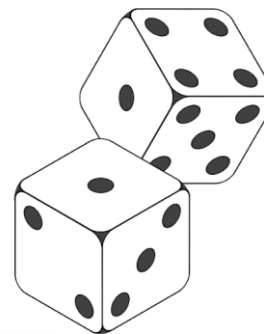


Creating Fractions! – Task 1

Resources needed:

- Plastic bottle caps/blocks or any other counters
- 2 dice
- Papers to write on.
- 6 x 6 Grid



Instructions:

- Roll both dice.
- Arrange the two numbers you get on the dice into a proper fraction (smaller number as numerator, larger number as denominator).
- Write it down on a paper.
- Take the 6 x 6 grid.
- Represent this fraction on the grid with caps.

Answers

Fraction	Number of boxes to be covered with caps or counters
$\frac{1}{2}$ or $\frac{2}{4}$ or $\frac{3}{6}$	18
$\frac{1}{3}$ or $\frac{2}{6}$	12
$\frac{1}{4}$	9
$\frac{1}{6}$	6
$\frac{2}{3}$ or $\frac{4}{6}$	24
$\frac{3}{4}$	27
$\frac{5}{6}$	30
$\frac{6}{6}$ (one whole)	36

Creating Fractions! –Task 2 Challenge

Resources needed:

- 6 x 6 Grid
- coloured bottle caps or blocks

Instructions:

- Write a number from 10 to 36 on a paper.
- Take that number of caps so that $\frac{1}{2}$ are red, $\frac{1}{3}$ are yellow and $\frac{1}{6}$ are blue.
Note: Not all numbers can be divided physically in these fractions.
- Display this on the grid.

Question: **Example Answer**

- What is your number? **30**
- How many are red, yellow and blue? **15 red, 10 yellow and 5 blue**
- Which numbers can be divided physically in these fractions?
12, 18, 24, and 36.
- What do you observe?
These numbers are common multiples of 2, 3 and 6.

Challenge:

Make a symmetrical pattern on the grid using the same caps.

What do you observe?

In symmetry, I must have the same number of coloured caps on both sides. Since 15 and 5 are both odd numbers I had to place one of each colour exactly in the middle so that half of the cap is on one side and the other is on the other side.

