# These are the games demonstrated at our Number Fact sessions.

Some are straight from the Families section of NZmaths (<u>www.nzmaths.co.nz</u>) so go online and find more.

Make 10 - Number Facts, Stage 0-3

#### Purpose:

To help your child to learn the addition number facts to 10.

#### What you need:

• A pack of cards with the picture cards, jokers and tens removed. Ace is used as 1.

#### What to do:

- Deal out 10 cards in a row, face up.
- Players take turns to pick up 2 or more cards that add to 10. For example 3+7, 2+3+5, 2+1+4+3, 3+1+6.
- At the end of each player's turn, the cards they have removed are replaced from the deck.
- The game finishes when no further combinations can be found. The winner is the player with the greatest number of cards.

#### What to expect your child to do:

Be able to instantly recognise combinations of numbers that add to 10.

#### Variation:

Once your child is confident with the number facts to 10, choose a different target number. For example make all cards add to 12 or 15.

Squeeze - Number Facts, Stage 2-3 (See attached sheet)

Little I Spy - Number Facts, Stage 1 – 4 (See attached sheet)

# Doubles and Halves Memory - Number Facts, Stage 4

#### Purpose:

The purpose of this activity is to help your child to learn doubles of numbers and their corresponding halves. For example 10 + 10 = 20, and  $\frac{1}{2}$  of 20 is 10, 8 + 8 = 16 and  $\frac{1}{2}$  of 16 is 8.

#### What you need:

• Game cards – included in your pack

#### What to do:

Use the doubles and halves cards to play memory. The aim of the game is to find as many matching pairs as possible by remembering where the cards are.

- Spread out all the cards face down.
- Turn over 2 cards. If the cards match, for example " $\frac{1}{2}$  of 4" and "2" players get to keep the pair. If the cards don't

match, players replace them face down.

- Take turns to try and find a matching pair.
- The winner is the player with the most pairs at the end of the game.

Have many pairs can you get?

#### What to expect your child to do:

Be able to instantly recall doubles and their corresponding halves.

# Add and Multiply - Number Facts, Stage 5

#### What you need:

- Four dice
- Pen and Paper for recording

# What to do:

The aim of the game is to produce the largest total by adding the values on pairs of dice and then multiplying these two totals.

- The dice are rolled. Players race to produce the largest value. For example, If 2, 4, 5, 6 are thrown they could be paired as:
  - 2 + 4 and 5 + 6 which would give  $6 \times 11 = 66$  or
  - 2 + 5 and 4 + 6 which would give 7 x 10 = 70 or
  - 2 + 6 and 4 + 5 which would give  $8 \times 9 = 72$ , the winning total
- Roll again. The first player to win three games is the winner.

# What to expect your child to do:

Children should be able to add numbers to ten together mentally or give instant responses to these.

# Variations:

- Try to get the smallest value
- Add three numbers together and multiply the total by the fourth number
- Use 5 dice: Add three numbers and two numbers and then multiply these totals

# Subtraction facts to 20 - Number facts, Stage 6

#### What you need:

• A pack of cards without the picture cards. Ace is used as 1.

# What to do:

Shuffle the number cards and hold them face down in a pile in your hand.

Ask your child to choose a number between 11 - 20. Then flip over the top card over and ask them to subtract that number from the number they have chosen. If the child answers quickly and correctly give them the card, if not put it back into your pile. The activity continues until your child has collected each card from you.

# What to expect your child to do:

• To instantly recall the addition facts up to 20.

# Variations:

Two players could compete against each other to give the answer.

A timer could be used to compete against.

The child could choose the same number between 11 and 20 to focus on.

You could choose the number between 11 and 20 and your child could flip the 1 - 10 cards over.

# Calculator Factors to 100 - Number Facts, Stage 7-8.

(Factors are numbers that divide evenly into a number with no remainder, for example, the factors of 6 are 1, 2, 3, and 6.)

# What you need:

• A calculator

# What to do:

- Enter a 2 digit number into the calculator.
- Ask your child to name as many factors of this number as they can. Factors come in pairs that multiply together to give the number. Every number has at least 1 and itself as factors.
- If your child is unsure whether a number is a factor, use the calculator to check. For example, if they are unsure whether 6 is a factor of 48, calculate 48 divided by 6. This will tell you the number that multiplies with 6 to give 48. In this example 48 ÷ 6 = 8 so both 6 and 8 are factors of 48. If the answer to the division is not a whole number, ie, it has a decimal point, then the number is not a factor. For example 48 ÷ 5 = 9.6 so 5 is not a factor of 48.
- Take turns with your child to name factors for numbers and use the calculator.

# What to expect your child to do:

• Use the basic multiplication facts they know to help them identify factors. For example, if you know 4 x 8 is 32, you can use this to identify that 4 and 8 are factors of 32.