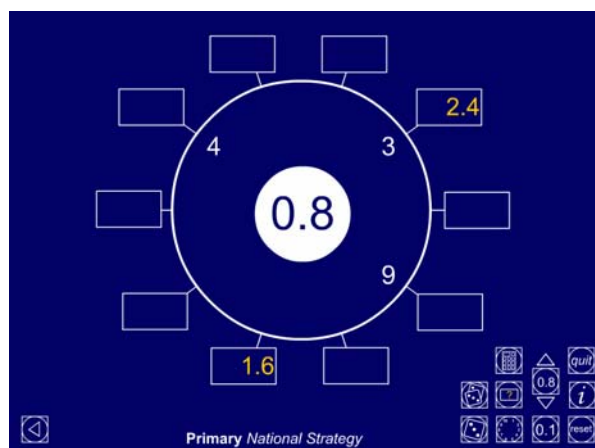**Year 6 Block E**

The models, images and practical resources detailed below will support the teaching of this Block. The text in italics relates directly to the learning overview of each Unit in the Block – this is accessed using the Planning tab in the Framework. Select: Planning–Year group–Block, then click on the Unit tabs.

|	

Number dials ITP
 	
Increasing number grid spreadsheet
 	
	*Children recall multiplication and division facts and use these to **derive related facts** involving decimals, such as 8 × 0.9 or 3 ÷ 0.6. They count on and back, for example in steps of 0.3, relating the steps to the 3 times-table. They use their knowledge of number facts, relationships between numbers and relationships between operations to solve problems and puzzles such as:*
	
	    Find two numbers with a product of 899.
	
	    Solve 3.2 ÷ y = 0.4.
	
	    Using all the digits 2, 4, 5 and 8, place one in each box in the calculation $\square\,\square\,\square \div \square$ to make the smallest possible answer.
	
