

#### Word Problems Grades 1-2 Mathematics/Theater

# 1<sup>st</sup> Grade Mathematics, Operations and Algebraic Thinking, Standard #2

Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.

# 2nd Grade Mathematics, Operations and Algebraic Thinking, Standard #1

Use addition and subtraction within 100 to solve one- and two-step word problems...

**Drama Standard 1-2.T.CR.3:** Create a scene or play with a beginning, middle, and end.

# Drama Standard 1-2.T.P.9:

Share dramatic play and guided drama experiences within the classroom or with invited guests.

### Drama Standard 1-2.T.R.1:

Demonstrate audience skills of observing attentively and responding appropriately.

### Drama Standard 1.T.CO.2:

Identify connections to other content areas in dramatic play or guided drama experiences.

**Objective:** Students will be able to visualize the actions that are going on in word problems. They will be able to pull out the numbers and create an equation to solve the problem.

### Materials:

A copy of the word problems included at the end of this lesson White boards and markers

# Warm-up

Option 1: <u>Clap Around</u>. Children will sit in a circle next to a partner. Have the students leave a small space between each partnership. Using the number 10, go around the circle with each partnership clapping addends that add up to 10. For example: if the first person in the partnership claps 3 times, the next person must clap 7 times. Make sure that each partnership adds up to 10. For a second round, go around the circle again, but in the opposite direction so that the other partner gets to choose the first addend. To make this activity go faster, you may want to break the class into two groups.

Side-coaching: Compliment children who get the numbers right. Question those who do not. Ask for the other children to help them out with the addends.

Option 2: <u>Skip Counting</u>. Invite the students to sit in a circle. Start a simple clapping pattern like: slap (slap the knees), clap, snap, clap. On the snap, skip count by 2s, 5s,

10s or 100s. You can do the skip counting as a class or you can start with one child in the circle and go around, having each one take their turn. Side-coaching: Stay with the rhythm! Make sure to say your number when we snap.

Option 3: <u>Doubles</u>. Use the following pattern: slap, clap, snap right, snap left, snap together, clap. The clap will be a silent beat. In rhythm say, "1 + 1 = 2; 2 + 2 = 4; 3 + 3 = 6; etc.

# Word Problems:

The word problems are written for groups of four. When first starting, it works best for the teacher to play one of the roles. Once the children are used to acting out the problems, you can let them do it by themselves. It is best to start 2<sup>nd</sup> graders with two or three of the one-step problems before moving onto the two-step problems.

- Choose some children to help you with an example. Act out one of the word problems. Write the equation on the board and solve the problem together.
- Put the children into groups.
- Give each group a word problem.
- Go around to each group to make sure they all know what they are going to do.
- Pass out the white boards and markers.
- Bring one group at a time in front of the class to act out their problem. Encourage the audience to listen for the numbers and write down the equation. When the group is finished acting, you may have to tell them to go back and restate their numbers.
- Have the students solve the problem and hold up their white boards when they are finished. Remind them to look for numbers that add up to 10 and for ways to create doubles.
- Check their answers and help those who need help.
- When most students have solved the problem correctly, have the class read the equation(s) together.

1. Jane, Julie and Margaret were working on a school project. They went to the library. Jane checked out 5 books, Julie checked out 4 books and Margaret checked out 3 books. How many total books did the girls check out?



Instructions: One of you is a librarian and three of you are children. The three of you pretend to check out books from the library. One of you tells us that you checked out 5 books. One of you tells us that you checked out 4 books. The other one tells us that you checked out 3 books. Ask the class, "How many total books did we check out?"

2. Bryson, Tim, and Sam were playing basketball. When their mother called them into dinner, Bryson had made 8 baskets, Tim had made 5 baskets, and Sam had made 6 baskets. How many total baskets did the boys make?



Instructions: One of you is a parent and the other three are children. The three children pretend to play basketball while the parent pretends to fix dinner. The parent calls the other three in for dinner. As they children come in, they tell the parent how many baskets they each made. One of you says that you made 8 baskets. One of you says that you made 5 baskets. The last one says that you made 6 baskets. Ask the class, "How many total baskets did we make?"

