

FIRST GRADE MATH



GRAPHING & DATA

**KEEP SCROLLING TO
TAKE A LOOK INSIDE
THIS RESOURCE!**

Why?

Lucky to Learn

MATH

This is the hands-on, standards-aligned, collaborative, and engaging math resource you've been looking for!

This resource can be used as a supplement to any math program, or as a complete curriculum.

Includes: teaching slides, lesson plans, math chats, mini lessons, collaborations, worksheets, assessments, exit tickets, anchor charts, and more!

Is your current math curriculum dull and lifeless?

These units are engaging! They include themed lessons to pique student interest, while also ensuring they master the math standards.

1

2

3

Wanting your students to love math?

The math block routine will scaffold and guide students to gain deep levels of understanding, feel successful, and love math!

Looking for resources that are easy to prep?

The activities are low-prep or no-prep! The lesson plans include icons to help you choose which activities to use during the day, and teaching slides that guide you & your students through the lesson.



UNIT MATERIALS



Anchor Charts

Binder cover

WHAT IS DATA? BAR GRAPHS

Data is information that we collect. Data can be collected by observing or by asking questions.

Observing: I see 7 stars and 5 moons in the picture.

Asking questions: What is your favorite nursery rhyme? Humpty Dumpty or Ten in the Bed.

Bar Graphs: A bar graph shows data using lengths of bars. Labels tell us what is being counted. The title tells us what the graph is about. The scale tells us the amount of data. Category labels tell us what each bar represents.

Vertical Bar Graph: FAVORITE PET

Pet	Number of Student Votes
Cat	4
Dog	9
Fish	2
Rabbit	1

Horizontal Bar Graph: FAVORITE PET

Pet	Number of Student Votes
Cat	4
Dog	9
Fish	2
Rabbit	1

Bar graphs can also be horizontal.

Lucky to Learn MATH UNIT 9 GRAPHS

A NURSERY RHYME ADVENTURE

Lucky to Learn MATH UNIT 9 GRAPHS

A NURSERY RHYME ADVENTURE

Pre & Post Assessment

Collaborative Games

UNIT 9 GRAPHS & DATA

GRAPHS AND DATA ASSESSMENT

Name: _____ Date: _____

Color each snack a different color as you draw a tally mark on the correct box on the chart. When you have counted all the snacks, count the tallies and write the totals.

snack	tally marks	number
chips		
fish crackers		
cookies		
crackers		
popcorn		
fruit		
ice cream		
yogurt		

FAVORITE WEEKEND ACTIVITY

Read the bar graph and answer the questions using the data.

ACTIVITY	NUMBER OF STUDENT VOTES
play outside	4
play video games	3
read a book	2
watch tv	1

- Which activity got the most amount of votes?
- Which activity got the least amount of votes?
- How many students chose read a book and watch tv?
- How many more students chose play outside than play video games?
- How many students voted in all?

LESSON 9.2 ORGANIZE DATA

RACE AGAINST TIME

Directions: Each person will roll their game piece on "Start". Everyone will take 10 spins and moving their game piece that number of spaces. On your recording sheet, number you land on for each mouse. Once all players have reached the "end," each person use their data to make a bar graph and answer the questions to see which mouse won!

Mouse	Spots
START	1, 3, 2, 4
SPIN 1	2, 1, 4
SPIN 2	4, 1, 3
SPIN 3	3, 2, 1
SPIN 4	2, 3, 1
SPIN 5	1, 3, 2

GO BACK 3 SPACES, GO BACK 1 SPACE, GO BACK 2 SPACES

ROLL, ROLL, ROLL YOUR DATA

Directions: Roll your game piece on the spin space. Take turns rolling the die and moving your game piece the number of spaces. Collect a card for each space you land on and use it for the final. Continue playing and collecting cards until all players have reached the "end" space. Then, sort the cards in your own way.

START FINISH!

Craftivity

Independent Work

LESSON 9.11 GRAPHING PROJECT

GRAPHING PROJECT: COLLECT DATA

Name: _____

Survey Question: _____

options	tally marks

GRAPHING PROJECT: TOPPER

Directions: Write your survey question in the speech bubble. Color the picture and cut both the picture and the speech bubble out. Glue them to the top of your graphing project.

LESSON 9.6 COWS IN THE CORN

SWEET DREAMS DATA

Name: _____

Directions: Read the bar graph and use the data to answer the questions.

