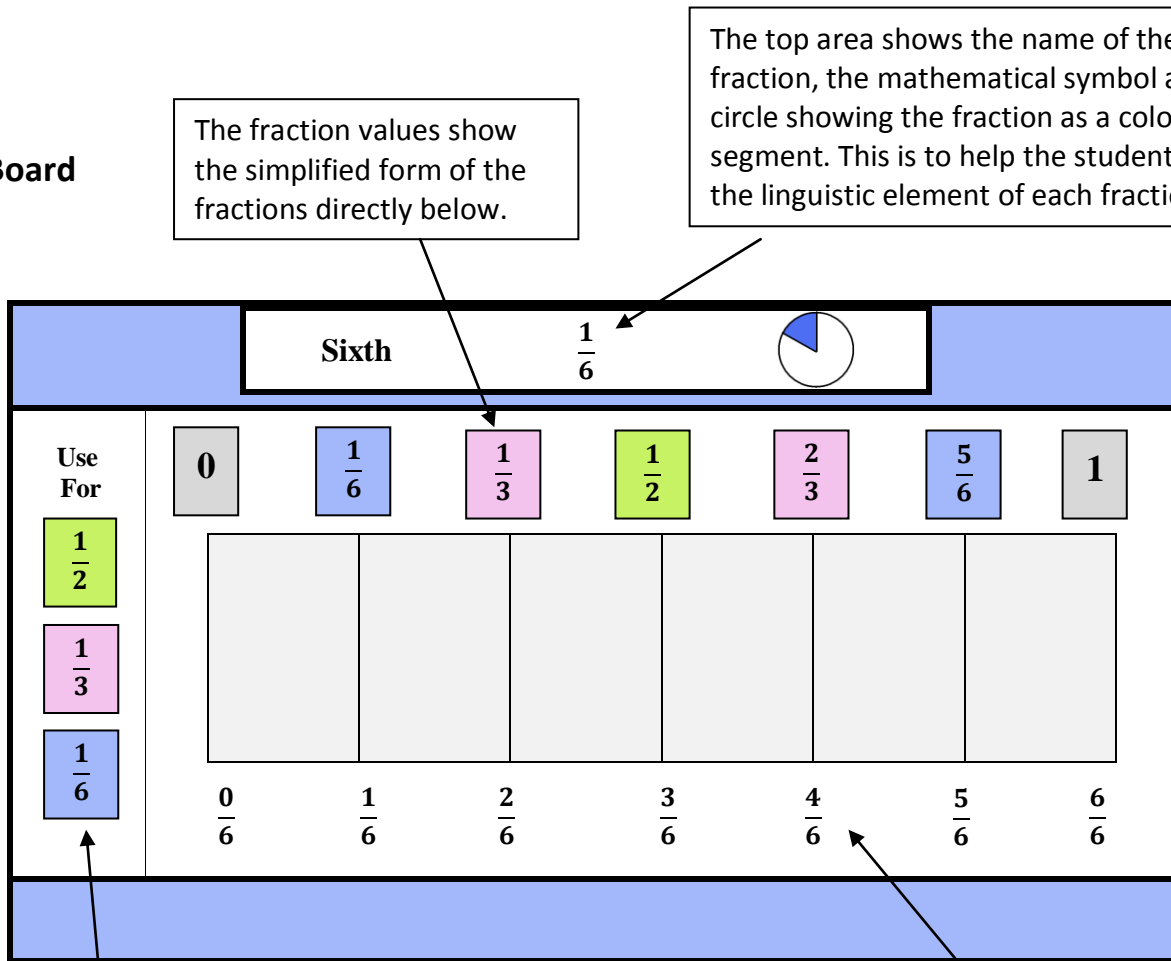# Design of Resource

The Board

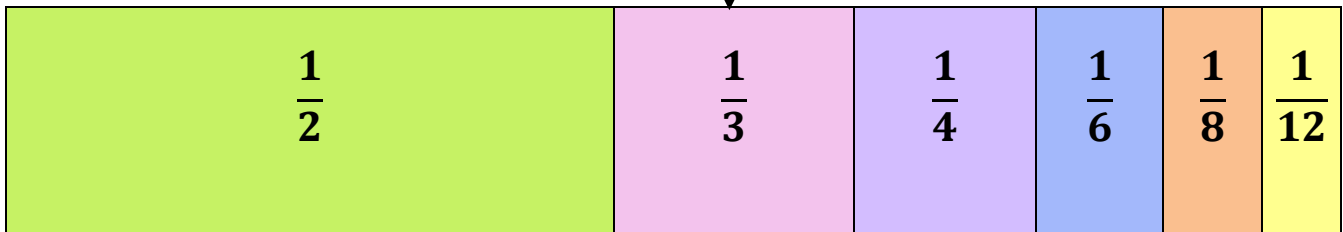The fraction values show the simplified form of the fractions directly below.

The top area shows the name of the fraction, the mathematical symbol and a circle showing the fraction as a coloured segment. This is to help the student with the linguistic element of each fraction.

| Sixth | $\frac{1}{6}$ | |

| Use For | 0 | $\frac{1}{6}$ | $\frac{1}{3}$ | $\frac{1}{2}$ | $\frac{2}{3}$ | $\frac{5}{6}$ | 1 |

$\frac{1}{2}$

$\frac{1}{3}$

$\frac{1}{6}$

| $\frac{0}{6}$ | $\frac{1}{6}$ | $\frac{2}{6}$ | $\frac{3}{6}$ | $\frac{4}{6}$ | $\frac{5}{6}$ | $\frac{6}{6}$ |

The colour coded blocks indicate which fractions can be expressed in terms of the fraction associated with the board. The use of colour makes it easier to spot which fractions can be used.

The fraction values relating the specified fraction are written along the bottom to show how the rectangle is divided into equal parts.

Fraction Pieces

The fraction pieces which can be positioned to make up the fraction sum, the resource is designed to appeal to Kinaesthetic and Active learners.

| $\frac{1}{2}$ | $\frac{1}{3}$ | $\frac{1}{4}$ | $\frac{1}{6}$ | $\frac{1}{8}$ | $\frac{1}{12}$ |

By designing the resource related fractions to colours, it is something which is very bright and designed to appeal to the Visual Learner.

Question Cards: Front

The top of the card shows the pieces which are required to solve the problem.

The question cards show a fraction addition sum to be equated.

$$\frac{1}{2}$$ $$\frac{1}{3}$$

$$\frac{1}{2} \quad + \quad \frac{1}{3} \quad =$$

If required, the back of the card shows which board should be used to solve the problem.

A numeric solution to the problems is provided to demonstrate another way of solving the problem.

Card Back

Hint: Use the $\frac{1}{6}$ board

$\frac{1}{2}$ is equivalent to $\frac{3}{6}$, $\frac{1}{3}$ is equivalent to $\frac{2}{6}$

So $\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$

Answer: $\frac{5}{6}$

This solution uses the same principles as the tools uses. If also shows a way of answering the question in an exam.

Providing the answer allows a student to work independently.