3. Mother helped Anne and her friends made treats for their class party. They baked 8 chocolate cupcakes, 5 vanilla cupcakes and 5 strawberry cupcakes. How many cupcakes did they bake?



Instructions: One of you is a parent and the other three are children. You are all baking treats for a class party. One of you pretends to make 8 chocolate cupcakes. One of you pretends to make 5 vanilla cupcakes. One of you pretends to make 5 strawberry cupcakes. Ask the class, "How many cupcakes did we make?"

4. Their mother told Tyson, Jack and Kevin to clean up their room. Jack found 9 toys under his bed and Tyson found 7 toys on top of his bed. Kevin remembered that he had left some toys in the kitchen. He found 2 toys there. How many toys did Tyson and Jack put away?



Instructions: One of you is a parent and three of you are children. The parent tells the children to clean their bedroom. One of you finds 9 toys under the bed. One of you finds 7 toys on top of the bed. The other child remembers that there are toys in the kitchen and brings in 2 toys more toys to put away. Ask the class, "How many toys did we put away?"

5. Samantha, Sarah and Abby went to visit their Grandpa's apple orchard. Samantha picked 6 apples from one tree and Sarah picked 7 apples from another tree. Abby picked up 4 apples off of the ground. How many apples did they have?



Instructions: One of you is a grandparent and three of you are children. The children ask the grandparent if they can pick apples. One of the children pretends to pick 6 apples from a tree. Another child pretends to pick 7 apples from a tree. The last child pretends to pick 4 apples off of the ground. Grandpa asks, "How many apples do you have?"

6. Tommy's school was having a fund raiser. Tommy sold 5 candy bars to his grandfather and 8 candy bars to his grandmother. Tommy's mother bought 2 candy bars. How many candy bars did Tommy sell?



Instructions: One of you is a child, one is a parent and two of you are grandparents. The child asks one of the grandparents if they will buy some candy bars for a school fund raiser. The grandparent agrees to buy 5 candy bars. The child then asks the other grandparent to buy some candy bars. That grandparent agrees to buy 8 candy bars. The child asks the parent if they will buy some and the parent agrees to buy 2 candy bars. Ask the class, "How many candy bars did I sell?"

7. Ben, Ella and Hanna helped their mother set the table. They put on 6 spoons, 6 forks and 6 knives. How many pieces of silverware are on the table?



Instructions: One of you is a parent and 3 of you are children. The parent asks the children to help set the table. The children pretend to put silverware on the table. One of you pretends to put on 6 spoons. One of you pretends to put on 6 forks. One of you pretends to put on 6 knives. Ask the class, "How many pieces of silverware are on the table?"

8. Tim, Danny and Ty were playing with their cars in the sand box. Tim brought 7 cars to play with and Danny brought 8 cars. Ty brought 5 cars. Joseph asked if you could play too. The other boys shared their cars with Joseph who didn't have any. How many total cars did they have to play with?



Instructions: Three of you are children playing with toy cars in the sand box. The other person is also a child. The forth child approaches the others and asks if they can play too. One of the children asks the forth child if they have any cars. The forth child says no. The other children say that they can share. One of you tells us that you have 7 cars. One of you tells us that you have 8 cars. One of you tells us that you have 5 cars. Ask the class, "How many total cars do we have to play with?" 9. When Vanessa, Valerie and Victor went to the zoo, they bought a bag of peanuts. Vanessa ate 8 peanuts. Valerie gave 8 peanuts to the elephant. Victor saved the last 4 peanuts to eat at home. How many peanuts were in the bag when Vanessa opened it?



Instructions: Three of you are children and one of you is an elephant. The children pretend to be at the zoo with a bag of peanuts. One of the children pretends to eat 8 peanuts. The next child pretends to give 8 peanuts to the elephant. The last child pretends to look in the bag and see 4 peanuts left. They decide to save them to eat later, when they get home. Ask the class, "How many peanuts were in the bag when we opened it?"

10. Emily's sister gave her a new camera for her birthday. Emily took 8 pictures of her cat She also took 7 pictures of her dog. Then she decided to take 5 of the pictures of herself with her sister. How many pictures did Emily take?