Counting Cow Spots

Cow Name	Number of Spots
DAISY	4
BESSIE	2
LEO	1
OTIS	3

- Which cow had the most amount of spots?
- Which cow had the least amount of spots?
- How many fewer spots did Leo have than Otis?
- How many spots did Leo and Bessie have in all?
- How many more spots did Daisy have than Bessie?
- How many spots did the cows have altogether?

TALLY CHART

Item	Tally
Slippers	4
Books	2
Pajamas	1
Teddy Bear	1

KEY: ☆ = 1 child

GRAPHS & DATA

UNIT OVERVIEW

WEEK ONE

LESSON 9.1

I can collect and compare data.

LESSON 9.2

I can collect, sort, and organize data.

LESSON 9.3

I can collect, sort, and organize data using tally marks.

LESSON 9.4

I can answer questions about data.

LESSON 9.5

I can generate and answer questions about data.

WEEK TWO

LESSON 9.6

I can read and create horizontal pictographs to represent data.

LESSON 9.7

I can read and create horizontal pictographs to represent data.

LESSON 9.8

I can read and create vertical pictographs to represent data.

LESSON 9.9

I can read and create vertical pictographs to represent data.

LESSON 9.10

I can read and create vertical bar graphs to represent data.

WEEK THREE

LESSON 9.11

I can read and create vertical bar graphs to represent data.

LESSON 9.12

I can read and create horizontal bar graphs to represent data.

LESSON 9.13

I can read and create horizontal bar graphs to represent data.

LESSON 9.14

I can create bar graphs and pictographs to represent data.

LESSON 9.15

I can solve problems using data within graphs.

MATH UNIT ICONS



These icons are on each piece of the curriculum to help you stay organized and help students learn the routine!

UNIT 9: GRAPHS & DATA

LESSON 9.1
Collect and Compare Data

OBJECTIVE
Collect and compare data.

MATERIALS
Lesson 9.1 Teaching Slides
Lesson 9.1 Copies
Manipulatives or School Supplies (optional)

MATH CHAT
Mystery Number: Show students the Mystery Number slide and read the prompt aloud, "How many more pink mittens are there than blue mittens?" Students will use silent thinking time to count the pink and blue mittens. Have students share and defend their answers by explaining their thinking. Answer: There are four more pink mittens than blue mittens.

MINI LESSON
Review what students already know about data and graphs. Use the teaching slides to explain to students what data is and how we collect it. Model collecting data on the board and walk students through each step. Teach students what the teaching slides are and how we use them to collect data. Call students up to the board to count how many cats are in a given "cat" category and have them record the data on the table. Once all three categories are recorded, have students walk to the next slide to see the data.

HANDS-ON COLLABORATION
Counting Data With Silly Cats
Teacher Directions: Print the 8 task cards (2 pages) in color or black/white. Cut them apart and place them around the room so students can easily see them. Students will walk the room with a partner to find each task card. They will read the question, find the data by counting, and write the answer on the recording sheet.

CHECK FOR UNDERSTANDING
Perfect Party Count: Students will write the total of each category.

DIFFERENTIATION
Students will demonstrate pictures of basketballs.

INTERVENTION
Use manipulatives and create a category.

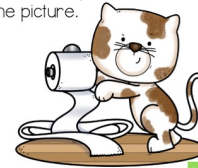
EXTENSION
Refer to Unit 9 and graphs.

9.1 COLLABORATION

LET'S WORK TOGETHER!

Counting Data with Silly Cats

- For this activity, you will walk the room with a partner to find each task card.
- Read the question on the card, count to find the answer, and write the answer in the box beside the matching crayon on your recording sheet.
- Once you have solved all of the cards, use your answers to color the picture.



NEXT

COUNTING DATA WITH SILLY CATS

Teacher Directions: Print the 8 task cards (2 pages) in color or black/white. Cut them apart and place them around the room so students can easily see them. Students will walk the room with a partner to find each task card. They will read the question, find the data by counting, and write the answer on the recording sheet.

