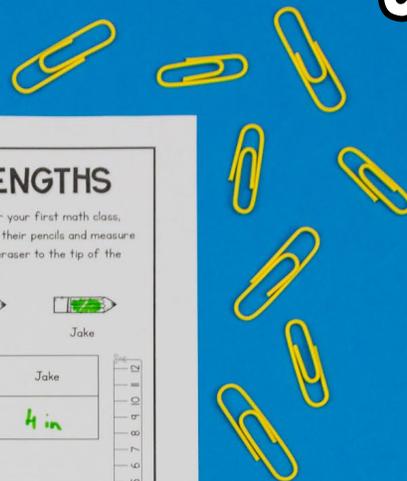


# BACK TO SCHOOL

## Project Based Learning

2<sup>nd</sup> Grade



### CHALLENGE #1: PENCIL LENGTHS

It's the first day of school, and your students have arrived at the classroom! For your first math class, you want your students to practice using a ruler. You have each student take out their pencils and measure them. Cut out the ruler and measure each student's pencil from the end of the eraser to the tip of the point. Record the pencil length in inches in the table.



Jameel

Evie

Fabiola

Jake

Fabiola	Jake
8 in	4 in

### SCHOOL SUPPLIES

You have lots of supplies for your students to use to help them learn this year. The table below shows how many of each school supplies item you have. Use the data to answer the questions.

Supply	Rulers	Scissors	Glue Sticks	Crayons	Pencils
Number	8	12	18	26	32

1. How many more pencils are there than crayons?



2. Five of the scissors are red. The rest of the scissors are blue? Write an equation to represent the situation.

$$12 - 5 = 7 \text{ blue scissors}$$

### CLASS SCHEDULE

Next, you need to plan your class schedule. The clocks below show the times your class does certain things.



School starts



Math



Recess



School ends

### SEATING CHART

### BACK TO SCHOOL

It's the most wonderful time of the year! time to go back to school! You are a second-grade teacher, and you are getting ready to welcome your students to a new school year! Fill out the nametag below with your teacher name so your students can get to know you. You will be organizing your classroom, planning your class schedule, and making sure everything is ready for your second-grade students!



Print & Digital



## SCHOOL SUPPLIES

You have lots of supplies for your students to use to help them learn this year. The table below shows how many of each school supplies item you have. Use the data to answer the questions.

Supply	 Rulers	 Scissors	 Glue Sticks	 Crayons	 Pencils
Number	8	12	18	26	32

1. How many more pencils are there than crayons? Draw a diagram to show your thinking.



2. Five of the scissors are red. The rest of the scissors are blue. How many scissors are blue? Write an equation to represent the problem.

$$12 - 5 = 7 \text{ blue scissors}$$



## CHALLENGE #1: PENCIL LENGTHS

4. Look at the information on the table you created on the previous page. Use that data to create a line plot of pencil lengths below. Fill in the missing measurements on the line plot. Then, draw an X to plot the length of each pencil.

## CHALLENGE #1: PENCIL LENGTHS

Marlena wants to compare the length of her pencil to the length of some other items in the classroom. Cut out the ruler and use to measure Marlena's pencil. Then, measure the other items and answer the questions.



5. Marlena's pencil is 6 inches long.



6. The purple crayon is 3 inches long. Compare the lengths of the crayon and Marlena's pencil.



7. The glue stick is 4 inches long. Compare the lengths of the glue stick and Marlena's pencil.



8. The pen is 7 inches long. Compare the lengths of the pen and Marlena's pencil.



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## SELF-EVALUATION

Circle one box per row on the rubric that expresses how you rate yourself on this Project Based Learning Activity.

## SELF-REFLECTION

Write a reflection of your experience with this project. How did you feel about the math problems and activities? Explain what you found easy to do and any difficulties you had while working on this project. Did you enjoy this activity? Why or why not?

This project was really fun.  
I did great in this lesson.

