

Teacher Notes:

Materials:

Chart paper
Pencils and Chart Markers
Glue
Blank Papers or white boards

Procedures:

Group:

Everyone works in groups or partners

Use my [Google Slides](#) with your class and follow my animations when you explain it to the class.

Individual:

Then, everyone does a similar individual problem and it gets popped in the portfolios!

SET 1: Basic problems in order to learn the routine

Ms. Harper has 128 granola bars. She wants to give them equally to 6 classes on a field trip. After giving the bars to each class, the teachers in each class divide the bars equally among their 5 groups. How many granola bars does each group get, and how many bars will be left over?

The PTA sold 489 carnival tickets. Tickets were sold equally at 4 booths. At each booth, 7 volunteers were working and split their tickets equally to sell. How many tickets did each volunteer have to sell, and how many tickets were left undistributed at the booths?

Mrs. Diaz ordered 365 new books for the library. She put an equal number of books into 9 boxes. Then she placed those books evenly onto 4 shelves from each box. How many books ended up on each shelf, and how many books were left unpacked?

The school ordered 613 stickers to decorate science fair posters. They divided the stickers evenly among 5 grades. Then, each grade evenly divided their stickers among 4 classrooms. How many stickers did each classroom receive, and how many stickers were left after distribution?

The cafeteria prepared 478 fruit cups. They divided them equally into 4 refrigerators. Later, each refrigerator's fruit cups were equally placed on 7 trays. How many fruit cups were placed on each tray, and how many fruit cups were left after filling all trays?

Sycamore Valley Academy School has 425 water balloons for Field Day. They divide the balloons equally among 6 classes. Then each class divides their balloons equally among 7 teams. How many balloons will each team receive? Will each class be even?

Sycamore Valley Academy orders 513 new library books. The librarian puts an equal number of books onto 5 book carts. Each book cart's books are then equally arranged onto 4 shelves in the library. How many books end up on each shelf?

Individual Work: August

Name: _____

Date: _____

Ms. Brenner is five foot seven inches tall. She got a new pair of high heels and is now three inches taller than her husband. How tall is Mr. Brenner?

SET 2: Part-Part-Whole with the Part Missing

In a soccer match, Sycamore Valley Academy students scored a total of 12 goals. Aubree scored 2 goals, Micah scored 3 goals, and Neymar scored 4 goals. Kaiden scored the remaining goals. How many goals did Kaiden score?

A group of Sycamore Valley Academy students took a field trip on a bus with 45 seats. Madeline, Amelia, and Serenity's classes took up 32 seats altogether. Luis's class filled the remaining seats. How many seats did Luis's class fill?

During a basketball game, students from Sycamore Valley Academy scored 38 points. Kason scored 11 points, Luis scored 7 points, and Amelia scored 9 points. Micah scored the rest of the points. How many points did Micah score?

Kaiden, Neymar, and Serenity were designing Toca Boca characters. Together, they created 20 characters. Kaiden designed 5, and Neymar designed 8 characters. Serenity designed the remaining characters. How many characters did Serenity create?

A group of Sycamore Valley Academy students read 48 books during reading week. Wesley read 12 books, Darla read 9 books, and Alex read 11 books. Audrina read the remaining books. How many books did Audrina read?

During a bake sale, students baked 36 cupcakes. Desire baked 7, Gabriel baked 10, and Mary baked 6. Declan baked the rest. How many cupcakes did Declan bake?

At recess, students collected 25 jump ropes. Donovan brought 4 jump ropes, Kason brought 7 jump ropes, and Josue brought 5 jump ropes. Melissa brought the rest. How many jump ropes did Melissa bring?

In the library, the fifth graders checked out 40 books. Mary checked out 8, Audrina checked out 13, and Gabriel checked out 9. Desire checked out the remaining books. How many books did Desire check out?

At a science fair, students created 22 projects. Melissa's class made 3 projects. Josue's class made 6 projects, and Serenity's class made 5 projects. Declan's class made the rest of the projects. How many projects did Declan make?

For a fundraiser, students sold 60 raffle tickets. Kason sold 14 tickets, Sophie sold 12 tickets, and Truett sold the rest. How many tickets did Truett sell?