How many flowers?
pink

How many mice?
brown

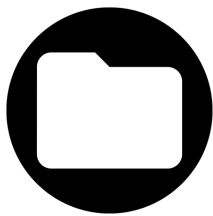
How many shirts?
blue

How many windows?
green

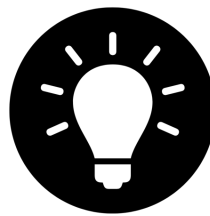
ICON KEY



OBJECTIVE



MATERIALS



MINI LESSON



MATH CHAT



HANDS-ON COLLABORATION



INDEPENDENT PRACTICE

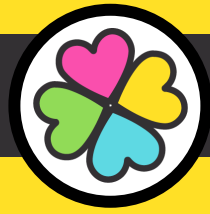


CHECK FOR UNDERSTANDING



DIFFERENTIATION

LESSON PLANS



Clear lesson objective

Teaching slides included for each part of the lesson

List of materials

Math chat (number talk) in each lesson

Skill-focused mini lesson








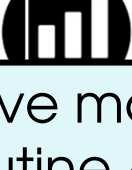
Collaborative hands-on tasks

Independent practice

Quick assessments

Materials have matching icons for routine & easy organization

Differentiation ideas

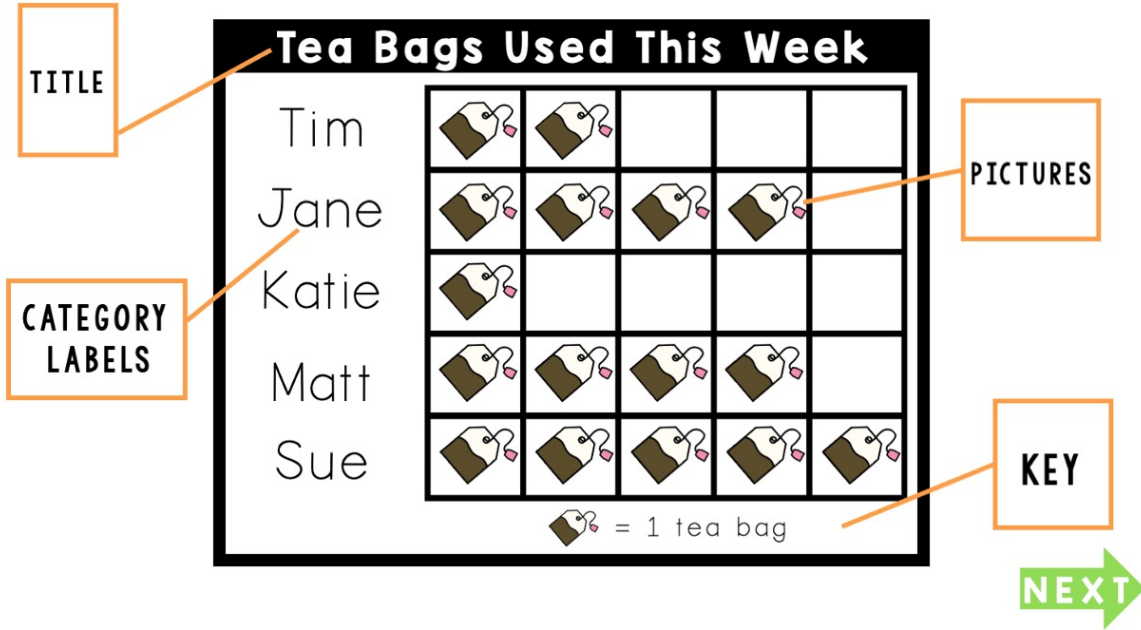
UNIT 9: GRAPHS & DATA		LESSON 9.4 Questions About Data	
	Answer questions about data.		<input type="checkbox"/> Lesson 9.4 Teaching Slides <input type="checkbox"/> Lesson 9.4 Copies <input type="checkbox"/> Colored Paper (optional) <input type="checkbox"/> Chart Paper or Whiteboard (optional)
	<p>Think About It: Explain to students that this slide will only be shown to them for 3-5 seconds. Tell them that they will try to figure out what day Humpty Dumpty had the fewest falls. Show students the slide for a few seconds and then give them silent thinking time. Have students share and defend their answers by explaining their thinking. Answer: Sunday had the fewest falls.</p>		
	<p>Review tally marks and tally charts with students and have them remember with a friend. Discuss how we will use our knowledge of sorting, and organizing data to answer questions about tally charts. Use the teaching slides to explain the various types of questions they might see and how to solve them. Give each student a Let's Eggs-plore Data With Humpty sheet. Go through the teaching slides and read each question aloud. Students will write their answers on their recording sheet. Then, discuss the answer and follow the steps to draw Humpty. There are 6 questions and drawing steps.</p>		
	<p>Crack the Case For Humpty: Print the 8 task cards (2 pages) in color or black/white. Cut them apart and place them around the room so students can easily see them. Students will walk the room with a partner to find each task card. They will read the question, look at the data on their recording sheet, and write the answer. Once they have all of the answers correct, they can earn the pieces to put Humpty together again. *You can also choose to give students one piece as they finish each task card. Once they get the last piece,</p>		
	<p>Tallying Humpty's Helpers: Students will color each helper, draw a tally mark in the correct box on the chart. When the helpers are done, they will count the tallies and write the number of tallies. Answer the questions at the bottom of the page.</p>		
	<p>Students will demonstrate their understanding of answering questions about data by answering the questions using the tally chart shown.</p>		
	<p>INTERVENTION: Do a class survey using any question and create a tally chart to show the data using chart paper or a whiteboard. Ask students various questions about the data as modeled in the lesson.</p> <p>EXTENSION: Refer to Lucky to Learn Math Grade 2, Unit 6 for extension activities with data.</p>		



