Highland Numeracy and Mathematics

Card Games
At Home

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ANNIE'S AMAZING MENTAL MATHS GAMES

The ideas in this resource have been reproduced, with permission, from Annie Mellor's book, 'Annie's Amazing Mental Maths Games'. If you'd like to find out more about the book click here.

Highland Numeracy and Mathematics:
Card Games At Home

The aim of these games is to engage learners 'in mental maths' in a fun and non-competitive manner.

In most games, the aim is to play together to beat the cards and always have FUN!

The value of the cards in all of these activities is as follows:

Ace = 1
Jack = 11
Queen = 12
King = 13

Alter cards used to suit the needs of the players:
- Level 1: use cards Ace, 2, 3, 4, 5 & 6
- Level 2: Ace, 2, 3, 4, 5, 6, 7, 8, 9, 10
- Level 3: Ace, 2, 3, 4, 5, 6, 7, 8, 9, 10, Jack (11), Queen (12), King (13)

If you wish to view this document as a WORD DOCUMENT, click HERE.

Card Games At Home

Quick Links

Click on the text to be taken to the relevant section of the document or just browse through the document:

All games can be adapted to suit different levels by varying the focus, questioning or cards available.

Game/Instructions		Example 'Facts' and Questions	
➜ SNAP	➜ Pyramid	➜ Early	➜ First - Third
➜ Pairs	➜ Scottish Flag	➜ First	➜ Second/Third
➜ Victory	➜ Grab	➜ First	➜ Third+
➜ Number Towers	➜ Fish For It!	➜ First/Second	

Card Games At Home

SNAP

Develop your skills of accurate observations and fast reactions!

What do we need?

- One pack of playing cards (or picture cards)
- 2 or more players.

Instructions:

1. Shuffle the cards.
2. Deal the cards as equally as possible to each player.
3. Take turns to place a card, face-up, into the middle.
4. If two cards are the same value, the first player to shoul SNAP and place their hand on the pile can take all the cards in the middle.
5. Play continues until someone wins all the cards, or until time is up.

Card Games At Home

PAIRS

Practise turn taking and matching. This game helps with concentration skills and memory.

What do we need?

- One pack of playing cards (or picture cards)
- 2 or more players.

Instructions:

1. Place cards on table face up for EARLY LEVEL or face down for FIRST LEVEL.
2. Take turns to find matching pairs of cards.
3. Play continues until all pairs are found.

Adaptations:

Click here for adaptations at Early, First and Second Level

Card Games At Home

VICTORY

Practise concentration and memory skills.

Practise addition for number bonds to 13.

What do we need?

- One pack of playing cards. Alter pack to suit players

  e.g. cards Ace - 6, Ace - 10 or Ace - King (13)

- 2 or more players.

Instructions:

WE ARE MAKING NUMBER BONDS IN THIS GAME e.g. we are trying to find paris of cards that go together to make 10. If player 1 turns over a 6, they would then need a 4.

1. Place cards on table face up for EARLY LEVEL or face down for FIRST LEVEL.
2. Take turns to find matching pairs of cards that make the total agreed.
3. Play continues until all pairs are found.
4. Select another number to make and play again!
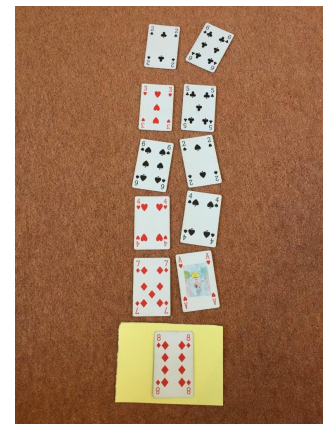
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Number Towers

Practise addition facts within 10.

What do we need?

- One pack of playing cards.
- 1 player and someone to check the tower or 2 players work together to complete the tower.

Instructions:

1. Choose a NUMBER TOWER to build e.g. 8
2. Build the tower using pairs of cards that make 8 - look through the cards to find the cards you need.
3. Players can check they have built the tower correctly.