## BACK TO SCHOOL

It's the most wonderful time of the year: time to go back to school! You are a second-grade teacher, and you are getting ready to welcome your students to a new school year! Fill out the nametag below with your teacher name so your students can get to know you. You will be organizing your classroom, planning your class schedule, and making sure everything is ready for your second-grade students!

### Here are your tasks:

- Read through the entire packet before beginning.
- Create seating charts for your students.
- Plan your class's daily schedule.
- Organize your classroom supplies.
- Plan a fun field trip for your students.
- Determine how many textbooks you need for your students.
- Complete the challenge pages. (Optional)
- Complete the self-reflection and evaluation rubric.



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## SEATING CHART

Before your students arrive, you need to make a seating chart. The diagram below shows the tables that are in your classroom.



Table 1

Rectangle



Table 2

Circle



Table 3

Square



Table 4

Rectangle

## CLASS SCHEDULE

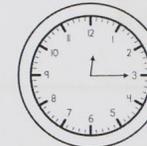
Next, you need to plan your class schedule. The clocks below show the times your class does certain things.



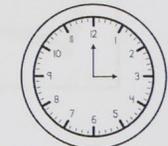
School starts



Math



Recess



School ends

1. What time does the school day begin?

8:00

2. What time is math class?

9:30

3. What time is recess?

12:45

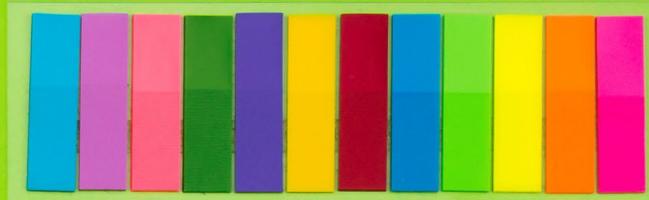
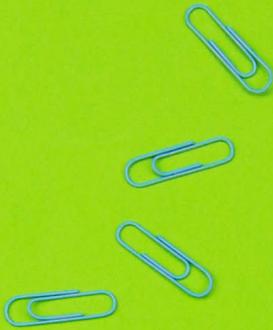
4. What time does the school day end?

3:00



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Versions



**BACK TO SCHOOL**  
*Project Based Learning*  
2nd Grade

**CHALLENGE #1- PENCIL LENGTHS**  
On the first day of school, all your students have received the assignment for your first challenge: you will use math skills to determine which pencil is the longest and which one is the shortest and measure them. Cut out the card and measure each student's pencil from the end of the eraser to the tip of the pencil. Record the pencil length on the table.

**SCHOOL SUPPLIES**  
You have 100 supplies for your students to use to help them have the year. The table below shows the amount of each school supply that you have. Use the data to answer the questions.

Supply	Quantity
Scissors	10
Pencils	20
Pens	15
Markers	10
Eraser	5
Sharpener	2
Stapler	1
Glue	1
Scissors	10
Pencils	20
Pens	15
Markers	10
Eraser	5
Sharpener	2
Stapler	1
Glue	1

1. How many more pencils are there than pens?  
2. How many more pens are there than markers?  
3. How many more pens are there than markers?  
4. How many more pens are there than markers?  
5. How many more pens are there than markers?

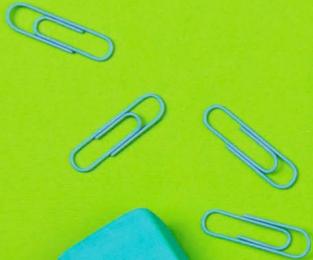
**CLASS SCHEDULE**  
There are four clocks on the wall. The numbers show the time your class has each day.

Day	Time
Monday	8:00
Tuesday	8:00
Wednesday	8:00
Thursday	8:00
Friday	8:00

**SEATING CHART**  
There are 20 desks in your classroom. The numbers show the time your class has each day.

**BACK TO SCHOOL**  
On the first day of school, all your students have received the assignment for your first challenge: you will use math skills to determine which pencil is the longest and which one is the shortest and measure them. Cut out the card and measure each student's pencil from the end of the eraser to the tip of the pencil. Record the pencil length on the table.