Instructions: Two of you are children. One of you is a dog. One of you is a cat. One child pretends to give the other child a new camera. The child with the camera pretends to take 8 pictures of the cat and 7 pictures of the dog. Then the child pretends to take 5 pictures of her sister and herself pictures. Ask the class, "How many pictures did I take?"

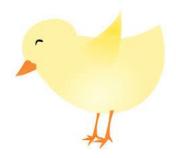
11. Tanner, Jackson and Emma were making a picture for their mother. Tanner glued 7 red beans on the picture. Jackson glued 5 black beans on the picture and Emma glued 7 white beans on the picture. How many beans were on the picture?

Instructions: One of you is a parent and three of you are children. The children decide to



make a picture for the parent. One of the children pretends to glue 7 red beans on the picture. Another child pretends to glue 7 white beans on the picture. The last child pretends to glue 5 black beans on the picture. They then surprise the parent by pretending to give them the picture. The parent asks the children, "How many beans did you glue on the picture?"

12. Danielle, Robert and Michael live on a farm. In the springtime, many of the animals have babies. Danielle counted 8 baby chickens. Robert counted 6 baby cows and Michael counted 4 baby horses. How many baby animals are on the farm?



Instructions: One of you is a parent. The parent tells the children there are a lot of new baby animals on the farm and asks them to go and count the baby animals. The children pretend to be excited to see a lot of new baby animals. One of you pretends to count 8 baby chicks. One of you pretends to count 6 baby cows. One of you pretends to count 4 baby horses. Ask the class, "How many baby animals are on the farm?"

#### Two Step Word Problems

1. Jane, Julie and Max were working on a school project. Together they checked out 15 library books. The next time they went to the library, they returned 3 of the books and checked out 12 more. How many library books do they still have checked out?



Instructions. One of you is a librarian and the other 3 are students checking out books. Pretend to check out 15 books. Pretend to go home and decide that 3 of the books are not helpful. Also decide that you need more books. Go back to the library and pretend to return 3 books and check out 12 more. Ask the audience, "How many books do we still have checked out?"

2. Addie has two boxes of crayons. In one box there are 42 crayons. In the other box there are 24 crayons. Addie's mother asked her to share her crayons with her little brothers. When she did, her brothers broke 5 of her crayons. How many unbroken crayons does Addie have?



Instructions: One of you is a parent and three of you are children. The parent asks one of the children to share their crayons with the other children. The child with the crayons tells us how many crayons there on in each box and then shares one of the boxes with the other children. The other children pretend to color and return the box. The child with the crayons gets mad when he/she finds that 5 of them are broken. Ask the audience, "How many unbroken crayons do I have left?"

3. Anne and her mother made cookies for Anne's class party. They baked 48 cookies but Ann's two brothers ate 6 of them. Anne baked 12 more cookies. How many cookies does Anne have for her class party?



Instructions: Two of you are baking cookies. Pretend to count the cookies and say that there are 48 of them. Exit the stage. The other two come in and see the cookies and eat 6 of them. One of the first actors comes back in and asks how many cookies they ate. They then decide to make 12 more cookies. Ask the audience, "How many cookies do we have now?"

4. Samantha, Sarah and Jon went to visit their Grandpa's apple orchard. Jon played on the swings while Samantha picked 12 apples from one tree and Sarah picked 14 apples from another tree. The children and their Grandpa ate 4 of the apples. How many apples were left?



Instructions: One of you is a grandparent and the other three are grandchildren. The two grandchildren pretend to pick apples at the grandparent's house. Each of you announces how many apples you have picked. The grandparent suggests that you all eat an apple. Pretend to eat one. Ask the audience, "How many apples do we have left?" 5. Tim, Danny and Abby were playing with cars in the sand box. Tim brought 26 cars and Danny brought 32 cars. When their mother called them to go inside, the children could not find 4 of the cars. How many cars did they take inside with them?



Instructions: Three of you are children and one of you is a parent. The children are pretending to play in a sandbox with cars. One of you says that you have 28 cars. The other one says that you have 32 cars. The third child asks them to share their cars. The parent calls the children to go inside. The children pretend to pick up the cars. They can't find four of them. Ask the audience, "How many cars did the children find?"