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Pyramid

Practise addition and subtraction within 20 using 2, 3, 4 and 5 numbers.

What do we need?

- One pack of playing cards.
- Scrap paper to write the pyramid number on.
- 1 player and someone to check the pyramid or 2 players work together to complete the pyramid.

Instructions:

1. Select a target number between 10 and 20.
2. Use addition and subtraction to make your pyramid shape iwth each line totalling the target number. Players place the cards out using 2 cards, then 3 cards, then 4 cards and finally 5 cards.
3. Tell someone how you made your pyramid.

Card Games At Home

Scottish Flag

Practise addition and subtraction within 20.

What do we need?

- One pack of playing cards.
- Scrap paper and a pencil.
- 2 or more players.

Instructions:

1. Shuffle cards
2. Each player chooses 4 target numbers (between 0-20) and writes them on their Scottish flag (different players can have the same number).
3. Dealer lays out four cards - see photo.
4. Player 1 must use 2 or more cards to eliminate one of their totals e.g. 10 plus 2 = 12

5. Player 1 must say the number sentence aloud so other players can confirm it is correct. When confirmed, Player 1 can eliminate this number.
6. Any cards used by player 1 are now covered with new cards from the central pil.
7. Player 2 takes a turn.
8. Play continues until one player has eliminated all their numbers.

Card Games At Home

Grab

Game for ALL levels

Illustrates different ways to get the same total.

What do we need?

- One pack of playing cards.
- 2 or more players.

Instructions:

1. Spread cards out onto table/floor - face up.

2. Say the instruction ONCE (to encourage and focus listening skills). For example: 'Find 2 cards to make 10.' DO NOT GRAB the cards until the CALLER says 'GRAB' this lets all players scan the cards.
   For further examples of QUESTIONS at different levels click HERE.

3. Players then grad their cards.

4. Show your cards to other players and say your number sentence e.g. 10 = 3 + 7

5. Once all players have shared, the cards are returned to the floor/table.

6. Caller asks next question… play continues.

Card Games At Home

FISH For It!

Game for ALL levels

Good for revisiting maths vocabulary.

What do we need?

- One pack of playing cards.
- 2 or more players.

Instructions Part 1:

1. Each player is given 5 cards, which they can look at. Any pairs of cards are matched up (e.g. a pair of 8s) and are placed on the table - they are no longer needed.
2. The object of the game is to get rid of all your cards by asking for matching pairs according to the 'facts' you have chosen to target. For examples of 'fact' types and sample questions, click HERE.
3. Play starts with the oldest player and continues around the group.

See next slide for Instructions Part 2

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FISH For It!

Game for ALL levels

Good for revisiting maths vocabulary.

Instructions Part 2:

4. Player One looks at their cards and thinks of a question so they can find a card to make matching pairs e.g. if they have 6 they need to think of a question that gives an answer of 6.

5. Player One says to the person sitting on their left-hand side:

    'Do you have the card which is 2 more than 4?'

6. Player 2 replies, after working out the question,

    'Would you like a 6?'

7. Player 1 says,

    'Yes, please.' IF Player 2 has a '6' they need to hand it over and Player 1 can discard the matching pairs.

    IF Player 2 does not have a 6, they can say,

    'FISH FOR IT!' Player 1 takes a cad from the pile. If this card matches any cards in their hand, they can discard the pairs (bonus).

8. Player 2 now take a turn. Play continues until someone is left empty handed.

Card Games At Home

Example questions for

GRAB: 'Can you find me…'

FISH FOR IT: 'Do you have…'

➜ **NUMBER RECOGNITION**

➜ **EARLY ADDITION AND SUBTRACTION**

➜ **Cards Ace to 10**
- The card which is 7
- The card which is 1 more than…
- The card which is 1 less than…
- The card which is 2 more than…
- The card which is 2 less than...

➜ **DOUBLES/HALVES WITHIN 10/20**

➜ **Cards Ace to 10**
- The card which is half of 4.
- The card which is double 5.
- The card which is half of 18.
- The card which is double 6.

