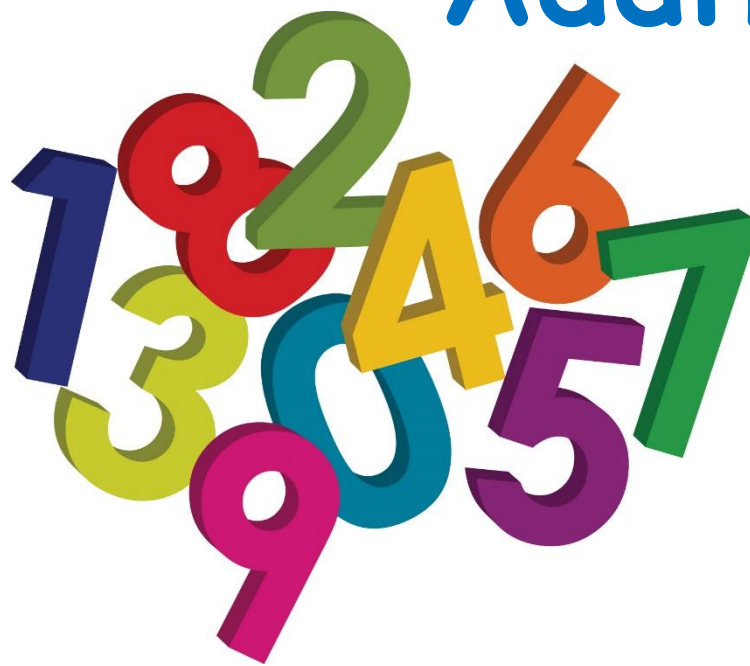




Maths

Booklet

Addition



Willows

The aim of this booklet is to outline what is expected that a child can do in addition by the end of Year 2.

We have included some of the strategies that will be used in class so that support is given in the same way at home.

We have also included some games and activities that can be completed together at home to help your child develop fluency and understanding.

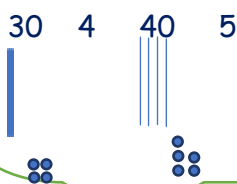
Expected targets

- Recall and use all addition facts to 20 fluently, and use related facts up to 100.
- Add numbers using concrete objects, pictorial representations, and mentally:
 - a two-digit number and 1s (e.g. $34 + 6$)
 - a two-digit number and 10s (e.g. $53 + 10$)
 - 2 two-digit numbers (e.g. $47 + 24$)
 - adding 3 one-digit numbers (e.g. $9 + 5 + 3$)
- Solve problems with addition and subtraction

When helping your child it is important to unitise - **43** and **21** you are adding **3 ones** and **1 one** and **4 tens** and **2 tens**.

Draw dienes to help visualise the number when it is partitioned.

$$34 + 45 =$$



3 tens and 4 tens are 7 tens which is 70
4 ones and 5 ones are 9 ones.

Using number bonds

$$7 + 3 = 10$$

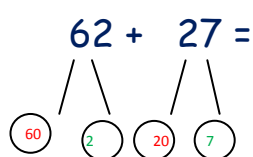
$$27 + 3 = 30$$

$$27 + 13 = 40$$

Leading on to:

$27 + 14 = 41$ (noticing 7 ones and 3 ones = 10 and then add 1 more one).

