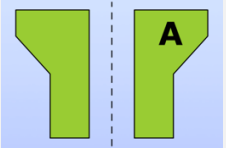
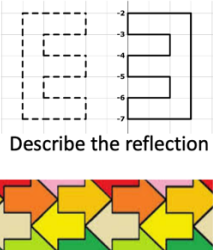
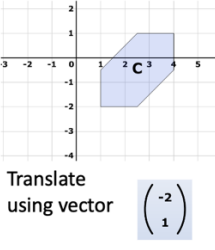
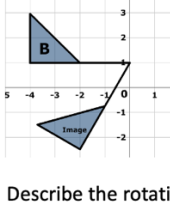
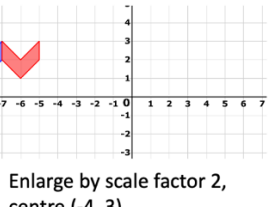


# Year 8 Term 1

Learning Aim	Emerging	Developing	Securing	
Transformation	Add lines of symmetry Reflect simple shapes in vertical or horizontal lines.	Draw and describe; translation using vectors notation . Reflect harder shapes in the axes and $y=x$ Work out order of rotational symmetry Enlarge from a given SF. <b>Tessellate shapes</b>	<b>Add, subtract and scale vectors inc. geometrical representations</b> Draw & describe rotation/enlargement in a given point.	
Examples		 	 	
Fraction focus		Four operations, different denominators	Four operations with mixed numbers	Complex questions which mix number type and order
Examples		$\frac{4}{5} \times \frac{5}{8} =$	$3\frac{1}{4} \div 2\frac{2}{3} =$	$3\frac{1}{4} \div \frac{2}{3} \times \left(\frac{2}{5} - 1\frac{1}{4}\right) =$
Percentages	Find simple fractions & percentage of amounts.	Find any fraction/percentage of amount, inc. decimals & percentages > 100% Write percentage of one quantity to another. Percentage increase and decrease using a multiplier.	Percentage change, compound and reverse	Mixed functional skill questions
Examples	$\frac{2}{5}$ of 40 =  20% of 42	What is 23 out of 30 as a percentage Work out 125% of 38 Increase 112 by 2.4%	I invest £5000 for 4 years in a bank offering 2.8% compound interest....	I have £230. I give $\frac{1}{4}$ to charity, 35% to my mum and keep the rest.....

## Extension opportunities

Dual transformations  
Enlargements with fractional and negative scale factors  
Reflect in  $y=mx + c$

You can find practice on all the topics taught this term at [Mathsworkout.co.uk](http://Mathsworkout.co.uk).  
Login: sarum. Password: solid92

Go to Geometry; section 17. Number; section 16 & 17  
Choosing the right level of difficulty for you within each topic area.

