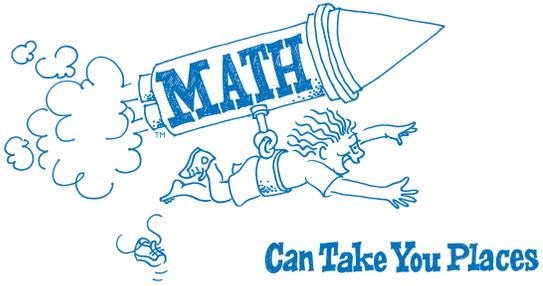# Riddle Me This

3rd - 4th Grade

FOCUS AREA
Equivalency

ACTIVITY TYPE
Tabletop Game

MATH GOAL
To match word problems to their appropriate equation

RECOMMENDED NUMBER OF STUDENTS
Students work in pairs, with as many as 10 pairs (maximum 20 participants)

TIME NEEDED
30 minutes

OBJECTIVE
To match word problems to their equations, then solve the equation for the missing quantity that makes the number sentence true.

MATERIALS

From the *Math Can Take You Places* After School Kit

- Riddle Me This strips (Five sets with five cards each in blue, pink, green, yellow and orange) - one set per pair
- Riddle Me This answer key
- Dry markers - one per pair
- Pencil and scratch paper to help children work out problems

BEFORE YOU START
Students will match the Riddle Me This strips, placing them end to end like dominoes. Make sure they have plenty of space, either on the floor or on a long table, to be able to spread out the strips.

HOW TO START
Ask: "What kind of music do they play on a space shuttle?" (Answer: Rocket-roll). "How many of you like riddles? Well, today we're going to find the answers to funny riddles by solving word problems."

Ask: "Can anyone come up with a quick example of an easy word problem?" (Possible answer: Steve had five pieces of candy. He gave two pieces to Beth. How many pieces does he have left?) Then, discuss how you would solve that problem by setting up a number sentence or equation (Example: 5-2=_____ (3). Tell the kids that they are going to use number sentences to play the game of Riddle Me This. Explain to the group that this game is played like Dominoes (matching strips together to form a long line of strips).

STEPS

Step 1

Give each pair a set of Riddle Me This playing cards. Each set has five cards and each set is a different color. You may want to supply scratch paper and pencils to help students work out the problems.

Step 2

Students are to match their Riddle Me This cards end to end with the appropriate number sentence touching the matching word problem. The Riddle Me This cards must be in the correct order.

Step 3

Once they believe the cards are in the proper order, students calculate the answer to the number sentence and write the correct answer in the blank on the card using the dry erase marker. Each set of cards will have one extra number sentence that does not match a word problem.

Step 4

When students think they have the cards in the correct order, they can check their answers by flipping the cards over from the bottom and reading the riddle answers displayed on the backs of the cards. If the cards are in the right order, they will be able to clearly read the answer to each riddle and it will make sense.

Step 5

Have the teams switch sets of cards and begin again as instructed.

WRAP UP

Ask the kids to come up with their own individual silly word problem to match the extra number sentence for their set of cards. Ask for volunteers to share their word problems.
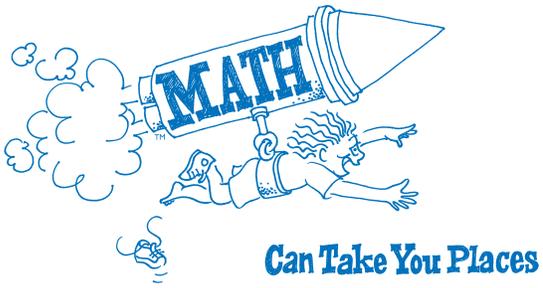
OPTIONAL ACTIVITIES

- Ask the students to create their own word problems, numbers sentences and solutions. Type them up and let the kids create a new set of Riddle Me This playing cards using their work. Be sure to number the word problems. Allow the children to cut the word problems and number sentences and randomly glue the word problem on one side of the note card and a different equation on the other. Keep the solutions to create a key.
- Allow students to work in pairs as they play the online games at www.mathplayground.com to practice word problems.