Using partitioning and part, part whole models



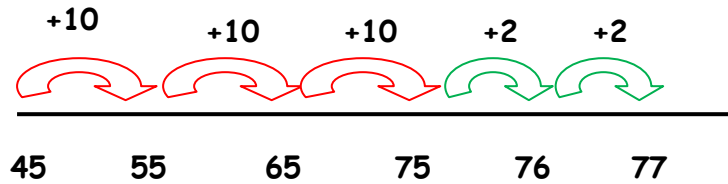
$$\text{So: } 60 + 20 = 80$$

$$2 + 7 = 9$$

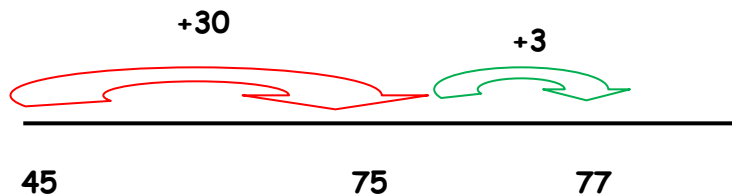
$$80 + 9 = 89$$

Using a blank number line

$$45 + 32 =$$



As children get more confident they will be able to do bigger jumps



Games and Activities

Learning Addition Facts by Playing Memory

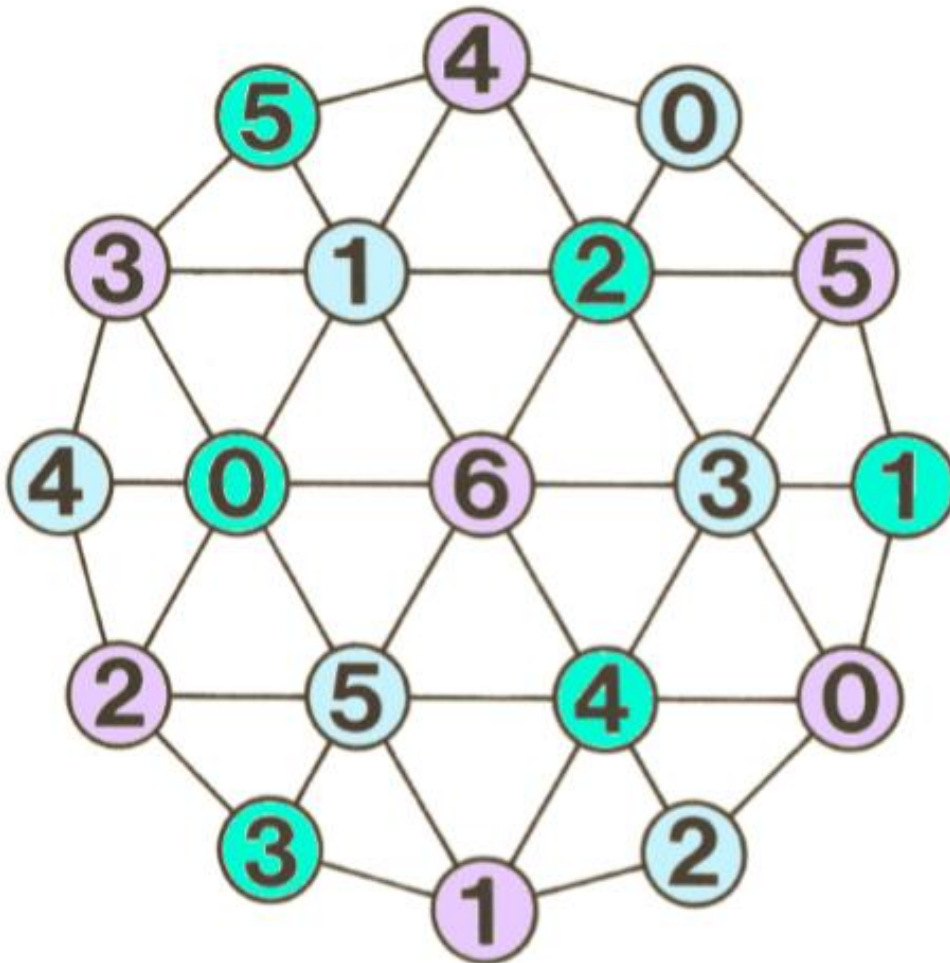
The card game Memory is a great game that can be modified to teach addition facts to children. The game focuses on math facts for a specific number.

All that's needed to play this game is a standard deck of playing cards. It can be played alone or with a group.

How to Play Memory

1. Sort through the deck to remove all cards that are higher than that featured number for the math game. For example, if the goal is to learn addition facts for the number six, the game will be played with ones (aces) through sixes.
2. Shuffle the deck and turn all the cards face down in a grid pattern.
3. Taking turns, have each player flip two cards to look for a matching pair. For example, if learning addition facts for the number six, appropriate pairs would be 5+1, 4+2 or 3+3. The 6 card would also be laid aside as a correct solution that doesn't require a pair.
4. Continue playing until all the cards in the deck have been matched into pairs. The player with the highest number of pairs at the end of the game is the winner.

Totality:



The aim of the game:

Slide the shared counter across several adjacent numbers, adding them up as you go to make a 'running' total. Be the player to make the final slide so that the chosen target is reached exactly. Making the total go above the target loses you the game.

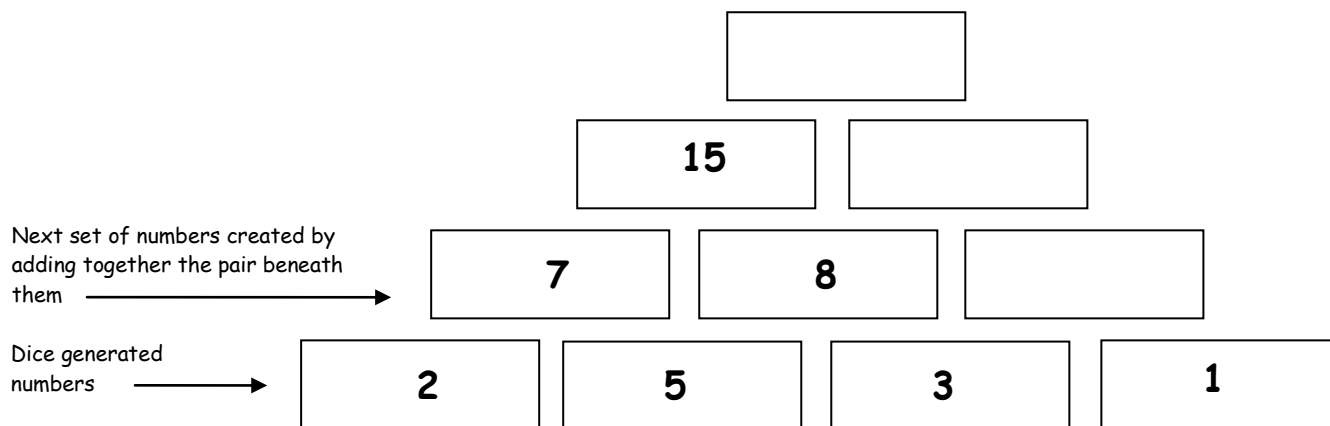
How to play:

1. Player 1 chooses a target to reach. This is the total both players try to make.
2. Player 2 places their counter on the game board over one of the numbers and says that number.
3. Player 1 moves the same counter in any direction along a line segment to a neighbouring number and announces the total of the two numbers.
4. Player 2 moves the same counter to cover a neighbouring number, adds on that number, and announces the 'running' total of the three numbers.
5. Players take it in turns to slide the counter to cover a neighbouring number and to add that number to the 'running' total.
6. Players must move when it is their turn.
7. No 'jumping' is allowed.

Bricks

Each player will need a copy of the bricks pattern (below) and a dice.

They throw a 1-6 dice 4 times and fill in the bottom row of the brick pattern. Now complete the next row by adding the two boxes below each brick.



The player who achieves the highest final number (at the top of the brick pattern) is the winner.

Useful Links and websites:

www.ictgames.com/resources.

<https://www.topmarks.co.uk/maths-games>

<http://www.sowealleyprimary.co.uk/documents/DiceGames-plus.pdf>