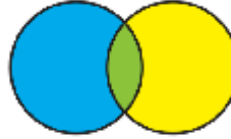











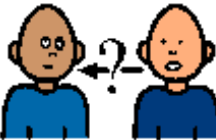





Every unit has a book with simple text and engaging photos. It comes in a pdf, recorded PowerPoint show, and an mp4 file.

A **histogram** is a great way to display a large amount of data, like the test score of every student in the class.





# vocabulary

 statistics	<table border="1" data-bbox="646 355 877 477"><thead><tr><th></th><th>like fruit</th><th>don't like fruit</th><th>total</th></tr></thead><tbody><tr><td>like vegetables</td><td>10</td><td>8</td><td>18</td></tr><tr><td>don't like vegetables</td><td>3</td><td>12</td><td>15</td></tr><tr><td>total</td><td>13</td><td>20</td><td></td></tr></tbody></table> frequency table		like fruit	don't like fruit	total	like vegetables	10	8	18	don't like vegetables	3	12	15	total	13	20		 Venn Diagram	 categories	 numbers
	like fruit	don't like fruit	total																	
like vegetables	10	8	18																	
don't like vegetables	3	12	15																	
total	13	20																		
 how many	 related	 I like that	 I don't like that	 total																
 more	 less	 the same	 survey	 question																
 repeat that	 yes	 no	 I don't know	 I need a break																

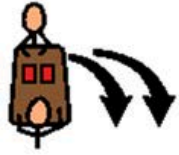
Every unit has a vocabulary board to use while working through the unit. Suggestions for use are included.



# vocabulary

## experiment

Something you do over and over that has a certain set of possible results.



## dependent

One event is affected by another event.



## conditional probability

Any time you have dependent events.



## independent

When the outcome of one event has no effect on future outcomes.



## probability

How likely something will happen.



## impossible

Cannot happen.



## certain

Will definitely happen.



## likely

Will probably happen; more than 50/50 but less than certain.



## unlikely



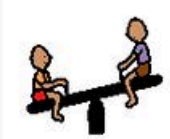
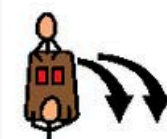
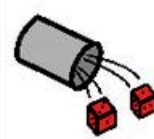
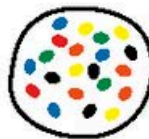
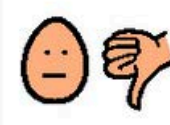
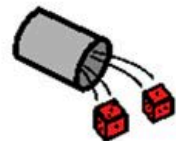
## 50/50 chance



## sample space



## outcome



$P(A)$

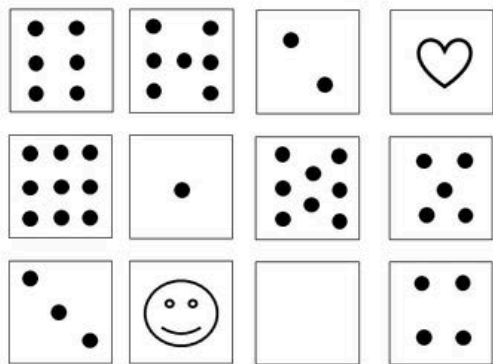
$P(\text{seesaw})$



Every unit has vocabulary cards specific to that unit. Also included are cut and paste activities to help review the definitions. There are group activities to do daily to review and work with these new words.



Circle all of the possible outcomes if you roll this classic die one time.



Listen to each question. Circle those you think are neutral questions. Remember, neutral questions are those that let you answer however you want without feeling bad.

What do you think of that new disgusting spaghetti sauce?

Would you rather have a dog for a pet or a boring old fish?

What could the school do to make football safer?

What do you think of that mean math teacher?  $250 \div 5$   
 $8 + 6$   
 $A \times B \times C$

What type of books do you like to read?

