



# I hate maths

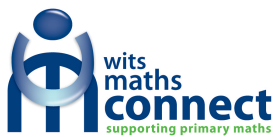
'I hate maths. Or do I ...?'

Number Cards games

selected by

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## Game sources

Nice or nasty: [nrich.maths.org](http://nrich.maths.org)

Seven up: [http://www.mathsolutions.com/wp-content/uploads/winwin\\_mathgames.pdf](http://www.mathsolutions.com/wp-content/uploads/winwin_mathgames.pdf)

In the zone: 'Acing Math' downloadable from

[http://www.pepnonprofit.org/uploads/2/7/7/2/2772238/acing\\_math.pdf](http://www.pepnonprofit.org/uploads/2/7/7/2/2772238/acing_math.pdf)

## Once through the pack

**Learning:** Basic fluencies practice  
**Players:** One  
**Materials:** A pack of 44 cards – four each of 0 - 10

### How to Play:

1. Agree with the class or individual what 'the rule' is going to be. It could be something like: add 10, double, multiply by 5, add 9. Or: multiply by 10 and subtract 1.
2. The player shuffles the cards.
3. They turn the cards over one at a time and apply the rule to the face-up card. For example, the rule is 'multiply by 5' and they turn over 4, they say '20'; they then turn over 7 and say '35'.
4. They continue until they have turned over all the cards in the pack and applied the rule to each one.

### Variation

Play in pairs and deal half the pack to each player.  
One player goes through their half pack while their partner checks that they get each answer correct.  
They swap roles.

## Seven Up

**Learning:** Number bonds of 10  
**Players:** Two  
**Materials:** A pack of 40 cards – four each of 1 - 10

### How to Play:

1. Player 1 deals the cards, Player 2 keeps the cards removed.
2. Player 1 deals seven cards face up in a row.
3. Working together, players remove all the cards with 10 on. They then remove any pair of cards that add to 10.
4. Each time players remove cards, they replace them with cards from the remaining pack.
5. If it is not possible to remove any more cards, Player 1 deals a new row of seven cards on top of the cards that are there.
6. The round ends when it's no longer possible to make 10s or all of the cards are used up. The score for that round is the number of cards not picked up.
7. Players swap over: Player 2 becomes dealer and Player 1 collects the cards. Shuffle the cards before dealing out a new row of 7.
8. Play continues for 5 rounds. The pair with the fewest points after the last round is the class champion.

## In the zone

**Learning:** Tables facts  
**Players:** Two  
**Materials:** A pack of 40 cards – four each of 0 - 9

### How to Play:

1. Shuffle the cards, and deal 10 cards to each pair.
2. Turn over the top card of the remaining stack of cards.
3. Multiply the value of the card turned over by 10. For example a 6 is turned over and multiplied by 10 to make 60.
4. Players look at their own of cards and try to find a pair of cards whose product is in that "decade". For example, if the face-up card is a six, then the zone is any number in the sixties (60-69), so a winning pair could be 9 and 7 ( $9 \times 7 = 63$ ) or 8 and 8 ( $8 \times 8 = 64$ ).
5. Any player who can make a pair removes those cards from his or her hand.
6. Turn the next card in the stack face up and multiply its value by 10 to set up the next zone.
7. Play continues until one player has removed all their cards.

## Target

**Learning:** Number properties  
**Players:** Four (two pairs)  
**Materials:** A pack of 44 cards – four each of 0 - 9

### How to Play:

1. Shuffle the cards, and deal 5 cards to each pair.
2. The teacher sets a number of challenges. Each pair uses some or all of their five cards to try and meet the challenge and beat their partners. They use the same five cards for each challenge.
3. Possible challenges:
  - Round 1: The largest 3-digit number
  - Round 2: The smallest 4-digit number
  - Round 3: The largest multiple of 3
  - Round 4: The smallest 2-digit even number
  - Round 5: The largest 2-digit odd number
  - Round 6: The number closest to 500
  - Round 7: The even number closest to 800
  - Round 8: The odd number closest to 700
  - Round 9: The largest 3 digit multiple of 5
  - Round 10: Two cards with the largest sum
  - Round 11: Two cards with the smallest difference
  - Round 12: Two cards with the largest product
4. Pairs score 1 point for each challenge they win.
5. The winning pair has the most number of points.

## Nice or nasty

**Learning:** Place value  
**Players:** Two  
**Materials:** A pack of 44 cards – four each of 0 - 9

### How to Play:

#### Nice version

1. Each player writes H T U on a paper with space for cards under each letter.
2. Place the shuffled cards face down on the table. Player 1 takes the top card.
3. Player 1 decides whether to place their card in the H, T, or U place, aiming to make the largest 3-digit number.
4. Player 2 turns over the next card and decides whether to use it as a H, T or U.
5. Players take cards in turn until each player has created a 3-digit number.
6. The winner of that round is the player with the larger number.
6. Play continues for 5 rounds.

#### Nasty version

As above but every time a player turns over a card they can choose either to play it on their own board or on their partner's board.

## Close to 100

**Learning:** Addition  
**Players:** Four (2 pairs)  
**Materials:** A pack of 40 cards – four each of 0 - 9

### Variation

Deal six cards to each pair. They use 3 of the cards to create a 2-digit number and a single-digit number. The aim is for the product of their two cards to be closest to 100 without going over.

### How to Play:

1. Shuffle the cards, and deal 6 cards to each pair.
2. Each pair selects four of their cards and uses them to create two 2-digit numbers. The aim is to create two numbers that have a sum as close to 100 as possible, without going over. (For example, a player may choose to use the cards 5, 6, 7, and 1, creating the sum  $76 + 15 = 91$ .)
3. After pairs have chosen their cards, they place them face up in front of them, arranging them so the other pair can see which two numbers they have created.
4. The pair with the sum closest to 100, without going over, wins a point. In the case of a tie, a point is awarded to each pair.
5. Shuffle the cards before dealing another round.
6. Play continues for 5 rounds. The pair with the most points after the last round wins the game.