MAGI CORE



# TABLE OF CONTENTS

1. Teacher Directions & Standards Addressed
2. Student Directions
3. Seating Chart (Geometry)
4. Class Schedule (Time)
5. School Supplies (Word Problems with Addition and Subtraction)
6. Field Trip (Making and Interpreting Bar Graphs)
7. Textbooks (Comparing Numbers, Place Value, Word Problems with Addition and Subtraction)
8. Challenge #1: Pencil Lengths (Measurement)
9. Challenge #2: Lunch Time (Geometric Shapes and Money)
10. Self-Reflection & Evaluation
11. Answer Key



THANK YOU FOR  
PURCHASING THIS  
COMMON CORE  
KINGDOM DIGITAL  
RESOURCE!

The Google Slides version of this resource requires that you make a copy of the resource to your own Google Drive.

# FOR THE TEACHER

**BACK TO SCHOOL** is a project-based learning task that was created for students in second grade. Students assume the role of a classroom teacher and plan a return to school for their students. It reviews first grade standards while introducing second grade standards. The following standards are addressed:

- 2.OA.A.1 Use addition and subtraction within 100 to solve one- and two-step word problems.
- 2.OA.B.2 Fluently add and subtract within 20 using mental strategies.
- 2.NBT.A.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits.
- 2.MD.C.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
- 2.MD.D.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple problems using information presented in a bar graph.
- 2.G.A.1 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
- 2.G.A.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.
- 2.G.A.3 Partition circles and rectangles into two, three, or four equal shares.

## DIRECTIONS:

1. Decide whether to have students complete the activities as a class, independently, or in small groups.
2. Preview the activity with your students.
3. Allow students class time to complete the activity. This can span several days.
4. Allow students an opportunity to complete extra challenge activities (Optional).
5. Allow students to complete the self-reflection and evaluation rubric.
6. Allow students an opportunity to share their completed projects.



# BACK TO SCHOOL

It's the most wonderful time of the year: time to go back to school! You are a second-grade teacher, and you are getting ready to welcome your students to a new school year! Fill out the nametag below with your teacher name so your students can get to know you. You will be organizing your classroom, planning your class schedule, and making sure everything is ready for your second-grade students!

## Here are your tasks:

- Read through the entire packet before beginning.
- Create seating charts for your students.
- Plan your class's daily schedule.
- Organize your classroom supplies.
- Plan a fun field trip for your students.
- Determine how many textbooks you need for your students.
- Complete the challenge pages. (Optional)
- Complete the self-reflection and evaluation rubric.

HELLO MY NAME IS

# SEATING CHART

Before your students arrive, you need to make a seating chart. The diagram below shows the tables that are in your classroom.



Table 1



Table 2



Table 3

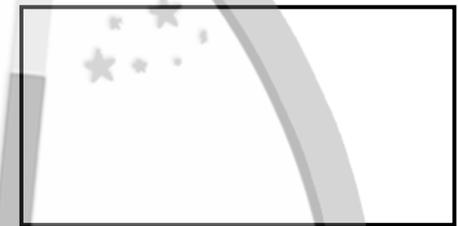
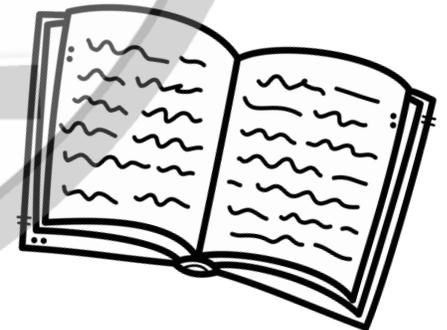