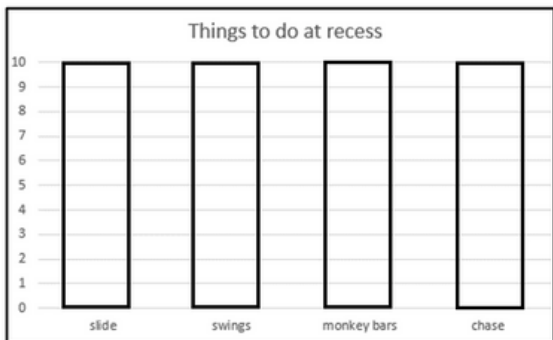
What is your favorite type of ice cream flavor?

Various other worksheets in each unit target specific skills covered in that unit. Suggestions for differentiation are included, or a second version already differentiated is present.

## scaffolded worksheets

Look at the survey results below. Color in the graph below to show the results. Circle the most popular answer.

Things to do at recess	Favorite
slide	8
swings	9
monkey bars	2
chase	6



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What is your favorite sport?	Do you like chocolate chip, oatmeal, or sugar cookies best?	How tall are you?
What do you think of the new movie?	What are some things that scare you?	Do you like dogs or cats better?
What month is your birthday?	What do you find hardest about math class?	Where do you want to go on vacation?
Do you want pepperoni, sausage, or onion on your pizza?	Which hand do you write with?	What do you want to be when you grow up?

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Look at the 2-way frequency table below and follow the instructions.

	likes pizza	does not like pizza	TOTAL
likes hot dogs	5	3	8
does not like hot dogs	2	1	3
TOTALS	7	4	

Color in the box **red** that shows the number of who liked pizza and hotdogs.

Color in the box **yellow** that shows the number of people who did not like pizza or hot dogs.

Color in the box **blue** that shows the total number of people who liked pizza and hotdogs.

Color in the box **green** that shows the total number of people who liked pizza.

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Look at the 2-way frequency table below and follow the instructions.

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Color in the box **green** that shows the total number of people who liked pizza.

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# Scatter Plots

 trend line				 statistician
 correlation	 statistician	 scatter plot		 non-linear
	 non-linear			 trend line
 scatter plot			 statistician	 non-linear
 non-linear		 correlation		 statistician
 linear			 non-linear	 trend line







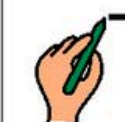

# Scatter Plots

 correlation			
	 scatter plot		 non-linear
 non-linear	 correlation		 linear
		 non-linear	 correlation

# vocabulary puzzles

Each unit has 2 Sudoku puzzles included practicing the vocabulary. One is 6x6 and one is 4x4. Again, suggestions on how to differentiate these are included.

Place the following images in the empty squares on the previous page, completing the sudoku puzzle.

 scatter plot	 scatter plot	 scatter plot	 correlation
 linear	 linear	 linear	 non-linear



# Conducting Surveys

1. What you are trying to learn from a survey is called the

2. You develop

to help you answer your objective.

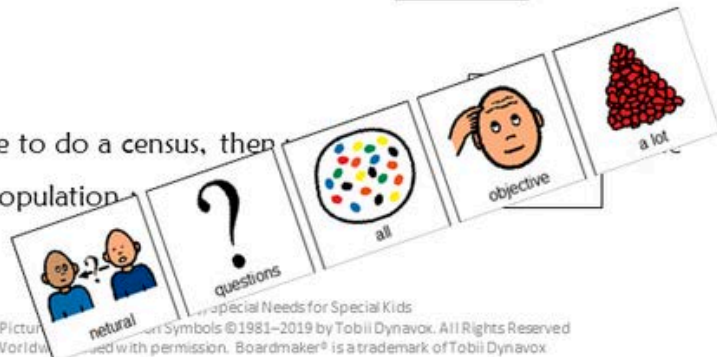
3. Open-ended questions can have

of answers.

4. You want to make sure your questions are

so people feel ok answering them.

5. If you choose to do a census, then



people in the population

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for review

# Conducting Surveys

6. If you only ask some of the people, then it is a

7. A random sample means everyone has an

chance of being asked to be in the survey.

