**Level 2**

**PROMPT sheet**

**2/1 To count by grouping**

**Example1**: Here are 20 sweets to share

 Each child gets 5 sweets

 How many children are there?

Divide them up into groups of 5 sweets-like this







There must be 4 children

**Example2**: Here are 12 marbles to share

 There are 4 children.

 How many marbles does each get?

Divide them up into 4 groups - like this



Each child gets 3 marbles

**2/2 To order numbers**

Numbers can be ordered by looking at the value of each digit

Example:

To order 83 3 87 8 80 78

 Tens Units

 **T** **U**

 **8** **3**

 0 **3**

 **8** **7**

 **0** **8**

 **8** **0**

 **7** **8**

The order would be;

**3 8 78 80 83 87**

smallest largest

**2/3 Numbers sequences**

**Look to see what you already know**

Example1: 1 4 7 10 ..... .....

 +3 +3 +3

* The numbers are going up- ascending
* They go up by 3 each time
* Continue with this rule

1 4 7 10 13 16

 +3 +3

Example1: 13 11 9 7 ..... .....

 -2 -2 -2

* The numbers are going down - descending
* They go down by 2 each time
* Continue with this rule-count backwards

13 11 9 7 5 3

 -2 -2

**2/4 Know the 2, 5, 10 times tables**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | x | 2 | = | 2 |
| 2 | x | 2 | = | 4 |
| 3 | x | 2 | = | 6 |
| 4 | x | 2 | = | 8 |
| 5 | x | 2 | = | 10 |
| 6 | x | 2 | = | 12 |
| 7 | x | 2 | = | 14 |
| 8 | x | 2 | = | 16 |
| 9 | x | 2 | = | 18 |
| 10 | x | 2 | = | 20 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | x | 5 | = | 5 |
| 2 | x | 5 | = | 10 |
| 3 | x | 5 | = | 15 |
| 4 | x | 5 | = | 20 |
| 5 | x | 5 | = | 25 |
| 6 | x | 5 | = | 30 |
| 7 | x | 5 | = | 35 |
| 8 | x | 5 | = | 40 |
| 9 | x | 5 | = | 45 |
| 10 | x | 5 | = | 50 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | x | 10 | = | 10 |
| 2 | x | 10 | = | 20 |
| 3 | x | 10 | = | 30 |
| 4 | x | 10 | = | 40 |
| 5 | x | 10 | = | 50 |
| 6 | x | 10 | = | 60 |
| 7 | x | 10 | = | 70 |
| 8 | x | 10 | = | 80 |
| 9 | x | 10 | = | 90 |
| 10 | x | 10 | = | 100 |

**2/5 Work out halves and quarters**

**To work out a half**

Split into two equal parts

 **YES NO!!!!**





**10 sweets ÷ 2 = 5 sweets**

**To work out a quarter**

Split into four equal parts



****

**8 strawberries ÷ 4 = 2 strawberries**

**2/6 Subtraction is the inverse of addition**



=

+

 3 + 2 = 5



-

 5 - 2 = 3



-

 5 - 3 = 2

Matching subtraction facts for an addition sum

 3 + 2 = 5

1. - 2 = 3 5 - 3 = 2
2. + 4 = 10

 10 – 6 = 4 10 – 4 = 6

**2/7 Halving as a way of undoing doubling**



 3 **DOUBLE** 6

 5 10



 3 **HALF** 6

 5 10

**2/8 Number bonds (Friends) to 10**

****

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  | **10** |
|  **1**  |  |  |  |  |  |  |  |  |  **9** |
|   |  2  |  |  |  |  |  |  |  |  8 |
|   |   |  3 |  |  |  |  |  |  |  7 |
|   |   |  |  4 |  |  |  |  |  |  6 |
|   |   |  |  |  5 |  |  |  |  |  5 |
|   |   |  |  |  | 6 |  |  |  |  4 |
|   |   |  |  |  |  | 7 |  |  |  3 |
|   |   |  |  |  |  |  |  8 |  |  2 |
|   |   |  |  |  |  |  |  |  9 |  1 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 0 + 10 | 1 + 9 | 2 + 8 | 3 + 7 | 4 + 6 |
| 10 + 0 | 9 + 1 | 8 + 2 | 7 + 3 | 6 + 4 |
|  |  | 5 + 5 |  |  |

These are so good to learn – believe me



**2/9 Mental calculation strategies**

**DOUBLES – you should know all of them**

Double 1 (1 + 1) = 2 OR 2 x 1 = 2

Double 2 (2 + 2) = 4 OR 2 x 2 = 4

Double 3 (3 + 3) = 6 OR 2 x 3 = 6

Double 4 (4 + 4) = 8 OR 2 x 4 = 8

Double 5 (5 + 5) = 10 OR 2 x 5 = 10

Double 6 (6 + 6) = 12 OR 2 x 6 = 12

Double 7 (7 + 7) = 14 OR 2 x 7 = 14

Double 8 (8 + 8) = 16 OR 2 x 8 = 16

Double 9 (9 + 9) = 18 OR 2 x 9 = 18

Double 10 (10 + 10) = 20 OR 2 x 10 = 20

Another double



+ =

**2/10 Repeated addition (Multiplication)**



Here are 3 footballers.

How many legs do they have altogether?

