Learning Objective:	To be able to multiply fractions and mixed numbers	**Name:**	
		Date:	

Do NOW Activity:

1 Express 0.0092 in standard form

2 Expand and simplify $(x + 3)(x - 3)$

3 Factorise $12 - 24x$

4 Work out $528 \div 16 =$

5 Increase £1200 by 15%

PRIOR KNOWLEDGE CHECK:
1. I am able to add and subtract fractions

THE MAIN EVENT

WORKED EXAMPLE #1:

Work out $\frac{3}{4} \times \frac{5}{6}$

$$\frac{15}{24} = \frac{5}{8}$$

$$\frac{5}{8}$$

(Total for question 3 is 2 m

PRACTICE #1:

(a) $\dfrac{1}{2} \times \dfrac{1}{5}$ (b) $\dfrac{1}{2} \times \dfrac{3}{4}$ (c) $\dfrac{1}{4} \times \dfrac{3}{5}$ (d) $\dfrac{1}{3} \times \dfrac{1}{3}$

(e) $\dfrac{5}{6} \times \dfrac{1}{2}$ (f) $\dfrac{3}{4} \times \dfrac{1}{4}$ (g) $\dfrac{2}{3} \times \dfrac{1}{7}$ (h) $\dfrac{5}{8} \times \dfrac{1}{3}$

(i) $\dfrac{2}{3} \times \dfrac{1}{2}$ (j) $\dfrac{1}{3} \times \dfrac{3}{4}$ (k) $\dfrac{3}{10} \times \dfrac{1}{2}$ (l) $\dfrac{2}{5} \times \dfrac{1}{4}$

(m) $\dfrac{2}{7} \times \dfrac{3}{4}$ (n) $\dfrac{5}{7} \times \dfrac{1}{10}$ (o) $\dfrac{7}{12} \times \dfrac{2}{3}$ (p) $\dfrac{6}{7} \times \dfrac{2}{3}$

WORKED EXAMPLE #2:

(b) Work out $2\frac{1}{3} \times \frac{3}{5}$

Give your answer as a mixed number in its simplest form.

$$\frac{7}{\cancel{3}} \times \frac{\cancel{3}}{5} = \frac{7}{5} = 1\frac{2}{5}$$

PRACTICE #2:

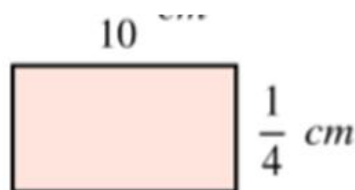Question 3:   Work out the following divisions.
Give your answers as simplified fractions.
If any answers are top heavy fractions, write as mixed numbers.

(a) $1\frac{2}{3} \times \frac{1}{4}$ (b) $\frac{2}{5} \times 1\frac{1}{4}$ (c) $\frac{3}{4} \times 1\frac{1}{2}$ (d) $2\frac{1}{2} \times \frac{7}{10}$

(e) $\frac{1}{4} \times 3\frac{1}{3}$ (f) $1\frac{2}{3} \times 1\frac{1}{4}$ (g) $4\frac{3}{5} \times 1\frac{2}{3}$ (h) $1\frac{2}{11} \times \frac{8}{9}$

(i) $2\frac{5}{6} \times 2\frac{1}{5}$ (j) $1\frac{1}{9} \times 3\frac{3}{10}$ (k) $3\frac{1}{8} \times 2\frac{1}{2}$ (l) $2\frac{6}{7} \times 3\frac{1}{5}$

PRACTICE #3:

Question 1:   Find the area of this rectangle.
Include suitable units.

10

$\frac{1}{4}$ cm

Question 2:   Alexis has a pet dog, Maxi.

Each day, Maxi eats $\frac{2}{3}$ of a can of dog food.

Alexis is buying dog food for one week.

How many cans of dog food should Alexis buy?

Question 3:   Kelly spends $\frac{1}{4}$ of her savings on driving lessons.

Kelly then spends $\frac{2}{3}$ of her remaining savings on a new car.

What fraction of her savings has Kelly spent?