What I can do in mathematics – level 4

00952-2009DOC-EN-03
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Name: …….....

My mental mathematics		
My I can statements	**Examples of questions I can answer**	**My working and answers**
I can use mental calculation strategies for addition, subtraction, multiplication and division	What number is 199 more than 428? What is the difference between 1999 and 4003? One orange costs 15p. How much would five oranges cost? Y4 optional test 1998 Mental test level 4. © QCA Four pineapples cost £3.40. Calculate the cost of one pineapple. Y4 optional test 2003 Paper A level 4. © QCA	
I can use mental methods for calculations that involve decimals	Multiply nought point seven by nine. Subtract one point nine from two point seven. KS2 2003 Mental test level 4. © QCA Find the total of 0.2, 0.4 and 0.6. What is half of three point six? KS2 1998 Mental test level 4. © QCA	
I can record my working for mental methods that involve several steps	A bottle holds 1 litre of lemonade. Rachel fills 5 glasses with lemonade. She puts 150 millilitres in each glass. How much lemonade is left in the bottle? KS2 2003 Paper A level 4. © QCA	
I can choose when to use mental methods, when to use written methods and when to use a calculator	Would you use a mental, written or calculator method to solve each of these? Explain your choice. 23.5 × □ = 176.25 How many cartons of juice costing 30p each can I buy with £2? What is the total cost if I buy food costing £3.86 and £8.57?	

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My understanding of numbers		
My I can statements	**Examples of questions I can answer**	**My working and answers**
I understand what each digit in a large/decimal number is worth and can explain how I know	What is the value of the 3 in the number 235 107? Suggest a number between 3.4 and 3.5. How many tenths could be made altogether from 8.4?	
I can find a missing number in a decimal sequence	Find the missing number on this number line: [ ] **10** **10.2** **10.4**	
I can explain how I order a set of decimal numbers	Put the correct symbol, < or >, in each box: 3.03 ☐ 3.3 0.37 ☐ 0.327 Order these numbers: 0.27 0.207 0.027 2.07 2.7	
I can round the numbers in a calculation to find an approximate answer	What is 3 528 rounded to the nearest ten/hundred/thousand? I buy 6 books that cost £4.99 each. How much will I pay to the nearest pound? How do you know?	
I can describe each step I do to complete a decimal calculation or problem	Explain how you know which two numbers total 0.12: 0.1 0.5 0.05 0.7 0.07 0.2 Explain how you find the missing number: 11.07 + ☐ = 18.45	
I can multiply/divide a number by 10/100/1000 and explain how I know the answer	How many hundreds are there in two thousand four hundred? Y5 optional test 2003 Mental test level 4. © QCA Write what the missing digits could be: ☐☐☐ ÷ 10 = 3☐ KS2 1997 Paper A level 4. © QCA	
I can use number facts to give some linked decimal facts	7 x 8 = 56. What is 0.07 x 8? Give some other decimal facts that are linked to this multiplication fact. What number multiplied by 8 gives 4.8?	

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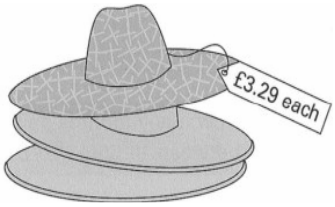
My calculating using money and time		
My I can statements	**Examples of questions I can answer**	**My working and answers**
I can solve problems that involve time, recording my calculation methods clearly	These are the start and finish times on a video recorder. **START 14:45 FINISH 17:25** For how long was the video recording? KS2 1999 Paper B level 4. © QCA	
I can read a timetable/calendar in order to solve a problem	Simon's birthday is on 26 August. He always has a party on the last Saturday in August. What was the date of the party in 1998? In what year will the party next fall on his actual birthday? Tina's birthday is on 9 September. On what day of the week was her birthday in 2008? KS2 1999 Paper B level 4. © QCA	**August 1998** Sun Mon Tues Wed Thur Fri Sat 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
I can solve problems that involve money, recording my working for each step	A packet of crisps costs 32p. Josh buys three packets. How much change does he get from £1? KS2 2005 Mental test level 4. © QCA  Ryan buys sunglasses for £4.69 and a sun hat. How much change does he get from £10? KS2 2004 Paper A level 4. © QCA	
I can use a calculator effectively to solve money problems	How much change will I get from £10 if I buy groceries costing £2.29, £1.42, 76p and £3.83? A pencil costs 48p. Jake works out the cost of five pencils by entering **48 x 5** into a calculator. If the calculator display says 240 what answer should Jake give?	