Addition sentence Multiplication sentence

 2 + 2 + 2 = 6 3 x 2 = 6

Repeated addition is the same as multiplication

|  |  |
| --- | --- |
| **Addition sentence** | **Multiplication sentence** |
| 5 + 5 + 5 + 5 = 20 | **4 x 5 = 20** |
| 10 + 10 + 10 = 30 | **3 x 10 = 30** |

**2/10 Repeated subtraction (Division)**

Repeated subtraction is the same as division

**15**

This is the same as 15 ÷ 5 = 3

Because 5 has been subtracted 3 times to get to 0

**-5 (1)**

**10**

**-5 (2)**

 **5**

**-5 (3)**

 **0**

**2/11 Solve number problems**

* **The order can be changed**

**Example:**

 13 + 6 + 7 = **13 + 7** + 6 = **20** + 6 = 26

* **The number can be partitioned**

**Example:**

10 + **15** = 10 + **10 + 5** = 20 + 5 = 25

* **A partial number line can be used**

**Example:**

**37 + 8 = 45**

 **+8**

 **+3 +5**

 **37 40 45**

**22 – 3 = 19**

 **-1 -2**

 **19 20 22**

**2/12 Record work as a number sentence**

**Example 1**

There are 12 people on a bus.

At the next stop 4 people get off and 7 get on

How many are on the bus now?

**Number sentence**

12 – 4 + 7 = **15**

**Example 2**

Pavan’s cat weighs 18kg. Olivia’s dog weighs 32kg. How much heavier is Olivia’s dog?

**Number sentence**

32 – 18 = **14**

**Example 3**

Sana had 50p. She spent 24p. How much did she have left?

**Number sentence**

50 - 24 = **26p**

**Example 4**

Aabid has 20p and Claudia has 41p. How much do they have altogether?

**Number sentence**

20 + 41 = **61p**

**2/13 Names of 2D shapes**

 Triangle Square Pentagon

****

Hexagon Circle Octagon

**2/13 Names of 3D shapes**

 **cube cylinder cuboid**



 **pyramid sphere**

**2/14 Properties of shapes**

 **corner edge face**

**curved surface**

**2/15 Describe position of objects**

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

The yellow square is above the orange cylinder

The sphere is to the left of the pink hexagon

The blue cuboid is below the red circle

The cuboid is to the right of the orange cylinder

**2/16 & 17 Describe position of objects**

 **A quarter turn**

 **clockwise**

 **A quarter turn**

 **anti-clockwise**

 **A half turn**

**2/18 Use measures**

**METRIC units of length are**:

Millimetre (mm)

Centimetre (cm)

Metre (m)

Kilometre (km)

2cm = 20mm 4.5cm = 45mm

1cm = 10mm





* A big stride is about a metre



* Distance to Dublin is measured in kilometres

**METRIC units of weight are:**

Gram (g)

Kilogram (kg)



1 kilogram(kg) = 1000grams(g)



* An apple weighs 150grams

****

* Baby chimp weighs 3kg

**METRIC units of capacity (liquids) are:**

Millilitre

Centilitre

Litre



* A medicine spoon holds 5ml



* A 5-litre bucket



* Fuel for the car is measured in litres

**2/19 Sorting**

**Carroll Diagram** to sort these numbers:

26 5 14 30 55 8 35 37

|  |  |  |
| --- | --- | --- |
|  | **Multiples of 5** | **NOT multiples of 5** |
| **Less than 30** | 5 | 26 14 8 |
| **NOT less than 30** | 30 55 35 | 37 |

**Venn Diagram** to sort these shapes



Set R contains shapes with a right-angle (90°).
Set Q contains shapes with four sides.

 R Q

 6 3

 2 1 5

 4 7 8

 9

**2/23 Record & communicate findings**

* **Frequency table of recycling**

|  |  |  |
| --- | --- | --- |
| **Item** | **Frequency (tally)** | **Total** |
| Plastic |  l l l l 1111 | 10 |
| Glass | 1111 | 4 |
| Cardboard | 1111 1 | 6 |
| Recyclable steel | l  | 1 |
| Aluminium cans | l l l l 11 | 7 |
| Other | l l l l 1111  | 9 |

* **Bar chart of animals kept**
* **Pictogram of football teams**

**KEY: Each badge represents 2 people**

|  |
| --- |
| Manchester Utdman-utd-logoman-utd-logoman-utd-logo |
| Darlingtonhttp://www.thenorthernecho.co.uk/resources/images/733788/?type=displayhttp://www.thenorthernecho.co.uk/resources/images/733788/?type=displayhttp://www.thenorthernecho.co.uk/resources/images/733788/?type=displayhttp://www.thenorthernecho.co.uk/resources/images/733788/?type=displayhttp://www.thenorthernecho.co.uk/resources/images/733788/?type=display |
| Liverpoolliverpool_logoliverpool_logo |
| Newcastle http://modifiedlimitedhangout.com/storage/NUFC_Logo.png?__SQUARESPACE_CACHEVERSION=1317002114312http://modifiedlimitedhangout.com/storage/NUFC_Logo.png?__SQUARESPACE_CACHEVERSION=1317002114312http://modifiedlimitedhangout.com/storage/NUFC_Logo.png?__SQUARESPACE_CACHEVERSION=1317002114312http://modifiedlimitedhangout.com/storage/NUFC_Logo.png?__SQUARESPACE_CACHEVERSION=1317002114312 |

* **Reading the pictogram using the key we have:**

Manchester = 6 people

Darlington = 10 people

Liverpool = 3 people

Newcastle = 8 people