Individual Work: Part-Part-Whole

Name: _____

Date: _____

Jessica has six friends at the sleepover. Her brother can invite some but their dad says there can not be more than ten kids at their house. What is the maximum number her brother can have over?

SET 3: Part-Part-Whole with the Part Missing for Fractions

Dash and Declan have LA Dodgers cupcakes they won . Dash has $\frac{1}{4}$ of the total cupcakes, and Declan has the remaining $\frac{3}{4}$. If Dash has 5 cupcakes, how many cupcakes does Declan have?

In a radio contest, Olivia and Leo won a package of tickets to the Giants game! Olivia has $\frac{1}{3}$ of the tickets, and Leo has the remaining $\frac{2}{3}$ Olivia has 4 tickets. How many tickets does Leo have?

Amara Lee and Truett are trading California sports cards featuring various teams. Both Amara Lee and Truett have $\frac{1}{2}$ of the cards. If Amara Lee has 12 cards, how many cards do they have together?

Ms. Ridenour and Ms. Henderson are planning a field trip for the class. The venue says they can only accommodate 25 students per day. That is only $\frac{5}{6}$ of each class! That is $\frac{5}{6}$ of Ms. Ridenour's class and $\frac{4}{6}$ of Ms. Henderson's class. How many students are left out of the field trip?

Individual Work:

Part-Part-Whole

Name: _____

Date: _____

Serenity has $\frac{1}{3}$ cup butter for the recipe that makes twelve cookies. That is the exact right amount. How much butter would be needed for thirty-six cookies?

SET 4: Equal Sharing for Fractions

Natalia has an orange tree in her backyard. There are three ripe and ready and juicy oranges. Warren helps her pick them off and they want to share them. How can the two children share three oranges?

Frankie and Micah both got foot long sandwiches from Subway. Frankie has two friends that want to share hers and Micah has one friend that wants to share his. How is Frankie's sandwich split? How is Micah's sandwich split?

Joseph and his four cousins go out to a Mexican restaurant. They didn't realize it at the time, but they ordered "family style." That means eight burritos come out all on one plate. How many burritos should each person get?

Taylor won a plate of 13 brownies at the Cakewalk at the Fall Festival. Four of her friends said that they would be willing to share the brownies with her. If she gives each person the same amount, how many brownies does each kid get?

In the art room, five kids sit at each table. There are 28 students in Ms. Brenner's class. There are 32 students in Ms. Ridenour's class. There are 31 in Ms. Henderson's class. For each class, how many students are at each table?

Uriah was babysitting three kids and all three of them refused to do their homework! He saw seven Snickers bars sitting in the fridge. So he cut off half of one and ate it! He told the kids he would eat another half each hour that passed that their homework was not done. Unpredictably, all the kids finished their homework immediately! So Uriah was forced to share the $6\frac{1}{2}$ bars with three kids. How much did each kid get?

Rosie's dad bought two sandwiches at Subway. He only eats a bit of one. There is $1\frac{3}{4}$ left over in the fridge. He says Rosie and her brother can share it. How much does each sibling get?

SET 5: Fractions with common denominators

Mateo ate $\frac{3}{8}$ of a quesadilla. Later, he ate another $\frac{4}{8}$ of the quesadilla. Is there any quesadilla left? How much?

Luciana baked a cake and cut it into ten equal slices. She gave $\frac{6}{10}$ of the cake to her friend Sofia. What fraction of the cake does Luciana have left?

When they were running the mile in PE, the coach set a timer. Each lap was $\frac{1}{6}$ of the a mile. Gabriel ran $\frac{5}{6}$ of a mile before the timer went off. His friend Carlos ran $\frac{2}{6}$ of a mile. How much farther did Gabriel run than Carlos?

Jimena and Xiomara were making a flavored lemonade. Jimena poured $\frac{2}{5}$ of a liter of lemonade into the pitcher. Xiomara poured $\frac{4}{5}$ of a liter of Coke into the same pitcher. How much of the drink is there? Would this mixture taste good?