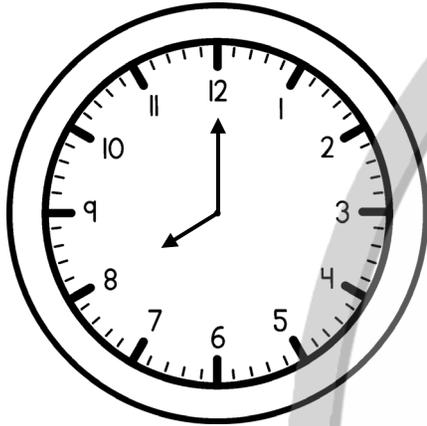
Table 4

1. What is the shape of each table? Write the shape name on the space under each table.  
\_\_\_\_\_
2. You want to partition Table 1 into four equal parts so that four students can sit there. Draw lines to partition Table 1 into four equal parts.
3. Each part of Table 1 is one \_\_\_\_\_ of the whole.
4. Table 1 is made up of \_\_\_\_\_ fourths.



# CLASS SCHEDULE

Next, you need to plan your class schedule. The clocks below show the times your class does certain things.



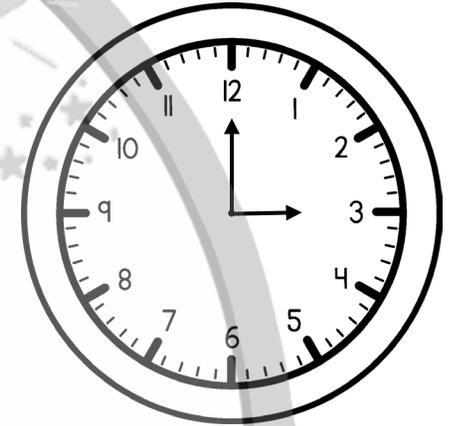
School starts



Math

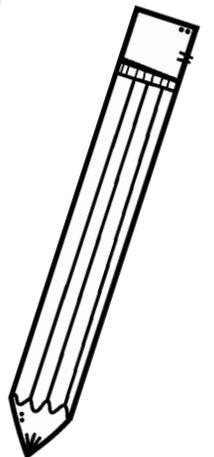


Recess



School ends

1. What time does the school day begin?
2. What time is math class?
3. What time is recess?
4. What time does the school day end?



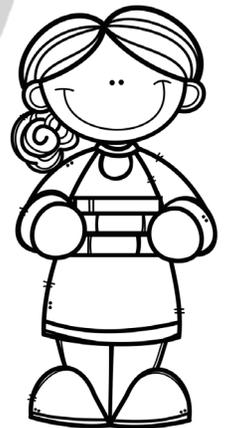
# SCHOOL SUPPLIES

You have lots of supplies for your students to use to help them learn this year. The table below shows how many of each school supplies item you have. Use the data to answer the questions.

Supply	 Rulers	 Scissors	 Glue Sticks	 Crayons	 Pencils
Number	8	12	18	26	32

1. How many more pencils are there than crayons? Draw a diagram to show your thinking.

2. Five of the scissors are red. The rest of the scissors are blue. How many scissors are blue? Write an equation to represent the problem.



