Number Games

The following games have been devised for children to play as part of their number activities to help them develop and consolidate important ideas in number. Teachers may find them a useful tool in the task of managing a whole class. The page numbers below relate to the teachers’ handbook - Ready, Set, Go — Maths. All games are copyright free.

LIST OF GAMES AND THEIR LEARNING POTENTIAL

Developing one-to-one correspondence
Happy Faces----------------------------------------------- page 123

Developing cardinal number within 5
Sweetie Jar --------------------------------------------- page 128
Animal Hunt--------------------------------------------- page 129
Snail Trail --------------------------------------------- page 129

Developing cardinal number within 10
Hidey Holes -------------------------------------------- page 140
Humpty Dumpty ----------------------------------------- page 140

Developing cardinal number within 15
Pawprints --------------------------------------------- page 148

Developing mental confidence
Memory Match (1-6)-------------------------------------- page 134
Make Five --------------------------------------------- page 67
Memory Match (5-10)------------------------------------ page 140
The add one machine ----------------------------------- page 85
Three in a line----------------------------------------- page 85
Buzz Ten----------------------------------------------- page 85
Number Chains ----------------------------------------- page 86

Attribute Cards
For Logic People----------------------------------------- pages 35-41
For Logic Blocks---------------------------------------- pages 44, 45
DICE
A variety of dice can be used to provide a wide range of activities for the children. Blank dice are also available, which can be tailored to the requirements of a particular game.
DEVELOPING ONE-TO-ONE CORRESPONDENCE

Happy Faces
Children play in pairs. Each has a ‘happy face’ base board and some counters. The die is marked with one sad face and five happy faces. The children shake the die in turn. If they shake a happy face they place one counter on one face. For a sad face they miss a turn. The winner is the first to capture all his faces. Children may well enjoy playing the game on their own initially.

DEVELOPING CARDINAL NUMBER WITHIN 5

Fill the sweetie jar
This game reinforces one-to-one correspondence and consolidates the current number. Each child has a base board with 4 jars and counters for sweets. Five faces of the die are numbered 1; the remaining face is left blank and means ‘miss a turn’. Lids are provided indicating the number of ‘sweets’ required in each jar. Children take turns to shake the die and fill up each jar in turn. As soon as a jar has the required number of sweets the lid is set on top and the next is filled.

Animal Hunt
Each child has an ‘Animal Hunt’ base board and counters. Children take turns to toss a die marked with the numerals 1 - 6. If a child shakes, say, a four he chooses a set of four animals and covers them with 4 counters. If both sets of 4 are already covered he misses a turn. The winner is the first child to complete a whole row of animals.

Snail Trail
A ‘Snail Trail’ base board is shared between two children. As for Animal Hunt they toss the die and cover up a corresponding set of snails. This time the winner is the child who wins the final set, thus maintaining interest to the end.

DEVELOPING CARDINAL NUMBER WITHIN 10

Hidey Holes
Each child will need a base board and a card for the target number. They will share a die marked 1,2,1,2,1,2 and a collection of cubes. The board has been planned to accommodate unifix cubes with 10 as the target number but smaller numbers can also be used.

The aim of the game is to build a ‘hidey hole’ for each of the children on the base board. The children take turns to toss the die and take the corresponding number of cubes in order to build up the target number for each hiding place.

Humpty Dumpty
Each child will need a Humpty base board and a card for the target number. They will share cubes (for bricks) and a die marked 1,2,3,4. The aim is to build a wall for Humpty. The number of bricks in each row must match the target number.

Children shake the die in turn and take the corresponding number of bricks. They may work on all three rows simultaneously but they must place all the bricks for any throw on a single row; they may not share them between rows. The winner is the first to complete the wall.
DEVELOPING CARDINAL NUMBER WITHIN 15

**Pawprints**
Each child will need a pawprint base board and small counters to cover the pawprints. They will share one die marked 1, 2, 3, 4 and one marked 5-10. The aim of the game is to cover the pawprints with the required number of counters. Each child, in turn, shakes both dice. He decides whether to choose the bigger or smaller number and takes the corresponding number of counters to cover pawprints. The counters for each throw must all be placed on the same track; they cannot be shared. The winner is the first to cover all three tracks. As children become familiar with the game they should come to realise that the bigger numbers are useful at the start but only the smaller numbers can be used towards the end. They should be encouraged to talk about their ideas as the game progresses.

For a more demanding version of the game use the baseboard **without** tracks. In this case children create the required number of pawprints with their counters.

DEVELOPING MENTAL CONFIDENCE

**Memory Match 1-6**
Each pair will need a set of numerals 1-6 and either the apple picture cards or the banana picture cards. The aim is to match a picture card to the corresponding numeral. The cards are placed face down. The children take turns to turn over two cards. If they have a matching pair they retain the cards; otherwise the cards are turned over again. The winner is the one with the most pairs.

