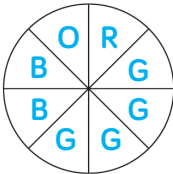
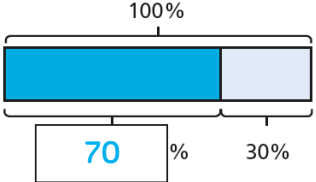
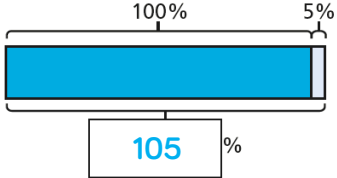
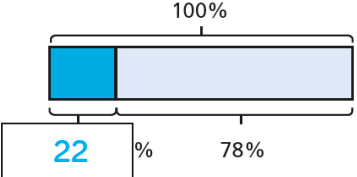
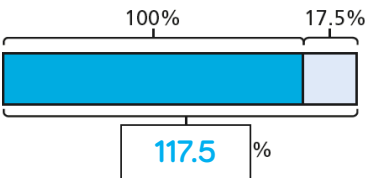


Question	Answer
1	
2	<p>a) <math>\frac{2}{5}</math> is the same as <math>\frac{4}{10}</math> which is 0.4</p> <p>b) 0.4</p> <p>c) 0.8</p>
3	<p>a) <math>75\% = \frac{75}{100}</math> which simplifies to <math>\frac{3}{4}</math></p> <p>b) i) <math>\frac{9}{10}</math></p> <p>ii) <math>\frac{9}{25}</math></p> <p>iii) <math>\frac{3}{5}</math></p> <p>iv) <math>\frac{1}{20}</math></p>
4	<p>a) i) 0.18</p> <p>ii) 0.81</p> <p>iii) 0.8</p> <p>iv) 0.08</p> <p>v) 0.01</p> <p>vi) 0.001</p> <p>b) i) 14%</p> <p>ii) 41%</p> <p>iii) 40%</p> <p>iv) 4%</p> <p>v) 1.4%</p> <p>vi) 140%</p>
5	<p>a) &gt;</p> <p>b) &lt;</p> <p>c) =</p> <p>d) &gt;</p>
6	<p>a) </p> <p>b) 10%</p>

**Y9 – Spring – Block 2 – Step 1 – Use the equivalence of fractions, decimals and percentages Answers (continued)**

Question	Answer										
7	<p>a) </p> <p>b) <table border="1" data-bbox="261 416 698 551"> <tr> <td>Colour</td> <td>red</td> <td>green</td> <td>blue</td> <td>other</td> </tr> <tr> <td>Probability</td> <td><math>\frac{1}{8}</math></td> <td>0.5</td> <td>25%</td> <td><math>\frac{1}{8}</math></td> </tr> </table> <p>Alternative answers would be 12.5% or 0.125</p> </p>	Colour	red	green	blue	other	Probability	$\frac{1}{8}$	0.5	25%	$\frac{1}{8}$
Colour	red	green	blue	other							
Probability	$\frac{1}{8}$	0.5	25%	$\frac{1}{8}$							
8	0.29										
9	<p>a) 0.06</p> <p>b) 0.45</p>										

Question	Answer
1	<p>a)     </p> <p>b)     </p>
2	<p>a) £44            b) £44            Students need to justify why they prefer one method over the other.</p>
3	<p>a) <input type="checkbox"/> <math>\times 0.3</math>    <input type="checkbox"/> <math>\times 30</math>    <input checked="" type="checkbox"/> <math>\times 0.7</math>    <input type="checkbox"/> <math>\times 1.3</math></p> <p>b) <input type="checkbox"/> <math>150 \times 1.7</math>    <input checked="" type="checkbox"/> <math>150 \times 1.07</math>    <input type="checkbox"/> <math>150 \times 0.93</math>    <input type="checkbox"/> <math>150 \times 0.07</math></p> <p>c) tablet: £315            television: £918            computer: £179.40</p>
4	<p>Whitney            Whitney: 66 marks, Amir: 60 marks</p>
5	<p>£575</p>
6	<p>0.96 cm<sup>2</sup></p>
7	<p>17,856</p>
8	<p>£52.65</p>
9	<p>Phone World            Best Phones: £838.80, Phone World: £819.99</p>

Y9 - Spring - Block 2 - Step 2 - Calculate percentage increase and decrease Answers (continued)

Question	Answer
10	original price of sofa: £2,238.60 sale price: £1,343.16 The sale price is less than £1,599

**Y9 – Spring – Block 2 – Step 3 – Express a change as a percentage Answers**

Question	Answer
1	65%
2	15%
3	a) 26.2% b) 33.3%
4	400%
5	37.5%
6	£30
7	40%
8	original area = 4,800 mm <sup>2</sup> new area = 5,400 mm <sup>2</sup> percentage change = 12.5%
9	1.09%
10	3%
11	25.44%

## Y9 – Spring – Block 2 – Step 4 – Solve reverse percentage problems Answers

Question	Answer
1	a) 80% b) £34 c) £340
2	80
3	30
4	a) Tom b) £400
5	50
6	a) £11,340 b) £14,175
7	a) 63p or £0.63 b) $9 \times 10^7$
8	a) 20 b) 1,530
9	$66,000 \div 1.45 = 45,517.2$ (to 1 d.p.) We cannot have part of a person, so there is not a whole number which can be increased by 45% to give 66,000
10	a) The 15% reduction was applied to 70% of the original price, not 100% of the original price. b) £240

**Y9 – Spring – Block 2 – Step 5 – Recognise and solve percentage problems (non-calculator) Answers**

Question	Answer
1	7 weeks
2	80%
3	846
4	£7
5	£61.75
6	120
7	a) 28 b) 45% c) 75p
8	a) 12% b) 51 c) 153 Yes. An unbiased spinner would land on each letter approximately the same number of times ( $\approx 60$ times). This spinner lands on E for over half the spins and on each of the other letters for less than 60
9	16 stickers

**Y9 – Spring – Block 2 – Step 6 – Recognise and solve percentage problems (calculator) Answers**

Question	Answer
1	120
2	a) 120 boys, 100 girls b) 15% of boys = 18 37% of girls = 37 total left-handed = 55 percentage left-handed = 25%
3	a) 21.7% b) £288,000 c) $1.449 \times 10^7$
4	£403.37
5	95.2 kg
6	7.5 cm
7	4.5 cm
8	£21,072



**Y9 – Spring – Block 2 – Step 7 – Solve problems with repeated percentage change (H) Answers**

Question	Answer
1	a) £60 b) £78 c) 56%
2	a) £6,552 b) £5,472 c) 715 ml d) 412.5 ml
3	a) £544 b) 32%
4	a) Rosie thinks that as $50\% + 50\% = 100\%$ , she can just double the original amount. b) 270 kg
5	a) $15,600 \times 0.875 \times 2$ $15,600 \times 0.875 \times 0.875$ ✓ $15,600 \times 0.125 \times 2$ $15,600 \times 0.125 \times 0.125$ b) £11,943.75
6	a) final price = £76 24% b) i) 54% increase ii) 44% decrease iii) 14.75% increase
7	0.686 m
8	64.3%
9	$y = 1.5\%$
10	5 months