   At home: This activity can be done with individual students solving one set of cards at a time.

LITERATURE CONNECTION

- *Twelve Ways to Get Eleven* by Eve Merriam
- *The King's Chessboard* by David Birch

Activity Cue Card

- Give a set of Riddle Me This Cards to each group.

- Students will place the cards in the correct order by matching the word problem to its equivalent number sentence.

- Write the answer to the number sentence in the blank on the card with a dry erase marker.

- Students can check if their work is correct if the riddle on the back is in the correct order.

Riddle Me This playing cards - ANSWER KEY

Yellow Cards

Riddle: What has big ears and a trunk? **Answer:** A donkey on vacation.

1. The Zogs have only 57 miles to fly before they get home to their planet, Pluto. They
   have already flown 315 miles today. How far away were they from home when the trip
   started?
   Answer:
   Number Sentence: 57 + 315 = _____
   (Solution: 372)

2. Kira is only $57 short of her goal of saving $372 for her class space trip to the moon.
   How much money has she saved for the trip?
   Answer:
   Number Sentence: _____ = 372 - 57
   (Solution: 315)

3. The box of moon rocks Wally is packing has a weight limit of 315 pounds. The scale says
   that he has already packed 231 pounds. How far off is he from the weight limit?
   Answer:
   Number Sentence: 315 - 231 = _____
   (Solution: 84)

4. Q-bert was promised $315 in pledges for the Save-the-Martians fund. So far he has collect-
   ed $54 from his mom and dad. How much money does Q-bert still have to collect?
   Answer:
   Number Sentence: 315 - 54 = _____
   (Solution: 261)

   Fake number sentence for the yellow cards:
   315 + _____ = 373
   (Answer: 58)

Riddle Me This playing cards - ANSWER KEY

Pink Cards

Riddle: Why do airplane pilots always fly past Peter Pan's Island? **Answer:** Because the sign says "Never Never Land."

5. D. J. Rocket Boy sold a total of 660 tickets to the Homecoming Space Jam. 345 of those tickets were sold to students throughout the week. How many tickets were sold at the door?
    Answer:
    Number Sentence: 660 - 345 = _____
    (Solution: 315)

6. Zenith and Org are in a race to the moon. They have traveled 315 miles already and they just passed a marker that said "Moon 360 miles away". How far will they travel?
    Answer:
    Number Sentence: _____ = 315 + 360
    (Solution: 675)

7. Tron wants to take a space walk outside of his space ship. For safety, he ties himself to a 345-foot-long safety rope. There is still 315 feet of the rope left inside the space ship. How much rope is hanging outside of the space ship?
    Answer:
    Number Sentence: 345 - 315 = _____
    (Solution: 30)

8. Matilda is traveling by broom to visit her Aunt Gertrude in Transylvania. The first village where she stopped was 315 miles away from Matilda's home. Her aunt lives another 432 miles away. How far is Matilda's home from her aunt's home?
    Answer:
    Number Sentence: 315 + 432 = _____
    (Solution: 747)

    Fake number sentence for the red cards:
    345 + 660 = _____
    (Solution: 1,005)

Riddle Me This playing cards - ANSWER KEY

Blue Cards

Riddle: How do you know that heat is faster than cold? **Answer:** You can catch a cold.