**Make Five**
Children will need a set of cards for ‘Make 5’, either in the form of fish or spots. The cards are placed face down on the table. Children take turns to turn over two cards. If the fish make the total 5 the child retains the pair, otherwise they are turned over again. The winner is the child with most cards at the end of the game.

**Memory Match 5-10**
Each pair will need a set of numerals 5-10 and either the burger picture cards or the pizza picture cards. The aim is to match a picture card to the corresponding numeral. The cards are placed face down. The children take turns to turn over two cards. If they have a matching pair they retain the cards; otherwise the cards are turned over again. The winner is the one with the most pairs.

**The add one machine**
Children will need a base board, a 10 sided die or number cards 0-9, cubes or counters, a water base marker. Children play in pairs. They take turns to select a card or toss the die and record that number on their board. The number is ‘processed’ by the machine and the output is recorded using the cubes or counters. At the end of the game the teacher can hide the input numbers and pose questions such as ‘If 6 cubes came out of the machine what number must have gone in?"
**Three in a line**

Children will share a base board, a die marked with the numerals 1-6 and a die with one dot on each face, counters for markers. Children play in pairs. They shake the two dice and add the ‘dotty one’ to the numeral. They use a counter to cover their answer on the board. The winner is the first child to complete a line of three.

Variation: For a more difficult version of the game the second die can be marked alternately with one dot and two dots.

**Buzz Ten**

Children will share a base board, counters for markers. Children play in pairs. This is an ‘adding on’ game in which each child contributes in turn to the running total. The first child places a counter on one, for example, and says one to start the count. The second child places a counter on two, adds it the current number and says three. The game continues in this way. The winner is the child to reach the total 10.

Variations: Play for different totals. Play in reverse, taking away until zero is reached.

**Number Chains**

Children will need a set of number cards marked 1-20 face up on the table, ten cards marked ‘1 more’ and ten marked ‘2 more’. The ‘more’ cards are shuffled, stacked in a pile and the number 1 is put out to start the chain. The children take turns to lift a card from the pile, place it in the chain and select the appropriate number card to follow. The winner is the child who completes the chain with 20. The final turn must be exact!

Variation: Different starting numbers may be used. The game can be played in reverse by starting at 20 and turning ‘less cards’ until zero is reached. For an easier version use only ‘1more’ cards with different starting numbers.
Happy Faces
Sweetie Jars
Lids for fill the sweetie jar

Cut out the lids. Select four lids to indicate the number of sweets to be placed in each jar. Blank lids are included to allow the game to be extended.
Snail trail
Hidey Holes

Number Card
Humpty Dumpty

Number Card
Memory Match 1-6 [irregular]
Memory Match 5 -10 [irregular]
Memory Match 5 -10 [regular]
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Three in a line</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>8</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
Number chains

1  2  3  4
5  6  7  8
9 10 11 12
13 14 15 16
17 18 19 20
<table>
<thead>
<tr>
<th>1 more</th>
<th>1 more</th>
<th>1 more</th>
<th>1 more</th>
<th>1 more</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 more</td>
<td>1 more</td>
<td>1 more</td>
<td>1 more</td>
<td>1 more</td>
</tr>
<tr>
<td>2 more</td>
<td>2 more</td>
<td>2 more</td>
<td>2 more</td>
<td>2 more</td>
</tr>
<tr>
<td>2 more</td>
<td>2 more</td>
<td>2 more</td>
<td>2 more</td>
<td>2 more</td>
</tr>
<tr>
<td>2 more</td>
<td>2 more</td>
<td>2 more</td>
<td>2 more</td>
<td>2 more</td>
</tr>
<tr>
<td>1 less</td>
<td>1 less</td>
<td>1 less</td>
<td>1 less</td>
<td>1 less</td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>1 less</td>
<td>1 less</td>
<td>1 less</td>
<td>1 less</td>
<td>1 less</td>
</tr>
<tr>
<td>1 less</td>
<td>1 less</td>
<td>1 less</td>
<td>1 less</td>
<td>1 less</td>
</tr>
<tr>
<td>2 less</td>
<td>2 less</td>
<td>2 less</td>
<td>2 less</td>
<td>2 less</td>
</tr>
<tr>
<td>2 less</td>
<td>2 less</td>
<td>2 less</td>
<td>2 less</td>
<td>2 less</td>
</tr>
</tbody>
</table>
Attribute cards for Logic People
Attribute cards for Logic People
Attribute cards for Logic Blocks

- large
- small
- thick
- thin
- rectangle
- square
- triangle
- circle
Attribute cards for Logic Blocks

red  red  red
blue  blue  blue
yellow  yellow  yellow