

# Big Ideas in Number Resource Information

Big Ideas in Number Focus Area:     **Partitioning**

Name of Game or Activity: I have, Who has (decimals, fractions & percentages)

## Instructions:

1. Students are in groups of any amount and the I have, Who has cards are distributed evenly. Students verbally match the cards to show understanding of equivalence.

Resources: I have, Who has Cards.

## BiIN Micro Content

<b>Objects, quantities and collections can be shared to create equal parts</b>	
<b>There is a relationship between the number of parts and the size and name of the parts and the number of parts increases as the size or share decreases</b>	
<b>Objects, quantities and collections can be repeatedly halved and doubled e.g. use successive splits to show that one half is equivalent to 2 parts in 4, 4 parts in 8 etc.</b>	
<b>An object, quantity or collection can be partitioned into a number of equal portions to show unit fractions so that say one third is more than one fourth etc.</b>	
<b>The relative magnitude of a fraction is dependent on the relationship between the numerator (how many parts) and the denominator (total parts)</b>	
<b>Fractions are renamed as equivalents where the total number of parts (denominator) and required number of parts (numerator) are increased by the same factor</b>	
<b>Fractions with unlike denominators can be compared and ordered</b>	
<b>Common fractions and decimal fractions can be compared, ordered and renamed in conceptual ways</b>	
<b>Construct of fraction as division can be used to produce equal parts (equipartitioning)</b>	
<b>Fractions are used to describe quotients and operators</b>	
<b>Fractions are used to describe part-whole relations</b>	

## Big Ideas in Number Resource Information

<b>Fractions are used to describe simple ratios</b>	
<b>Percentages, fractions and decimals express the relationship between to quantities</b>	
<b>Percentages are special part : whole ratios based on 100</b>	
<b>Any given percentage can be used as a ratio to generate an infinite number of equivalent fractions (e.g. 50% = <math>\frac{1}{2}</math> <math>\frac{2}{4}</math> <math>\frac{3}{6}</math> etc.)</b>	
<b>Multiplicative arrays can be used to represent fractions, decimals and percentages</b>	
<b>Benchmark fractions, decimals and percentages which are the equivalents of one another, can be used to estimate and to solve problems</b>	

**I am the starter.**

Who has the decimal that is equivalent to three tenths?

**I have 50%**

Who has the fraction that is equivalent to 70%?

**I have 0.3**

Who has the percentage that is equivalent to one quarter?

**I have  $\frac{7}{10}$**

Who has the decimal that is equivalent to 10%?

**I have 25%**

Who has the fraction that is equivalent to 0.75?

**I have 0.1**

Who has the percentage that is equivalent to three fifths?

**I have  $\frac{3}{4}$**

Who has the percentage that is equivalent to nine tenths?

**I have 60%**

Who has the decimal that is equivalent to nine tenths?

**I have 90%**

Who has the percentage that is equivalent to 0.5?

**I have 0.9**

Who has the fraction that is equivalent to 80%?

**I have  $\frac{4}{5}$**

Who has the fraction that is equivalent to 25%?

**I have 0.75**

Who has the percentage that is equivalent to 0.4?

**I have  $\frac{1}{4}$**

Who has the percentage that is equivalent to one whole?

**I have 40%**

Who has the decimal that is equivalent to seven tenths?

**I have 100%**

Who has the decimal that is equivalent to one half?

**I have 0.7**

Who has the decimal that is equivalent to one fifth?

**I have 0.5**

Who has the fraction that is equivalent to 40%?

**I have 0.2**

Who has the fraction that is equivalent to 90%?

**I have  $\frac{2}{5}$**

Who has the decimal that is equivalent to three quarters?

**I have  $\frac{9}{10}$**

Who has the percentage that is equivalent to 0.3?



**I have 30%.**

Who has the decimal that is equivalent to four fifths?

**I have 0.6**

Who has the fraction that is equivalent to 50%?

**I have 0.8**

Who has the fraction that is equivalent to 0.6?

**I have  $\frac{1}{2}$**

Who has the decimal that is equivalent to 25%?

**I have  $\frac{3}{5}$**

Who has the fraction that is equivalent to 30%?

**I have 0.25**

Who has the percentage that is equivalent to one tenth?

**I have  $\frac{3}{10}$**

Who has the percentage that is equivalent to 0.7?

**I have 10%**

Who has the decimal that is equivalent to four tenths?

**I have 70%**

Who has the decimal that is equivalent to three fifths?

**I have 0.4**

I am the winner.