6. Marci and her sister Maggie are twins. They have 12 shirts hanging in their closet and 14 shirts in the hamper. Their mother asked them to give their little sister the shirts that were too small for them. Marci and Maggie picked out 4 shirts to give to their sister. How many shirts do Marci and Maggie have left?



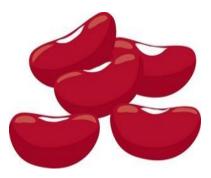
Instructions: One of you is a parent. The other three are children. The parent asks two of the children, who happen to be twins, how many shirts they have. The two children pretend to count their shirts and announce that they have 12 shirts hanging in their closet and 14 more in the hamper. The parent tells the two children to give the small ones to the other child. The children pretend to give 4 shirts to the other child. The other child says, "Thank you." The two children ask the audience, "How many shirts do we have left?"

7. Emily took 22 pictures of her cat with her new camera. She also took 37 pictures of her dog. Her sister looked at the pictures and deleted 5 of them. How many pictures does Emily have?



Instructions: Two of you are children, one is a dog and the other one is a cat. One child pretends to take 22 pictures of the cat and 37 pictures of the dog. The other child looks at the pictures on the camera and deletes 5 of them. Ask the audience, "How many pictures do I have?"

8. Tanner and Emma were making a picture for their mother and father. Tanner glued 35 red beans and Emma glued 22 white beans on the picture. Before they gave their parents the picture, 6 of the white beans fell off. How many beans were still on the picture?



Instructions: One of you is a mother and the other one is a father. The other two are children. The children pretend to make a picture for their mother and father by gluing beans on a piece of paper. One of you tells us that you glued 35 red beans on the paper. The other one tells us that you glued 22 white beans on the paper. As you give the picture to the parents, some of the beans fall off. Pretend to pick up 6 beans. Ask the audience, "How many beans are still on the picture?" 9. Danielle's pet rabbit had 12 babies. Her sister's rabbit had 11 babies. Her father sold 3 of the babies. How many baby rabbits did they have left?



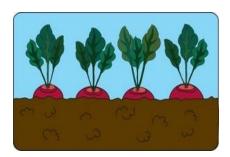
Instructions: Two of you are children, one of you is a parent and the other one is someone who is buying rabbits. The children pretend to play with the baby rabbits. One of you says that your rabbit had 12 babies. The other one says that their rabbit had 11 babies. The buyer goes to the parent and asks to buy three baby rabbits. The parent walks over and pretends to pick up 3 of the baby rabbits and hands them to the buyer. Ask the audience, "How many baby rabbits are left?"

10. Tommy and Toby were selling candy bars for the school fundraiser. They sold 5 candy bars to their grandfather and 8 candy bars to their grandmother. Their grandmother gave them 2 of the candy bars. How many candy bars did his grandparents have left?



Instructions: Two of you are grandparents and two of you are grandchildren. The grandchildren pretend to sell candy bars to the grandparents. One of the grandparents buys 5 candy bars. The other grandparent buys 8 candy bars but gives 2 back to the grandchildren. Ask the audience, "How many candy bars do the grandparents have left?"

11. Kylie's family planted a big garden every year. This year Kylie and her brother got to help. She planted 54 carrot seeds. Her brother planted 35 bean seeds. 8 of the seeds did not grow into plants. How many seeds did grow into plants?



Instructions: Two of you are parents and two of you are children. The parents tell the children that they can help plant the garden this year. One of the children pretends to plant 54 carrot seeds and the other one pretends to plant 35 bean seeds. Pretend to leave. The parents says, "Weeks later." The children come back to see the garden. They say that 8 of the seeds did not grow. Ask the audience, "How many seeds did grow into plants?"

12. Daniel had been saving his money for a long time. He had \$38. Daniel decided to use some of his money to buy a birthday present for his brother. Daniel bought his brother a toy car and used \$12. That day his father gave him \$4 for shoveling snow. How much money does Daniel have?



Instructions: One of you is a parent, two of you are children, and one of you is a salesperson. One child announces that he/she has \$38 and wants to buy a birthday present for their brother. Pretend to go to a store and buy a present from the salesperson that costs \$12. Pretend to come home and give the present to other child. The parent comes in and pretends to hand the child with the money another \$4 and tells them thank you for shoveling snow. Ask the audience, "How much money do I have now?"