9.7 MINI-LESSON

LET'S LEARN!



Nice work! Each part of the pictograph is important because it tells us the data we need to know.



I WILL BE ABLE TO...

Read and create horizontal pictographs to represent data.

I'M A LITTLE TEAPOT

 
I'm a little teapot,
Short and stout.
Here is my handle,
Here is my spout.
When I get all steamed up,
Here me shout.
Tip me over and
Pour me out!



NEXT 

Guides students through each lesson with an easy-to-follow, attractive, kid-friendly format & theme

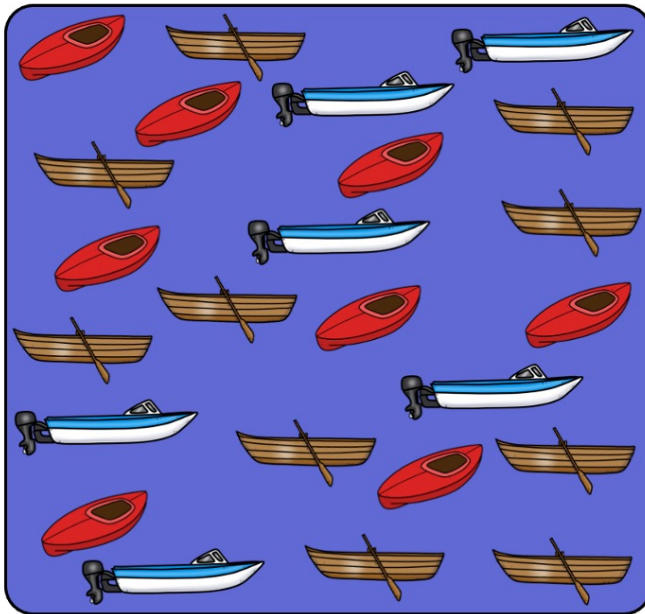
MINI LESSONS



9.2 MINI-LESSON

LET'S LEARN!

This time, we will sort the data by being the data!



- I will give you a card with one of these boats on it:



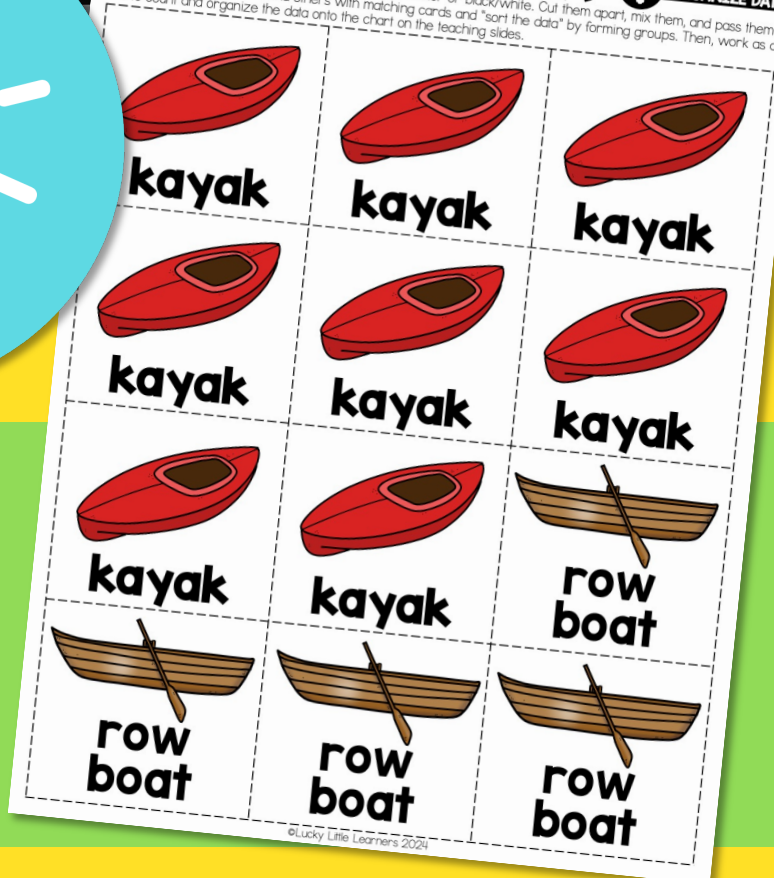
- You will find students with the same boat and stay together as a group.
- Then, once the boats are sorted, we will count and organize the data.