	    Write in the missing number 32.45 × $\square$ = 253.11
	
	Number dials ITP and Increasing number grid spreadsheet can be found in the library section of the Primary Framework.
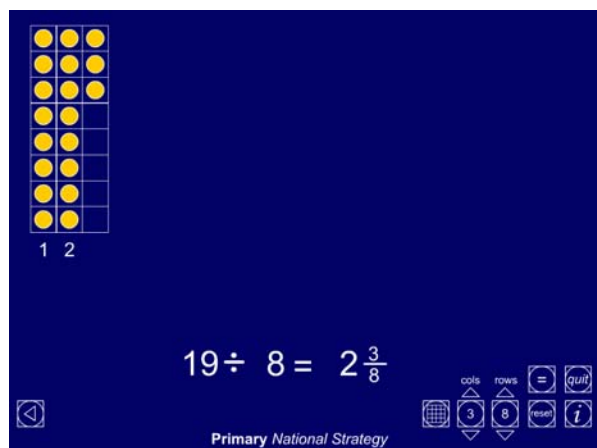
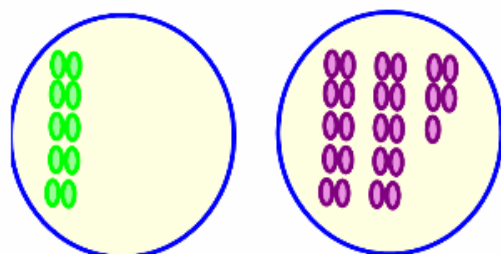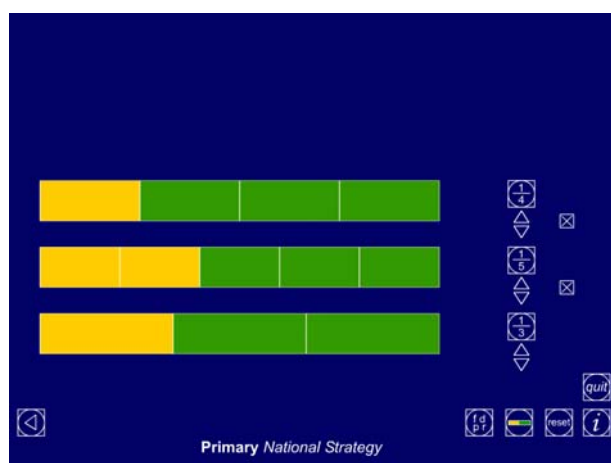| Remainders ITP	They **explain their methods and reasoning, using symbols** where appropriate.
	Children **express a quotient as a fraction**, for example $19 \div 8 = 2\frac{3}{8}$ or $3 \div 4 = \frac{3}{4}$, simplifying the fraction where appropriate. They solve problems, giving their answers as a fraction, for example:
	Share 9 pizzas equally between 4 people.
	Divide a 28 m length of wood into 6 equal pieces.
	Remainders ITP can be found in the library section of the Primary Framework. Use it alongside practical equipment to explore the concept and recording of remainders.
Fractions ITP	Children express a larger whole number as a fraction of a smaller one using practical contexts or diagrams. For example, they compare a bag containing 10 grapes and a bag containing 25 grapes, grouping the 25 grapes into groups of 10 (with a group of 5) to establish that the larger bag contains $2\frac{1}{2}$ times as many grapes as the smaller bag.
	They **simplify fractions by cancelling** and use equivalent fractions to **compare one fraction with another**. For example, they use fraction strips to show that $\frac{1}{3}$ lies between $\frac{1}{4}$ and $\frac{2}{5}$.
	Fractions ITP can be found in the library section of the Primary Framework. Use it alongside practical equipment.
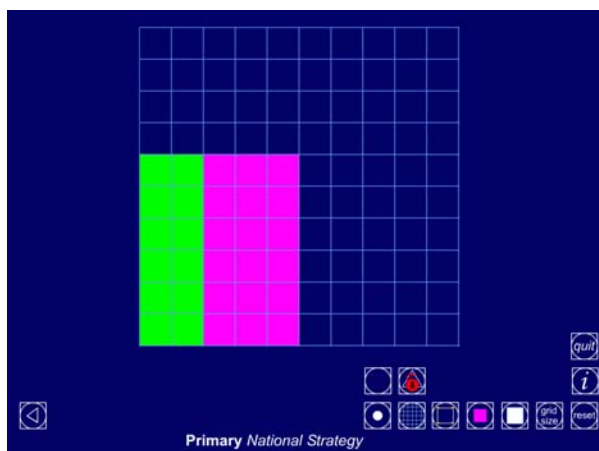
Area ITP	Children find **fractions and simple percentages of amounts**, *identifying the appropriate steps towards finding the answer. They solve problems involving fractions and percentages, using calculators where appropriate, and identifying and recording the calculations needed. For example:*

A class contains 12 boys and 18 girls. What fraction of the class are boys? What percentage of the class are girls?

25% of the apples in a basket are red. The rest are green. There are 21 red apples. How many green apples are there?

Area ITP can be found in the library section of the Primary Framework. Use it alongside practical equipment.

Children build on their understanding of direct proportion to solve problems, for example:

This cup holds 40 ml. How many cups can I pour from a $\frac{1}{2}$ litre bottle?
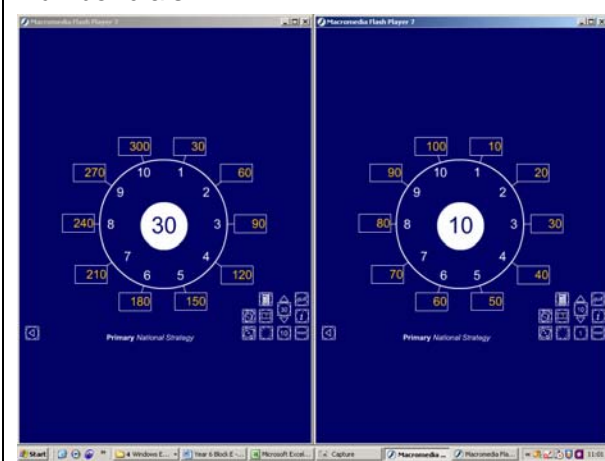
Number dials ITP	*They scale numbers up or down by converting recipes for, say, 6 people to recipes for 2 people:*

In a recipe for 6 people you need 120 g flour and 270 ml of milk. How much of each ingredient does a recipe for 2 people require?

Number dials ITP can be found in the library section of the Primary Framework. It can be used in a split-screen format to explore the effect of scaling quantities up or down.