8. The standard deviation is the range between the

and largest results .

9. The

is the most likely answer.

10. A good survey will let you



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All units include fill-in-the-blank worksheets to review concepts covered in the book and unit.

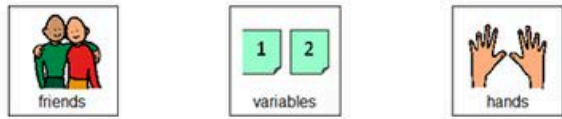




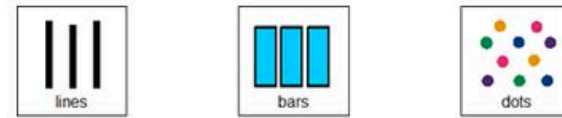
# assessment

Version 1

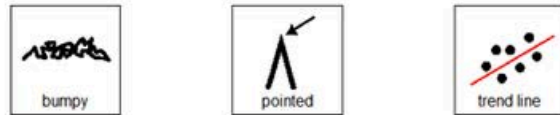
1. Scatter plots tell you if there is a relationship between 2:



2. What do scatter plots use to graph the data?



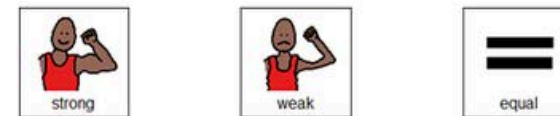
3. This is drawn with a ruler through the dots to see if it is linear?



4. If the dots are close to the trend line, then the correlation is:



5. If the dots are far from the trend line, then the correlation is:

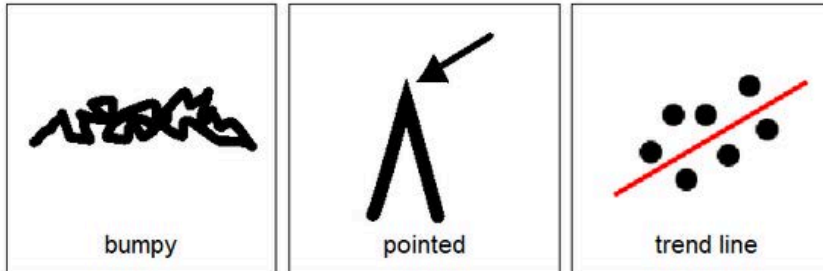


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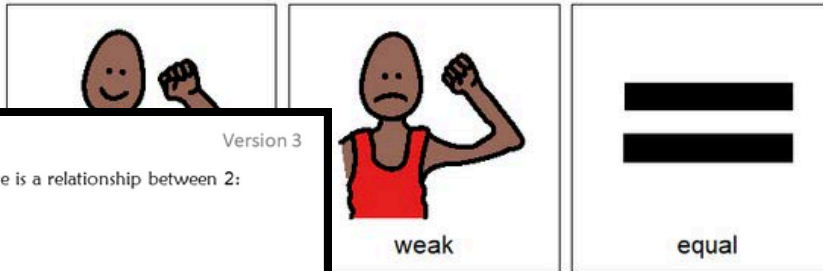
Version 2

Print onto cardstock or mount on index cards. Cut pictures apart and show student answer choices for each question.

