## Equivalent Fractions

This Powerpoint is all about equivalent fractions. Although it is retrieval practice for all of us, understanding equivalent fractions is essential and we need to make sure we have a secure understanding of this.

Please look over the Powerpoint briefly before tackling your independent work.


How many equal sections is each square cut into?

How many of the sections are blue?

What fraction of each square is blue?

1
2
4
8


These fractions are all equal (equivalent)
How do you get from one fraction to the next?


How many equal sections is each 3

9
36 square cut into?

How many of the sections are blue?

What fraction of each square is blue?
$\frac{1}{3}$
$\frac{3}{9}$


So to find equivalent fractions you multiply the numerator (the top number) and the denominator (the bottom number) by the same number.
E.g. Find 3 equivalent fractions to $\frac{2}{5}$ :

| $\frac{2}{5}=\frac{4}{10}$ | $\frac{2}{5}=\frac{12}{30}$ | $\frac{2}{5}=\frac{48}{120}$ |
| :---: | :---: | :---: |
| $x 2$ | $\times 6$ | $\times 24$ |



## Practice Questions:

Find 3 equivalent fractions for each question
a) $\frac{1}{4}$
b) $\frac{6}{9}$
c) $\frac{3}{8}$
d) $\frac{9}{10}$
e) $\frac{3}{5}$
f) $\frac{7}{10}$
g) $\frac{4}{7}$
h) $\frac{2}{8}$
i) $\frac{8}{12}$
j) $\frac{\mathbf{1}}{\mathbf{8}}$
k) $\frac{4}{7}$
I) $\frac{9}{11}$

Simplifying fractions is the opposites instead of multiplying the numerator and the denominator by the same number you divide it until you cant divide it anymore.
E.g. Simplify the fraction $\frac{12}{30}$ :


## Practice Questions:

## Simplify the following fractions

a) $\frac{4}{8}$
b) $\frac{6}{9}$
c) $\frac{12}{16}$
d) $\frac{24}{36}$
e) $\frac{\mathbf{1 5}}{\mathbf{3 5}}$
f) $\frac{\mathbf{2 1}}{49}$
g) $\frac{\mathbf{1 6}}{\mathbf{3 6}}$
h) $\frac{63}{77}$
i) $\frac{\mathbf{4 4}}{\mathbf{1 2 1}}$
j) $\quad \frac{20}{28}$
k) $\frac{42}{72}$
I) $\frac{72}{144}$