Card Games At Home

Example 'Facts' and Questions: First

Example questions for

GRAB: 'Can you find me…'

FISH FOR IT: 'Do you have…'

➔ **ADDITION AND SUBTRACTION WITHIN 10**

➔ **Use language to suit players**

➔ **Cards Ace to 10**

- **The card which is 7 plus 2.**
- **The card which is 4 plus 4.**
- **The card which is 2 add 5.**
- **The card which is 4 more than 3.**
- **The card which is 7 minus 3.**
- **The card which is 4 take away 1.**
- **The card which is 3 less than 8..**

➔ **ADDITION AND SUBTRACTION FACTS TO 10 (BONDS TO 10)**

➔ **Cards Ace to 10**

- **The card which goes with 6 to make 10?**
- **The card which goes with 3 to make 10?**
- **The card which which is 5 less than 10?**
- **The card which is 8 less than 10?**

Card Games At Home

Example 'Facts' and Questions: First

Example questions for

GRAB: 'Can you find me…'

FISH FOR IT: 'Do you have…'

➔ **ADDITION USING MORE THAN 2 NUMBERS**

➔ **Cards Ace to 10**

- The card which is 3 plus 4 plus 2.
- The card which is 2 plus 2 plus 1.

➔ **SUBTRACTION USING MORE THAN 2 NUMBERS**

➔ **Cards Ace to 10**

- The card which is 10 - 3 - 2
- The card which is 8 - 1 - 2

➔ **MIXED ADDITION AND SUBTRACTION**

➔ **Cards Ace to 10**

- The card which is 2 + 2 - 1
- The card which is 3 + 2 - 1
- The card which is 9 - 4 + 2

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Example 'Facts' and Questions: First/Second

Example questions for

GRAB: 'Can you find me…'

FISH FOR IT: 'Do you have…'

➔ **MULTIPLICATION**

➔ **Cards Ace to King (13)**

- ◆ **The card which is 2 x 4**
- ● **The card which is 5 x 2**

➔ **DIVISION**

➔ **Cards Ace to King (13)**

- ◆ **The card which is the number of times 9 goes into 36**
- ◆ **The card which is 80 divided by 10**

➔ **MIXED MULTIPLICATION AND DIVISION**

➔ **Cards Ace to King (13)**

- ◆ **The card which is 6 times 2 divided by 3**
- ● **The card which is 27 divided by 3 multiplied by 4**

Card Games At Home

Example 'Facts' and Questions: First - Third

Example questions for

GRAB: 'Can you find me…'

FISH FOR IT: 'Do you have…'

➔ **FRACTIONS**
➔ **Cards Ace to King (13)**
   ◆ **The card which is half of 14**
   ◆ **The card which is a third of 9**
   ◆ **The card which is a fifth of 35**
   ◆ **The card which is a tenth of 100**

➔ **MORE FRACTIONS**
➔ **Cards Ace to King (13)**
   ◆ **The card which is two thirds of 18**
   ◆ **The card which is three quarters of 12**
   ◆ **The card which is four fifths of 10**

Card Games At Home

Example questions for

GRAB: 'Can you find me…'

FISH FOR IT: 'Do you have…'

➔ **MULTIPLES**

➔ **Cards Ace to King (13)**

- The card which is a multiple of 3 between 14 and 17

- The card which is a multiple of 2 greater than 8 but less than 12

- The card which is the lowest common multiple of 3 and 4.

➔ **FACTORS**

➔ **Cards Ace to King (13)**

- The card which is a factor of 27 between 5 and 15

- The card which is the highest common factor of 4 and 8

Card Games At Home

Example questions for

GRAB: 'Can you find me…'

FISH FOR IT: 'Do you have…'

➔ **SQUARE NUMBERS AND SQUARE ROOTS**

➔ **Cards Ace to King (13)**

- **The card which is the square root of 169**

- **The card which is three squared**

➔ **PRIME NUMBERS**

➔ **Cards Ace to King (13)**

- **The card which is the next prime number after 8**

- **The card which is the third prime number (1 is not a prime number)**