Q 3



Q 4,5



Version 3

1. Scatter plots tell you if there is a relationship between 2:

- A. friends
- B. variables
- C. hands

2. What do scatter plots use to graph the data?

- A. lines
- B. bars
- C. dots

3. This is drawn with a ruler through the dots to see if it is linear?

- A. bumpy
- B. pointed
- C. trend line

4. If the dots are close to the trend line, then the correlation is:

- A. strong
- B. weak
- C. equal

5. If the dots are far from the trend line, then the correlation is:

- A. strong
- B. weak
- C. equal

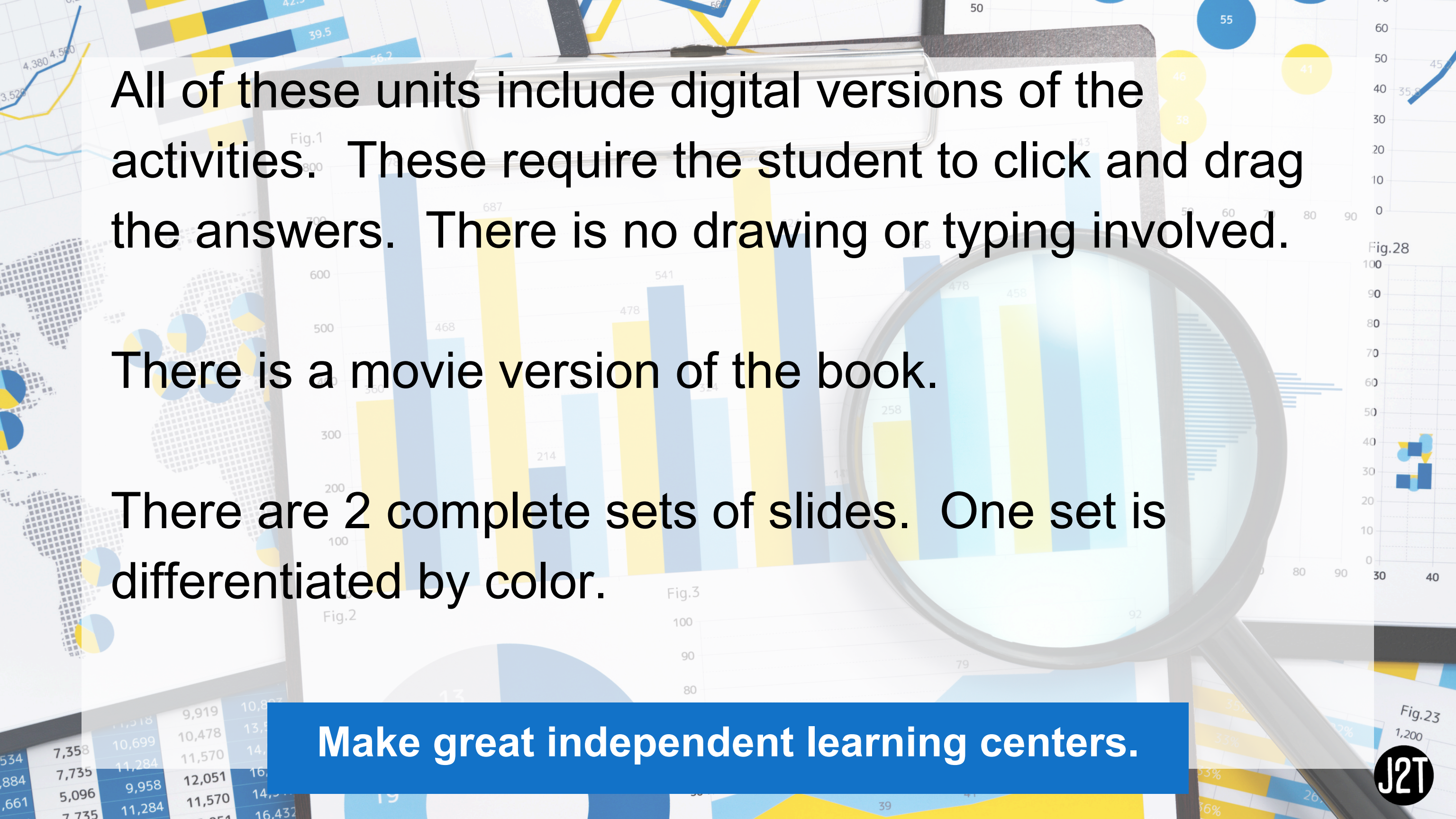
6. When you cannot find a line that goes through most of the dots, it is said to be:

- A. linear
- B. non-linear
- C. bumpy

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Finally, each unit has an assessment that is available in 3 versions. These are given 1:1 and read aloud to the student.