Camilla had $1\frac{1}{8}$ meters of yellow ribbon from WalMart. She used some ribbon to wrap a gift for Ms. Brenner and some ribbon to wrap a gift for Ms. Flynn. Now, there is barely $\frac{1}{2}$ of a meter left. How much ribbon did Camilla use?

Individual Work:

Fractions

Name: _____

Date: _____

Aiden had a chore list. He did five things on the list. His dad was mad and said "You didn't even do half of the list!" He looked closer at the list and said "You did exactly $\frac{1}{5}$ of the list." Aiden is correct he did $\frac{1}{5}$ of the list. How many chores are on the list?

SET 6: Fractions with Mixed Numbers and Easy Denominators

Leonor baked cakes for her family. She used $2\frac{7}{15}$ cups of flour for one recipe and $1\frac{3}{5}$ cups of flour for another recipe. How much flour did she use altogether?

Rafael painted part of a mural. He painted $2\frac{9}{15}$ square meters in the morning and $1\frac{3}{5}$ square meters in the afternoon. Later, his friend Lara painted another $\frac{7}{15}$ of a square meter. How many square meters did they paint altogether?

Olivia measured rainfall for her science project in a granulated tube. On Monday morning, the tube was empty. When the rain was over, she recorded 1.72 inches and didn't dump it out. On Tuesday, she recorded 2.3 inches. Now the tube is more full. On Wednesday, she forgot to measure but she had to write down the amount for her science project. On Wednesday, the total amount was 10.02. How many inches of rainfall actually happened on Wednesday?

Individual Work:

Part-Part-Whole

Name: _____

Date: _____

SET 7: Fractions and Whole numbers

Isabella has 24 stickers. Mateo has twice as many stickers as Isabella. How many stickers does Mateo have?

Lucas read 35 pages of his book this weekend. Emma read twice as much. How many pages did Emma read

Sophia baked 48 cookies for the school fair. Jackson baked an amount half as much as Sophia's. How many cookies did Jackson bake?

Mia ran 60 laps around the track this month. Liam ran half as big an amount. How many laps did Liam run?

Elijah scored 60 points in the math game. Amelia scored two-thirds smaller than Elijah's amount of points. How many points did Amelia score?

Charlotte earned \$75 from babysitting. Ethan earned two-thirds less than Charlotte. How much money did Ethan earn?

Mia ate one third of one of her sandwiches. Lucas wasn't as hungry so he ate half as much as she did of his own sandwich. How much of his sandwich did Lucas eat?

Noah spent a quarter of an hour doing chores. Ava was much faster than he was and only spent half of that time to finish her same chores. In fraction form, how long did Ava work for? In minutes, how long did Ava work for?

For beautification day at Sycamore Valley Academy, everyone wanted the fence to be painted. So Emma painted $\frac{1}{4}$ of the fence. Jackson painted twice as much as she did. How much of the fence still needs to be painted?

Liam and his brother wanted to make some cookies. There were 2 cups of sugar in the cabinet. Liam used a half a cup of sugar for his recipe. His brother wanted sweeter cookies so he used three times as much. How much sugar is left over?

Janelle has 21 hair beads. She divided her hair into three separate braids. However, she wants the same number of beads in each one of her braids. How many braids does she have?

I have \$.21. Each piece of gum cost four cents. How much gum can I get?

Lucy has eighty fish. They are quite crowded. When she told the woman at the pet store that her tank was fifty gallons, the woman said, "You should have $\frac{1}{4}$ that amount!" How should Lucy solve this?

Individual Work: Part-Part-Whole

Name: _____

Date: _____

SET 8: Multiplication and Division: Group Size Unknown

Noah had 6 apples. He wanted to share them equally with his friends so that each person, including himself, got the same number. If he shared them among 3 people, how many apples did each person get?

Emma has 125 pencils and wants to divide them equally into boxes. If she has 5 boxes, how many pencils go in each box?

Oliver does not like how Emma arranged the pencils in the boxes. He says 125 pencils in 5 boxes is a bad idea because it's too hard to find the color he wants. He says it should be less than twenty pencils per box. He says he should have fifteen pencils in each box. How many boxes will Oliver need?

