

Multo primary/junior

Flash Cards; Multo Game Board

Directions for Playing

The game uses all of the 100 flash cards with the basic multiplication facts 0×0 through 9×9 .

Players get to make their own boards by writing 16 different numbers into the squares of a 4×4 grid.

The aim is to complete a full row, column, diagonal, or 4 corners of the board.

Note: To go deeper with the math, investigate the probability.

Multo

Part-Whole Bingo primary

Pair of Number Cubes; Connecting Cubes; Bingo Game Boards

Directions for Playing

Children usually play in pairs with one game board each. However, groups of three or four are also possible. A variety of game boards are provided to ensure that a diversity of equivalent expressions will occur. Players take turns rolling the pair of number cubes. The numbers on the two cubes combined determine the number of connecting cubes that can be placed on the boards. All the cubes can be placed on one track or divided to cover more than one track. Each player decides where they will be placed. The game ends when all the tracks are covered completely.

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Operation Target primary/junior

Number Cards

Directions for Playing

The teacher gives the children a target number for the game. Children play in pairs. Players take four number cards from the deck and try to make the target number with those cards, using addition or subtraction. If the target number is made, players record how they made it on their recording sheet. If the target is not made, players draw another card and try again to make the target number. At the end of the game, players examine all the ways they made the target number.

Find Toss primary/junior/intermediate

Object to Toss; Large Number Cards; Tape

Directions for Playing

Students play in two groups with each student receiving an object to toss in their group's colour; both groups should have an equal number of objects (i.e., if one group has 3 students and the other groups has 4 students, one student from the first group will go twice). The teacher will give students a target number. One student from alternating groups will have to throw their object onto a number from a specified distance. Students use the operations to attain the target number.

7	3	1
4	9	6
8	2	5

Product Game junior

Product Game Board; Paper Clips

Directions for Playing

Read the following rules before you begin playing The Product Game.

- 1.** Player 1 puts a paper clip on a number in the factor list. No square on the product grid is marked with Player 1's color because only one factor has been marked; it takes two factors to make a product.
- 2.** Player 2 puts the other paper clip on any number in the factor list (including the same number marked by Player 1) and then shades or covers the product of the two factors on the product grid.
- 3.** Player 1 moves *either one* of the paper clips to another number and then shades or covers the new product.
- 4.** Each player, in turn, moves a paper clip and marks a product. If a product is already marked, the player does not get a mark for that turn. The first player to mark four squares in a row -- up and down, across, or diagonally.

1	2	3	4	5	6
7	8	9	10	12	14
15	16	18	20	21	24
25	27	28	30	32	35
36	40	42	45	48	49
54	56	63	64	72	81

Factors:

1	2	3	4	5	6	7	8	9
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Rating Songs junior

Audio Player; Songs to play; Rating Songs Recording Sheet

Directions for Playing

Play a song to the class and have each student give it a rating: 0 – don't like it; 1 – neutral; 2 – Like it; 3 – really like it. Once student vote on all songs, have them complete the "rating" row per song (i.e., if 3 students rate 2, than the rating for that column would be 6), and then the total rating for each song to determine which song will is most popular.

Rating Songs

<i>Song</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>Total Rating</i>
<i>Your Rating:</i> <i>Total Votes:</i> <i>Rating:</i>					
<i>Your Rating:</i> <i>Total Votes:</i> <i>Rating:</i>					
<i>Your Rating:</i> <i>Total Votes:</i> <i>Rating:</i>					
<i>Your Rating:</i> <i>Total Votes:</i> <i>Rating:</i>					

Rating Songs intermediate

Audio Player; Songs to play; Rating Songs Recording Sheet

Directions for Playing

Play a song to the class and have each student give it a rating from -3 to +3 where negative numbers indicate dislike and positives indicated like with zero as neutral. Once student vote on all songs, have them complete the “rating” row per song (i.e., if 3 students rate -2, than the rating for that column would be -6), and then the total rating for each song to determine which song will is most popular.



Rating Songs with Integers

Song		-3	-2	-1	0	+1	+2	+3	Total Rating
1.	Your Rating:								
	Total Votes:								
	Rating:								
2.	Your Rating:								
	Total Votes:								
	Rating:								
3.	Your Rating:								
	Total Votes:								
	Rating:								
4.	Your Rating:								
	Total Votes:								
	Rating:								
5.	Your Rating:								
	Total Votes:								
	Rating:								
<p>Listen to the song played by your teacher. Check your rating for each song (-3 strongly dislike to +3 strongly like). As a class, tally the number of votes for each rating. Find the total rating for each value (i.e. if 4 people vote -3, the rating is -12). Find the total rating for each song (i.e. add all the ratings). Find the total rating for the CD (i.e. add all the total song ratings).</p>								Total CD Rating	

Score with Four junior/intermediate

3 numbered cubes, Score with Four Game board

Directions for Playing

The object of the game is to be the first player to get four X's or O's in a row, orthogonally (i.e., vertically or horizontally) or diagonally.

