(Shaw Education Trust	Knowledge Organiser - Mather	matics F	ractions &	Probability	
	Topic	Information	Examples			Sparx Clip
1	Multiplying and dividing fractions	To multiply fractions: Multiply the numerators together and multiply the denominators together.	$\frac{3}{8} \times \frac{2}{9} = \frac{6}{72} = \frac{1}{12}$		2	M671, M601, M216, M157, M110, M197, M265
		To divide fractions: Keep the first fraction the same. Flip the second fraction upside down Change the ÷ sign to a x sign	$\frac{3}{4} \div \frac{5}{6} = \frac{3}{4} \times \frac{6}{5} = \frac{18}{20} = \frac{9}{10}$			
2	Fractions of an amount	Divide by the denominator, times by the Numerator	Find $\frac{2}{5}$ of £60 $60 \div 5 = 12$ $12 \times 2 = 2$		M157, M478, M695, M684	
3	Fractions,		1/2	0.5	50%	M939, M410,
	decimals and percentages	Percentage $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	14	0.25	25%	M671, M335, M601, M958,
			1 3	0.3	33.3%	M264, M553, M235
			<u>1</u> 5	0.2	20%	
			1 8	0.125	12.5%	
			10	0.1	10%	
4	Probability We express probability as a <u>number</u> between 0 and 1. The probability for an event which is IMPOSSIBLE is 0. The probability for an event which is CERTAIN is 1. Probability can be expressed as a <u>fraction</u> , a <u>decimal</u> or a <u>percentage</u> .		Calculate the probability of rolling an odd number on a fair 6-sided die. $P(\text{odd}) = \frac{\text{odd numbers on a die}}{\text{total numbers on a die}} = \frac{3}{6}$			M655, M941, M938, M755, M718