Mason printed 240 fliers for the Fall Festival. He divided them evenly for all twelve classrooms. The teachers complained that there wasn't 30 - one for each kid. What should Mason do?

Jayden collected 180 cans during the recycling event. Each can weighs about 2 ounces, so he should get about \$27 for the whole bit. He sorted 180 cans evenly into boxes. If there are 15 boxes, how many cans will go in each box?

Aubrey got cupcakes for her class. At the grocery store, they come in groups of 12 but there's 30 students in her class. What should she do?

Individual Work:

Number of groups unknown

Name: _____

Date: _____

Dottie had 26 bananas. She wanted to share them equally with his friends so that each person, including herself, got the same number. If she shared them among four people, how many bananas did each person get?

SET 9: NUMBER OF GROUPS UNKNOWN

Skarlett has 66 apples. She puts 2 apples in each bag. How many bags does she use?

Emma has nine marbles and places three marbles in each jar. How many jars does Levi need?

Litzy has 45 pieces of gum that she is going to put in the goodie bags from her birthday party. She puts five pieces of gum in each bag. How many bags does she use?

Lucas collected one hundred twenty three books for a book drive. Benson collected twenty five books. When they get ready to bring the books to the drive, their mother doesn't want the boxes to be too heavy. She says they can't have more than 35 books in each box. What is the minimum number of boxes that they will need?

Individual Work:

Number of groups unknown

Name: _____

Date: _____

Peyton printed 300 flyers for a fundraiser. There are some volunteers that are going to walk around the neighborhood and pass out the flyers. Peyton gives out 25 flyers to each volunteer. How many volunteers does she give flyers to?

SET 10: Multiplication practice

Wesley went camping with his Uncle Adam. It took one tank of gas to drive the 147 miles to the camp. How many miles can he drive with 16 tanks of gas?

Owen went to Disneyland! It took two gallons of gas to drive 294 miles. How many miles can his family drive on six gallons of gas?

Ellie went to Six Flags. It cost \$43 for one person. How much will it cost for Ellie, Apollo, Evangeline and their parents to go?

Truett went to Six Flags. It cost \$38 for one person. How much will it cost for him, his two brothers and their parents to go?

A warehouse has 184 shelves for storing bottles. Each shelf can hold 27 bottles. How many bottles can be stored at this warehouse?

A warehouse has 183 shelves for storing boxes. Each shelf can hold 28 boxes of product. How many boxes can be stored in this section of the warehouse?

Individual Work:

Multiplication and Geometry

Name: _____

Date: _____

The mall has an outdoor space for kids to play. It measures 127 feet long and 46 feet wide. It's almost a perfect rectangle. There is a grassy section that is 40 feet wide and a concrete sidewalk that is 6 feet wide. What is the area of the whole space?

SET 11: Multiplication practice

Eric's friend is an up-cycler! He makes baskets from recycled wire. He cuts the wire into smaller pieces and weaves them. For a single basket, he needs 96 strips that are 115 centimeters long. If he gets a roll of wire that is 11,000 centimeters long, how many baskets can he make?

Riley's mom is obsessed with her sheep. She runs a sheep farm and sells the wool. Her farm has 225 sheep. This should yield 12 pounds of wool from each sheep. How much wool is this all together?

Ellie went to Six Flags. It cost \$43 for one person. How much will it cost for Ellie, Apollo, Evangeline and their parents to go?

Truett went to Six Flags. It cost \$38 for one person. How much will it cost for him, his two brothers and their parents to go?

A warehouse has 184 shelves for storing bottles. Each shelf can hold 27 bottles. How many bottles can be stored at this warehouse?

A warehouse has 183 shelves for storing boxes. Each shelf can hold 28 boxes of product. How many boxes can be stored in this section of the warehouse?

Individual Work: Multiplication and Geometry

Name: _____

Date: _____

An amazon box has a height of 24 centimeters, a width of 11 centimeters and a length of 15 centimeters. What is the total volume?