The background features a collage of various data visualization elements. On the left, there's a world map with blue and yellow circular markers. In the center, a large magnifying glass is positioned over a bar chart with blue and yellow bars. To the right, there are several circular data points in blue and yellow. The overall theme is data analysis and digital learning.

All of these units include digital versions of the activities. These require the student to click and drag the answers. There is no drawing or typing involved.

There is a movie version of the book.

There are 2 complete sets of slides. One set is differentiated by color.

**Make great independent learning centers.**



Watch the movie on mean, mode, and median.

But, for the most part, you will be able to use the mean, the median, and the mode to find out some common things about a set of numbers.



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The movie version of the book from the unit.



2, 6, 8, 12, 15, 22, 26

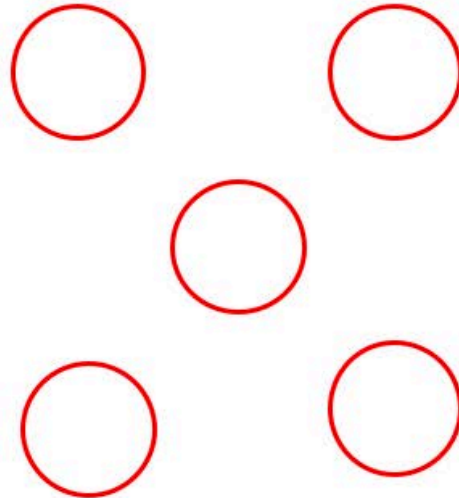
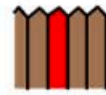
4, 9, 10, 11, 13, 16, 20

11, 15, 19, 25, 26, 35, 47

1, 2, 3, 4, 5, 6, 7

81, 82, 83, 91, 92, 93, 99

Circle the median in each data set.



Person

# hotdogs eaten

Sally

6

Bill

5

Joey

3

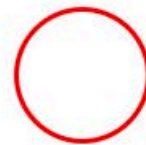
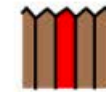
Brian

2

Gary

1

Circle the median in each survey.  
Then match the correct number.



6

1

5

2

3

4

Median =

Great for review

The digital activities are click and drag.



Perfect for any learning level

1,5,6,7,9

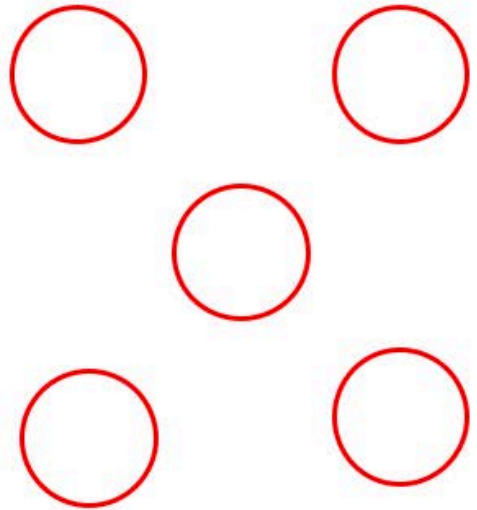
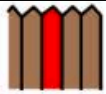
1,2,5,8,10

2,3,4,7,8

3,6,7,11,12

1,2,3,4,16

Circle the median.



Each unit comes with a set of slides that are differentiated with color.

Calculating Mean of this data set.

1, 3, 7, 10, 11

1. First, add all the numbers together using a calculator. 32
2. Check you answer. Did you get 32 ?
  - YES → go onto step 3
  - NO → try again
3. Count the number of values. 5
4. Check you answer. Did you get 5 ?
  - YES → go onto step 5
  - NO → try again
5. Plug in the values to find the mean.

$$\boxed{32} \div \boxed{5} = \boxed{6.4}$$

mean

Answer each question.  
Calculate the mean. You will need a calculator.



32 32 5 5 6.4





**Still have questions?**

**Reach out at [specialneedsforspecialkids@gmail.com](mailto:specialneedsforspecialkids@gmail.com)**

**I will answer your question personally and promptly.**