9. Frankie's class at Monster Mash Elementary School has collected 432 spiders to help decorate their school with beautiful cobwebs. His class collected 315 fewer spiders than Mrs. Ghoulie's class. How many spiders did Mrs. Ghoulie's class collect?
Answer:
Number Sentence: _____ = 432 + 315
(Solution: 747)

10. On an exciting night of trick-or-treating, Wolfie collected 432 pieces of candy. He gave 147 pieces to his friend, Fangs, who didn't get as much candy. How many pieces did Wolfie have left?
Answer:
Number Sentence: 432 - 147 = _____
(Solution: 285)

11. When Space Ship Atlantis landed on Mars, 432 people left the ship to explore. 147 passengers remained on the ship. How many total passengers were there on the space ship when it landed?
Answer:
Number Sentence: 432 + 147 = _____
(Solution: 579)

12. Squeak and Eek are running the "Eyeball Bobbing" booth at the school carnival. They have found 432 fake eyeballs so far, but they need 549 eyeballs total. How many more eyeballs do they need to buy for the carnival?
Answer:
Number Sentence: 549 - 432 = _____
(Solution: 117)

    Fake equation for the blue cards:
    549 + 432 = _____
    (Solution: 981)

Green Cards

Riddle: What did the hat say to the necktie? **Answer:** You hang around. I'm going on a head.

13. Haunted Hill Elementary held its annual Haunted House. 63 of the 405 guests ran from the Haunted House screaming. How many brave people made it all the way through?
Answer:
Number Sentence: 405 - 63 = _____
(Solution: 342)

14. Witch Hazel was expecting company for the weekend. She needed to clean all of the bats out of her attic. There were a total of 402 bats. After the first day of cleaning, she still had 339 bats left to clean out of the attic. How many bats has she gotten rid of so far?
Answer:
Number Sentence: 402 - 339 = _____
(Solution: 63)

15. Drusilla began reading her book of ghost stories today. She read 63 pages. She still has 332 pages to read. How many pages long is the book?
Answer:
Number Sentence: _____ = 63 + 332
(Solution: 395)

16. Casper received a total of $402 for his birthday from his family and friends. His mom and dad gave him $332, and his grandparents gave him $63. How much money did his friends give him?
Answer:
Number Sentence: 402 - 332 - 63 = _____
(Solution: 7)

Fake number sentence for the green cards:
315 + 339 = _____
(Solution: 654)

Orange Cards

Riddle: If Mississippi gave Missouri her New Jersey, what would Delaware?
Answer: I don't know, but Alaska.

17. Rea wants to buy a brand new motorcycle. She has saved $633 from her first paycheck and $318 from her second paycheck. How much money has Rea saved so far?
Answer:
Number Sentence: _____ = 633 + 318
(Solution: 951)

18. Brad's class is going on a field trip to the Bubble Gum Museum to see the world's largest piece of bubble gum. The Bubble Gum Museum is 633 miles away from his school. So far, the class has traveled 63 miles. How much further does Brad's class have to ride?
Answer:
Number Sentence: 633 - 63 = _____
(Solution: 570)

19. 381 students from Carter Elementary were gathered at the airport for their school trip to Disney World. 63 students still hadn't shown up because they were running late. How many students total are going on the trip?
Answer:
Number Sentence: 381 + 63 = _____
(Solution: 444)

20. D. J. Boogie Down and the Funky Bunch printed 1,041 tickets to sell to their concert. Of those tickets, 723 were sold before 12:00 pm. How many tickets would they need to sell in the afternoon for tickets to be sold out?
Answer:
Number Sentence: 1,041 - 723 = _____
(Solution: 318)

Fake number sentence for orange cards:
1,041 - 63 = _____
(Solution: 978)

Matilda is traveling by broom
to visit her Aunt Gertrude.
The first village
in Transylvania
where she stopped was
345 miles away from Matilda's home.
Her aunt lives another
482 miles away.
How far is Matilda's home from
her aunt's home?

345 + 660 = _____

ALASKA

RIDDLE
ME
THIS?

KERA

www.mathcantakeyouplaces.org

★ travelocity

The Zogs have only 97 miles to
fly before they get home
to their planet, Pluto.
They have already flown
345 miles today.
How far away were they
from home when
the trip started?

_____ + 57 = 372

Haunted Hill Elementary held its
annual Haunted House.
63% of the 402 guests ran from
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