SET 12: Multiplication practice with mismatched units

Emma wants a bearded dragon. The space on top of her dresser is 48 inches. She can fit a terrarium that is 48 inches wide, and 2 feet long and 36 inches tall. The man at the pet store says she needs at least 20 square feet. Does she have enough space?

Noah wants a leopard gecko. He has a space on his book shelf that is 50 inches wide. He finds a terrarium that is 50 inches wide, 2 feet long, and 3 feet tall. The pet shop owner says it needs at least 25 square feet of space. Does Noah have enough space for his new pet?

Jackson wants a corn snake. He bought a tank that is 4 inches wide, 3 inches tall, and 6 inches long. His corn snake will be 4 feet long when it's fully grown. Will this tank work?

Ethan is buying a tree frog. The terrarium he's looking at is 49 inches wide, 2 feet long, and 36 inches tall. The pet store says the frog needs a minimum of 20 square feet. Does the terrarium provide that much space?

Individual Work:

Multiplication and Geometry

Name: _____

Date: _____

The class is building a planter box for the garden. it is going to have a perfectly rectangular bottom. And the sides will come up at straight perpendicular angles. The base is going to be 27,405 cm. The height is going to be about 19 cm. In order to fill it to capacity, how much soil needs to be bought?

SET 13: Multiplication practice

Jessie's family owns a local tortilla factory. The factory makes packages of tortillas for the local grocery stores and restaurants. Every 10 minutes, the factory makes 578 packages of corn tortillas and 145 packages of flour tortillas. There are 24 tortillas in each package. How many tortillas does the factory make every ten minutes?

Jonah's family owns a local tortilla factory. The factory makes packages of tortillas for the local grocery stores and restaurants. Every 30 minutes, the factory makes 78 packages of corn tortillas and 74 packages of flour tortillas. There are 21 tortillas in each package. How many tortillas does the factory make every thirty minutes?

Christina's family owns a local tortilla factory. The factory makes packages of tortillas for the local grocery stores and restaurants. Every 5 minutes, the factory makes 12 packages of corn tortillas and 8 packages of flour tortillas. There are 15 tortillas in each package. How many tortillas does the factory make every five minutes?

SET 14: Multiplication practice with large numbers

Tesla decided to get rich. She bought a movie theater. The theater has 24 rows and 36 seats in most rows. Three of the rows are irregular: 34 seats, 30 seats and 18 seats. How many seats are there in the entire theater?

Cordelia decided to get rich. She bought a movie theater with 864 seats. If Cordelia can charge \$5 for each movie ticket, how much money will she make if the theater is full?

Owen decided to get rich. He bought a movie theater. For every movie showing with a full theater, he makes \$4,320. He thinks he can make more money if he sells popcorn. Owen thinks he can sell a bag of popcorn for \$3. If the theater seats 864 people and each person buys a popcorn, how much money can he make?

Truett decided to get rich. He bought a movie theater and opened a snack bar. When every seat is sold, Truett makes \$4,320. When every seat is sold, Truett usually makes about \$2,592 on the snack bar. How much money can Truett make if the theater is full?

Luis decided to get rich. He is going to host a concert. The theater has 29 sections and each section has about 90 seats. If Luis' company uses 15 full sections and each seat is \$4, how much money can Luis' company make?

Serenity decided to make some money. She bought 28 jerseys for \$14 each. Then, she sold each of those jerseys for \$18. How much money did she make?

Annabelle and Sophia are making a garden for their class project. Each garden bed has 38 flowers planted and there are 13 garden beds. How many flowers are there in the whole project?

Ms. Brenner is soooooo mad! Since the beginning of the year, the class has used 17 boxes of pencils! There are 72 pencils in each box. How many pencils were used this school year, so far? If there are 30 students in class, how many pencils did each kid get?

Benjamin decided to get rich. He bought 67 plain white tee shirts. He embroidered a logo on each one and sold them for \$28. How much money did Benjamin make?

Riley decided to get rich. She is selling puppies. The pibbles go for \$128. The poodles go for \$80. She sells seven pibbles and two poodles. How much

money did she make?

Ellie decided to shut down Riley's puppy selling business. She paid Riley \$100 for each of her nine puppies.