# FIELD TRIP

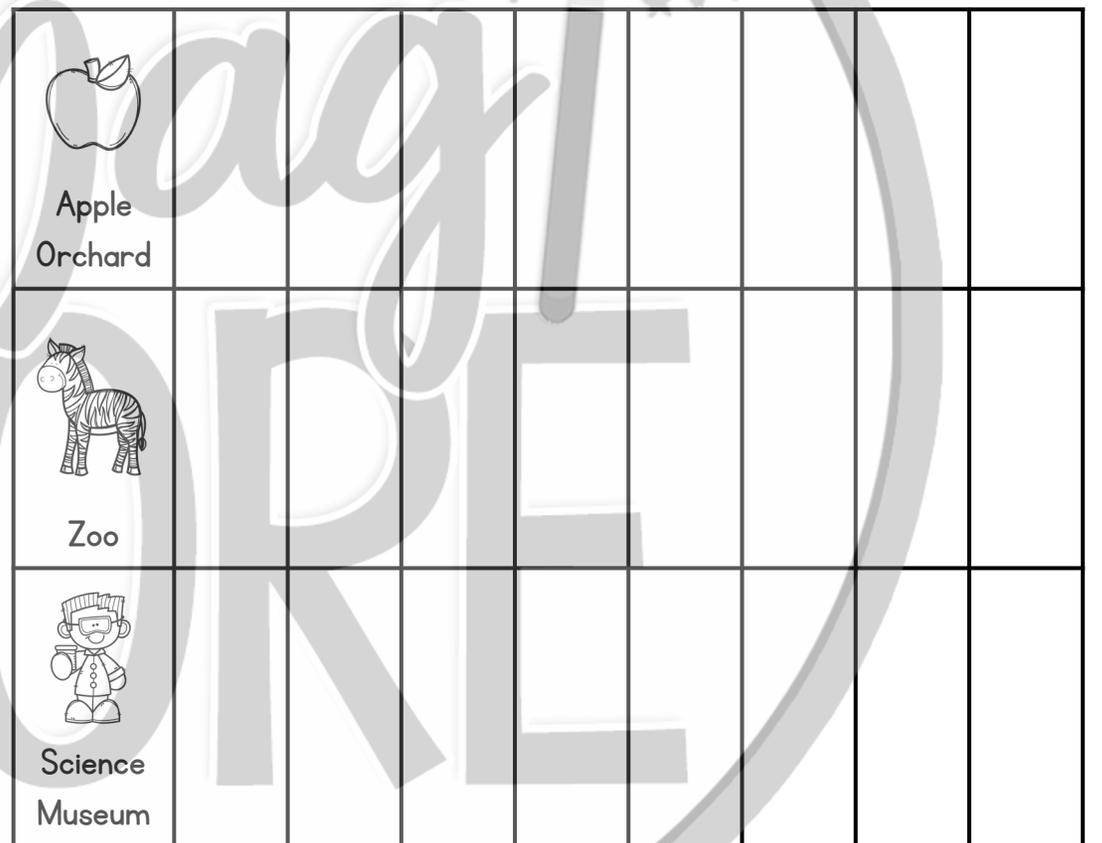
Over the summer, you asked your students where they would like to go on a field trip this fall. Their responses are on the clipboard below. Plot the data on the bar graph by shading in the bars.

FIELD TRIP LOCATION CHOICES



Field Trip Location	# of Students
Apple Orchard	3
Zoo	8
Science Museum	4

FIELD TRIP LOCATION

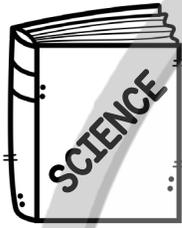


0 1 2 3 4 5 6 7 8

NUMBER OF STUDENTS

# TEXTBOOKS

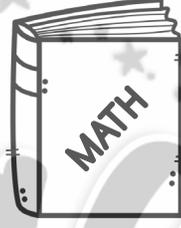
Each student will receive a textbook for math, reading, science, and social studies. The textbooks and the number of pages in each are shown below.



88 pages



126 pages



109 pages



93 pages

1. Compare the number of pages in the different textbooks. Complete each number comparison by filling in the space with the correct symbol  $<$ ,  $>$ , or  $=$ .

$93 \bigcirc 88$

$109 \bigcirc 126$

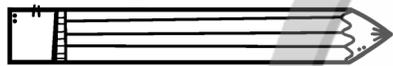
$88 \bigcirc 109$

$126 \bigcirc 93$

2. Which book has the most pages?
3. Which book has the least pages?
4. The social studies book includes a 10-page glossary at the back of the book. How many pages are in the social studies book NOT counting the glossary? Explain how you know.

# CHALLENGE #1: PENCIL LENGTHS

It's the first day of school, and your students have arrived at the classroom! For your first math class, you want your students to practice using a ruler. You have each student take out their pencils and measure them. Cut out the ruler and measure each student's pencil from the end of the eraser to the tip of the point. Record the pencil length in inches in the table.