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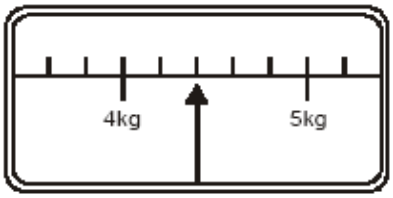
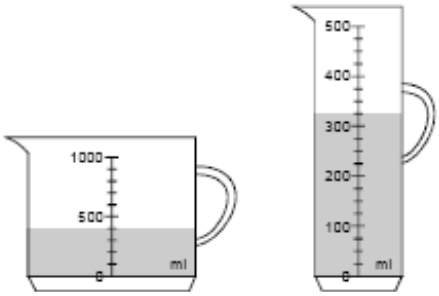
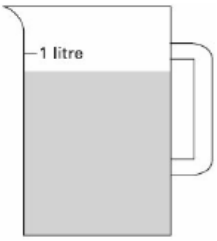
My skills in reading scales		
My I can statements	**Examples of questions I can answer**	**My working and answers**
I can work out the size of each interval on a scale and check, using counting	What is one interval worth on this scale? How do you know?  This scale shows the weight of Fred's cat. How much does Fred's cat weigh? KS2 2004 Paper B level 4. © QCA	
I can work out the value of any marked point on a scale	Which jug contains more water, A or B? How much more does it contain? Explain how you worked it out.  **Jug A** **Jug B** 2003 Y7 progress test Paper B level 4. © QCA	
I can estimate the value of a point that falls between two marks on a scale	Sophie poured some water out of a litre jug. Look how much is left in the jug. Estimate how many millilitres of water are left.  Y5 optional test 2003 Paper A level 4. © QCA	
I can read a scale to solve problems involving length, weight and capacity	Use one apple to work out approximately how many apples you would get in a 1 kg bag.	

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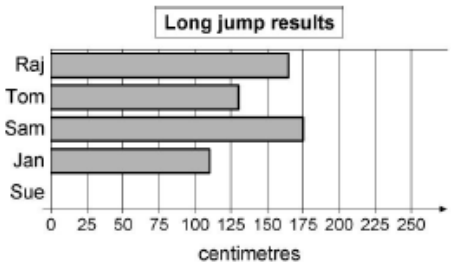
My problem solving using tables and graphs

My I can statements	Examples of questions I can answer	My working and answers
I can find the information in a table or graph to answer a question	<table><tr><th></th><th></th><th>Hull</th><th>York</th><th>Leeds</th></tr><tr><td rowspan="2">Adult</td><td>single</td><td>£12.50</td><td>£15.60</td><td>£10.25</td></tr><tr><td>return</td><td>£23.75</td><td>£28.50</td><td>£19.30</td></tr><tr><td rowspan="2">Child</td><td>single</td><td>£8.50</td><td>£10.80</td><td>£8.25</td></tr><tr><td>return</td><td>£14.90</td><td>£17.90</td><td>£14.75</td></tr></table> The table shows the cost of coach tickets to different cities. What is the total cost for a return journey to York for one adult and two children? KS2 2002 Paper B level 4. © QCA	
I can read data accurately from a graph	Here are some children's long jump results. Sue jumped 212 cm. Draw Sue's long jump result on the graph. Use the graph above to estimate how much further Sam jumped than Jan. KS2 1996 Paper A level 3. © QCA	
I can work out what calculations I need to do to answer questions using data		

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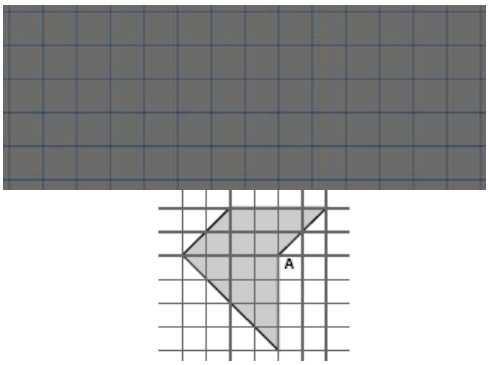
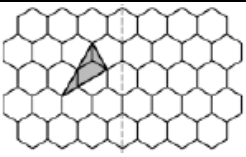
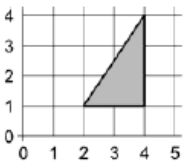
My understanding of shapes		
My I can statements	**Examples of questions I can answer**	**My working and answers**
I can name shapes and describe their properties, using mathematical language	Imagine a triangular prism. How many faces does it have? KS2 1999 Mental test level 4. © QCA This diagram shows the diagonals of a quadrilateral. What is its name? KS2 2003 Paper A level 4. © QCA	
I can draw or make shapes accurately	On squared paper, draw a pentagon that has three right angles. Draw two straight lines from point A to divide the shape into a square and two triangles. KS2 2003 Paper B level 4. © QCA	
I can explain how I have sorted a set of shapes	My shape has exactly two equal sides. My shape has exactly two parallel sides. Can you show or draw me a polygon that fits both of these criteria? What do you look for?	
I can reflect a shape accurately in a given mirror line	This grid is made of hexagons. Draw the reflection of the shaded shape on the grid. KS2 2005 Paper B level 3. © QCA	
I can rotate a shape about a vertex or its centre	This pattern is made by turning a shape clockwise through 90° each time. Draw the two missing triangles on the last shape. KS2 2005 Paper B level 4. © QCA	
I can describe where a shape will be after translation	This triangle is translated two squares to the left and one square down. Give the coordinates of its vertices in the new position.	

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