

The Game of Pig (Grades 3–8)



Math concepts: This game for two or more players gives students practice with mental addition and experience with thinking strategically.

The object: to be the first to score 100 points or more.

How to play: Players take turns rolling two dice and following these rules:

1. On a turn, a player may roll the dice as many times as he or she wants, mentally keeping a running total of the sums that come up. When the player stops rolling, he or she records the total and adds it to the scores from previous rounds.
2. But, if a 1 comes up on one of the dice before the player decides to stop rolling, the player scores 0 for that round and it's the next player's turn.
3. Even worse, if a 1 comes up on both dice, not only does the turn end, but the player's entire accumulated total returns to 0.

After students have had the chance to play the game for several days, have a class discussion about the strategies they used. You may want to list their ideas and have them test different strategies against each other to try and determine the best way to play.

Subtraction Pig (subtraction)

Two or more players start out with 100 points each. Players in turn roll two dice and subtract that number from their points. A player on a turn continues rolling the dice and subtracting the resulting number from his remaining points until a 1 appears on any dice rolled. That player's turn ends, and the next player takes a turn. When a player has lost all of his points, he is out of the game. The last player in the game, is the winner.



Guess My Number (number logic)

You need: paper, pencil, partner, hundred chart, 3 different colored markers

Player one picks a number from 0-99 and writes it down hidden from the other player. Use the hundreds chart to narrow down the number. Player one gives a clue: "Your guess is greater than my number" or "Your guess is less than my number". Continue playing until player two guesses player one's number. Switch jobs and play again.

Concentration

Flash cards with problems and flash cards with answers

This game is played the same as the old fashioned game making matches but you have to match the problem with the solution.

The one with the most sets of correct matches wins.

Race for \$1.00

Materials: 30 pennies, 10 nickels, 20 dimes, 1 quarter, a dollar, 2 dice, and a partner.

Directions:

Take turns. On your turn, roll the dice. The sum tells how many pennies to take. When you have 5 pennies, trade for a nickel. When you have 2 nickels, trade for a dime. When you have 2 dimes and one nickel, trade for a quarter. The first player to reach \$1.00 is the winner.

Game of 99

The adding game of "99" is played with a deck of cards for a group of 3 to 5 players. Each child is dealt four cards and the remaining cards are left in the center. After a card is played the child needs to pick up a replacement card from the deck--or just plays short.

The object is not to go over 99. As a card is placed in the center, the child states the value of that card after it is added to the ones already played. So, if the first player plays a 7 he says, "Seven." If the next player plays an 8, he says, "Fifteen," which is the total of $7 + 8$. Should the next player put down a 5, the statement would be "Twenty." This may sound boring, but there are so many wild cards that the students really love it. The first player to go over 99 is out of the game and the play continues until there is only one player left.

Ace = 1

2 = 2

3 = 3

4 = no value, reverse play

5 = 5

6 = 6

7 = 7

8 = 8

9 = pass, no value

10 = minus 10

Jack = 10

Queen = 10

King = score goes to 99

Race for Math

Materials Needed

Create on the board or on chart paper a grid numbered across 1 to 9 and down 1 to 9. The grid's squares should be large enough for students to write a readable number in.

The Race

Arrange the class into two or more teams and provide each team with a grid sheet. Decide whether you want students to practice addition, subtraction, or multiplication facts in this game of speed. When the chart is set, say "Go!" One person on each team races to the board and fills in any square on the math facts grid. For example, if you are reinforcing addition facts, the student writes the number 6 in the square at which the 4 column and the 2 row meet ($4 + 2 = 6$).

Emphasize that it is important for all members of a team to watch what their teammates write. If any student on either team sees a mistake made by a teammate during the game, he or she can use his/her turn to correct that error.

If you make this a "quiet game," it will hold down the "oooo's" that are sure to signal an error, and also further emphasize the importance of team members paying close attention to one another.

The first team to fill in all the squares on their grid is the winning team *if* all the answers on their chart are correct.

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The one with the most sets of correct matches wins.

Going to Boston: Math Facts: Primary to Intermediate

This game requires three dice and pencil & paper.

In one turn, the first player rolls all three dice. The highest roll is put aside. The next two dice are rolled and the highest number is put aside again. The last die is rolled, and then all three dice are added together.

The winner is whoever gets to a predetermined amount first, such as 100. Use a lower target for primary grades.

Variations on the game are adding the first two dice and multiplying the sum by the third; using any combination of addition, subtraction, multiplication or division to get the highest number possible, or just using two dice to practice basic math facts (addition, subtraction or multiplication).

Hundreds Chart Battleship

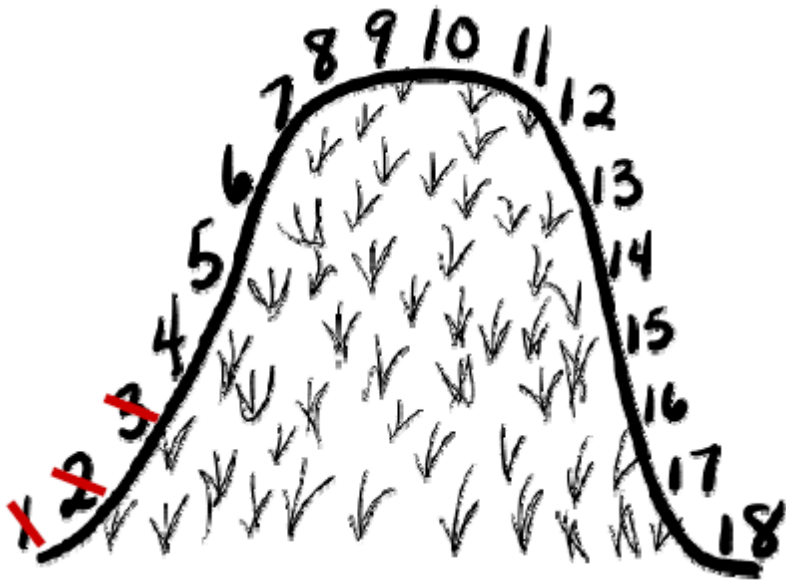
Each person creates 5 ships on their own chart:

One 2 number ship One 5 number ship

Two 3 number ships Place a divider between the boards and play like normal battle ship calling out the fact and solving

Over the Hill: Number Sense: Primary

Group students into pairs; give each student an Over the Hill worksheet and each pair 3 dice. Students will take turns rolling all 3 dice. They are to add or subtract the amounts shown on the rolled dice and then cross off those sums or differences on their "hill" number line. They must go in numerical order starting at 1 and will cross off as many as possible in that roll. When they cannot create any more numbers from the rolled dice, it is their partners turn. Each player's turn starts at the end point from the previous turn. The first to reach 18 wins.



EXAMPLE: Player A rolls a 3,4,6. She can cross off **1** (because $4-3 = 1$), **2** (because $6-4 = 2$), and **3** (because $6-3 = 3$) from her worksheet. She cannot make a sum or difference of **4**, so now it is player B's turn to roll. Each player's turn starts at the end point from the previous turn. The first to reach 18 wins.