Jameel



Evie

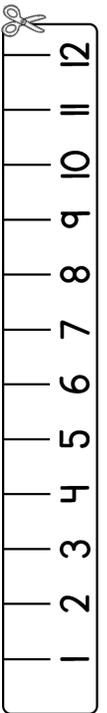


Fabiola



Jake

Student Name	Jameel	Evie	Fabiola	Jake
Pencil Length (in inches)				



1. Whose pencil is the longest?
2. Whose pencil is the shortest?
3. How much longer is Jameel's pencil than Evie's pencil?

# CHALLENGE #2: LUNCH TIME

It's lunch time in the cafeteria. The students in your class are eating lunch together. Answer the questions below.

1. Chetna, Simon, Jacques, and Carly all brought sandwiches from home. Their parents cut their sandwiches into different shapes. Read the descriptions of each person's sandwich shape. Find the shape that matches the description and write the name of the person underneath. In the space underneath their name, write the name of the shape.

Chetna's sandwich has three sides and three angles.



\_\_\_\_\_  
Student name

\_\_\_\_\_  
Shape name

Simon's sandwich has four sides. Two sides are short, and two sides are long.



\_\_\_\_\_  
Student name

\_\_\_\_\_  
Shape name

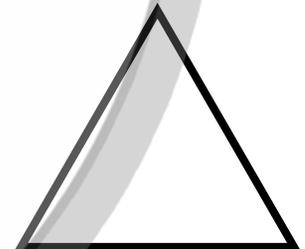
Jacques's sandwich has six sides. It also has six angles.



\_\_\_\_\_  
Student name

\_\_\_\_\_  
Shape name

Carly's sandwich has four sides and four angles. All the sides are the same length.



\_\_\_\_\_  
Student name

\_\_\_\_\_  
Shape name

# SELF-REFLECTION

Write a reflection of your experience with this project. How did you feel about the math problems and activities? Explain what you found easy to do and any difficulties you had while working on this project. Did you enjoy this activity? Why or why not?

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## RATE THIS PROJECT

Circle the statement you most agree with.

I am ready for something harder.

This was just right.

I found this very challenging.

# SELF-EVALUATION

Circle one box per row on the rubric that expresses how you rate yourself on this Project Based Learning Activity.

+	✓	-
I felt very confident about the math in this project.	I felt pretty good about my ability to complete the math in this project.	I felt a lot of the math in this project was too hard for me to do alone.
I understood all of the math and did not need help to complete the problems.	I understood most of the math but needed a little help to solve some of the problems.	I understood some of the math but needed help to complete most of the problems.
I easily used many strategies to solve the math problems efficiently.	I needed some help to use the best strategies for solving the math problems.	I had trouble understanding the best way to solve many of the math problems.
I feel I am ready for a harder math project.	I feel I would like to spend more time practicing similar math problems.	I feel I need assistance to work on similar math problems

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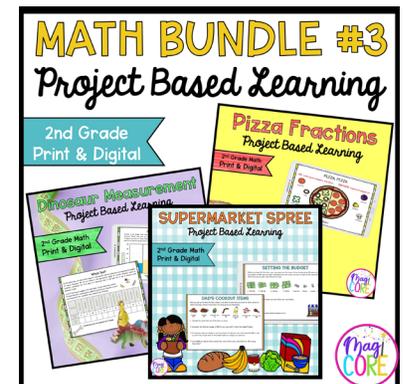
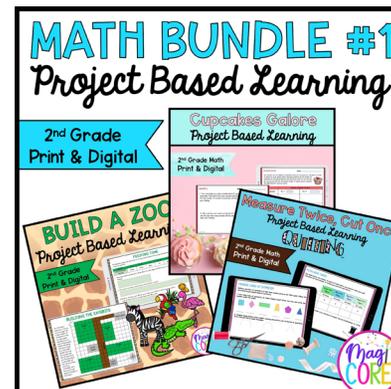


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