NEXT →



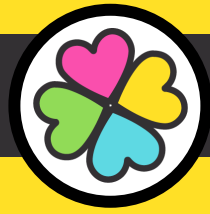
SORTING BOAT DATA

LESSON 9.2 ORGANIZE DATA
Teacher Directions: Print both pages of boat cards in color or black/white, cut them out, and pass them to students. Students will find others with matching cards and "sort the data" by forming groups. Then, work as a class to count and organize the data onto the chart on the teaching slides.



Provides instruction & scaffolded practice with the skill.

COLLABORATION



ROLL, ROLL, ROLL YOUR DATA

Directions: Put your game pawns on the start space. Take turns rolling the die and moving your pawn that number of spaces. Collect a card for each picture you land on and add it to the boat. Continue playing and collecting cards until all players have reached the finish space. Then, sort the cards in your boat together, count, and organize the data on the chart.



LESSON 9.2
ORGANIZE DATA



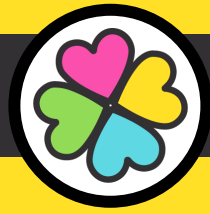
START



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Hands-on activities for students to practice the skill in fun ways with partners and groups

CHECK UNDERSTANDING



LESSON 9.10
BAR GRAPHS

Name _____

CHECK FOR UNDERSTANDING

Directions: Draw tally marks in the chart to match the bar graph.

_ / 4

FAVORITE DESSERT

6					
5					
4					
3					
2					
1					
0					

TALLY CHART

Ice Cream	
Cake	
Pie	



LESSON 9.10
DATA QUESTIONS

Name _____

CHECK FOR UNDERSTANDING

Directions: Use the tally chart to answer the questions. Then, write and answer your own question about the data.

_ / 4

Favorite Farm Animal

cow			
sheep			
horse			
pig			

1. Which animal was the most popular?
2. How many people voted for the cow?
3. How many more voted for horse than sheep?

Write and answer your own question about this data.

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Half-page exit tickets are an easy check for understanding. This shows you an immediate picture of how students are doing. No more huge stacks of grading to sort through!

Weekly Email FREEBIES!

Grab a cup of coffee and take a few minutes with **our weekly newsletter** created just for teachers like you.



RESEARCH DRIVEN MUST-HAVES

SEASONAL FUN

VIRAL FAVES

IN THIS CLASSROOM

WE ARE KIND

WE ARE HELPFUL

WE ARE IMPORTANT

WE ARE...

WE DON'T GIVE UP

WE CAN DO HARD THINGS

WE HAVE LOTS OF FUN

FREE

IN THE LOOP

- Community Idea: Conference Advice
- On The Blog: Growth Mindset Tips
- Featured Download: Goal Mountain
- Let's Get Social: [Bean Ghosts](#)
- Video Tip: [Growth Mindset Tips For Students](#)
- New & Hot In AA
- Sunday Funnies

Hey there and happy Sunday!

About Lucky Little Learners



Angie Olson has many years of classroom experience teaching grades kindergarten, first, and second grade. She earned her master's degree in mathematics and has presented for a variety of conferences at the national, state, and local levels. Over the years, Angie has employed teachers to help with Lucky Little Learners. She is proud of her talented team who strives to support the teaching community with her. Lucky Little Learners has created over 25,000 resources that are available in the All Access membership. Lucky Little Learners is also a top seller on Teachers Pay Teachers.