Player 1 rolls all three dice and uses all three number and one or two operations to make a number statement (e.g., $2 \times 5 + 4 = 14$). Player 1 then marks an "X" on the answer on the game board. Player 2 then rolls all three numbered cubes and uses all three numbers to make a number statement. Player 2 marks an "O" on the answer on the game board.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	44	45	48	50	54	55
60	64	66	72	75	80	90	96
100	108	120	125	144	150	180	216

Greedy Pig junior/intermediate

Numbered Cubes

Directions for Playing

The object of the game is to determine a strategy that in the long term will maximize the total points. All players get the first rolls of the two numbered cubes for free. A pair of numbered cubes is rolled twice. The scores are added together. Each player keeps track of this value which is now their current score. All players now stand up. Each player now has two options:

1. They can quit and their score is the total of the roll. They sit down and record this score for round 1.
 2. They can continue to play and remain standing. The numbered cubes are rolled again. If the sum rolled is 2, the players that are still standing lose all points for that round. They sit down and record a zero for their total for round 1. Otherwise, students add the sum to their previous score.
- This process is continued for 5 rounds.

Round	Score	Points
1		
2		
3		
4		
5		

River Crossing junior/intermediate

Chips; Number Cubes

Directions for Playing

In pairs, students play using 12 boats (i.e., chips) each. The object of the game is to have all 12 boats cross to the other side of the river. Each student places their chips on their side of the river on any combination of dock numbers from 1 to 12. Players take turns rolling two numbered cubes. Students remove one of the chips on the dock corresponding to the sum rolled if it appears on the dock. If not chip is on the dock of the sum rolled, the turn goes to the other person.

Warp Speed primary/junior/intermediate

Ball to pass; Stop Watch

Directions for Playing

The group stands in a circle with hands in front. One person starts with the ball, states their name, and passes it to another person in the group, stating their name. Once they have passed, they put their hands behind their back. Tell people to remember whom they threw to.

Repeat exactly as above and time it. Record this as Trial 1, and record the time.

Ask – What are some ideas that could help speed it up? Choose 1 idea and do it. Repeat and time it again. Continue to brainstorm ways of speeding up the passing and record each time. Only implement 1 idea at a time. Must stick to saying ‘my name is xxx, I am passing to yyyy’. The sequence of people who receive the ball must remain constant. With each repetition, record the results.

Mystery Bag primary

3D Solids; Opaque Bag; Mystery Bag Game Board

Directions for Playing

Divide students into groups of three. Provide each group with a Mystery Bag containing a sphere, cube, cone, and cylinder and the game board. Each player, in turn, reaches into the Bag, selects a figure, and describes it while it is still in the bag. The player removes the figure from the Bag and places a counter on a matching picture of the figure on his or her game board. The player puts the figure back into the Bag, and the next player takes a turn.

Players return a shape to the Bag if the shape they remove already has counters on both matching pictures. The game continues until one player has placed a counter on all eight sections of his or her game board.

Geometry Barrier Game primary/junior/intermediate

Chart Paper; Markers; Barrier;

Directions for Playing

In pairs or groups, students will work to describe and draw a 2D shape. One student will select a 2D shape and describe it to his/her partner, who does not know the shape. This partner will attempt to draw the described shape given the instructions provided. Partners may change roles.

Note Variations:

Partner 1 cannot see Partner 2 and Partner 2 may not communicate with Partner 1.

Partner 1 cannot see Partner 2 and Partner 2 may communicate with Partner 1.

Partner 1 can see Partner 2 and Partner 2 may communicate with Partner 1.

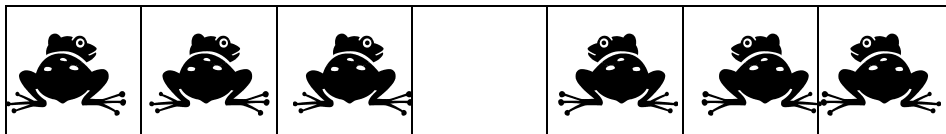
Partner 1 can see Partner 2 although Partner 2 may not communicate with Partner 1.

Partner 1 can see Partner 2 and Partner 2 may ask questions

Frogs intermediate*Coloured Chips; Frogs Game Board*Directions for Playing

You will be playing using 3 Red Frogs (**R**) and 3 Yellow Frogs (**Y**). You can start by placing 3 Red Frogs (**R**) in successive positions on the left string of squares; 3 Yellow Frogs (**Y**) occupy the rightmost square. There is always one free space in the middle.

R R R Y Y Y



Red Frogs (R) can only move rightward.

Yellow Frogs (Y) can only move leftward.

Every move is either a slide (S) one position over or a jump (J) over one position.

You can only jump (J) over a frog of another colour.

Goal of the Puzzle:

Move the Red Frogs (R) to the rightmost positions and move the Yellow Frogs (Y) to the leftmost positions.