

Prep and Year 1 Maths Games Evening for families

Thursday 24 October 2019

4pm – 4.45pm

5.30pm – 6.15pm



Bialik College

Welcome

We warmly welcome our Prep and Year 1 families to enjoy the excitement of mathematics during an evening of Maths games.

This interactive evening will take place in the Mifgash on Thursday 24 October from 4pm to 4.45pm or 5.30pm to 6.15pm. This event offers families the opportunity to experience a range of hands-on and enjoyable maths games from our classrooms.

Throughout the evening, we will make connections to the Victorian Curriculum Mathematics including strategic thinking, fluency and understanding. We will also demonstrate how we extend and enable games in the classroom to meet the needs of all learners.

Why play maths games?

Maths games offer the opportunity to:

- Encourage strategic thinking and understanding
- Support development of fluency
- Are highly engaging and motivating
- Hold students accountable as they record their thinking
- Support home and school connections as they provide insights into the classroom.

Questions to ask while playing maths games

Pose the following questions when playing Maths Games to focus upon strategic thinking:

- Which strategies did you use while playing the game?
- If you were to play the game again, what different strategies would you use?
- How could you tweak or modify the game to make it more challenging?

Go Fish

Materials

For 2 to 4 players, one deck of cards with Kings and Jacks removed (Ace = 1, Queen = 0)

Rules

Play like Go Fish with students looking for combinations of 10.

Players each receive 4 cards they can look at but don't let the other players see. The remaining cards are placed face down and become the "fish pond" (draw pile).

Each player looks for combinations of 10 in their four cards. These cards are laid on the table for all to see and additional cards are drawn from the "fish pond" so each player always has at least 4 cards.

Players take turns asking each other for a specific card to make 10. For example, if Jimmy has 4 in his hand he may ask another player "Do you have a 6?" The player either hands over the requested card or says "Go Fish".

Players continue to draw cards to ensure they have at least four cards in their hands. Play continues until all cards are used.

Aim

The winner is the player with the most combinations to 10. Players look back over each other's combinations to ensure accurate calculations and to explain their strategies.

The mathematical purpose of this game is building understanding and fluency with combinations to 10.

Extending prompts

1. Play with at least 5 cards in a hand and change the sum to 20.
2. Players can use addition, subtraction or multiplication to reach 10 for example $6 \times 2 - 2$. Play again and change the target number to 24.

Sum Duel

Materials

Played in pairs with one deck of playing cards where Kings and Jacks are removed (Ace = 1, Queen = 0)

Rules

Split the deck so each player has half the cards.

At the same time, players turn two cards and call out the sum of their numbers. Each player checks their partner's calculations and discusses strategies.

If both players are correct, the person with the greatest sum wins all cards for the round. If only one player is correct, they win the round. If neither player is correct, the cards return to the bottom of each player's deck.

The winning player for each round keeps the cards. Play continues until one of the decks is gone or time is called.

Aim

The player with the most cards is the winner. Cards should not be exchanged until players can explain their strategies for calculating the total.

The mathematical purpose of this game is to develop efficient strategies for calculating addition.

Extending prompts

1. Keep a running total. What strategies are you using to keep your running total? After 5 turns, the winner is the person with the highest total.
2. Change to subtraction and find the difference. The player with the smallest difference wins the cards.
3. Change to multiplication and compare products. The player with the largest product wins the cards. Discuss strategies for calculating multiplication facts.

Tactix

Materials

A game for two players with 16 counters

Rules

Place 16 counters into a square array as shown.

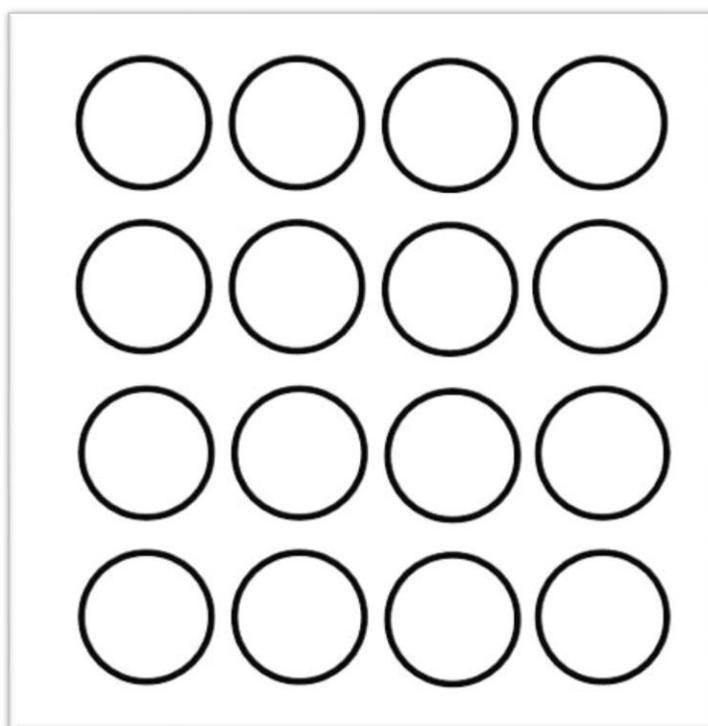
Players take turns to pick up any number of counters, but from one row. They do not have to be next to each other.

Aim

The aim is to avoid being the last person forced to make the last move.

Extending prompt

1. Keep playing the game until you work out a winning strategy. What do you notice? Does it matter who has the first turn? Write your winning strategy as a claim and be prepared to share at your table.
2. Keep track of the pieces you take each time. What is the least number of turns taken to win? The most number? Can you check your claims by playing several times to ensure this is always the case?



Game of 57

Materials

A game for two players, a copy of the 3 x 3 magic square, a counter

Rules

The first player places the counter on any square. This number counts as the starting total.

The second player now moves the same counter to a new square and adds the number to the total.

When moved, the counter must not be placed on the same row or column as the previous number. So for example, if the first player puts the counter on '9', the second player cannot use 1, 5, 2, or 4. If the second player chose '7', then the total would be $9 + 7 = 16$ and so on.

Aim

The game is won if a player reaches a score of exactly 57 or forces the opponent beyond that number. This game encourages efficient strategies for solving addition, and strategic thinking.

Extending prompt:

What is the least amount of moves taken to win the game?

6	7	2
1	5	9
8	3	4