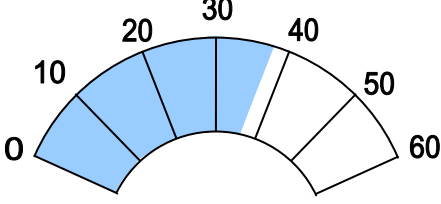
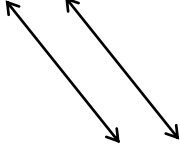
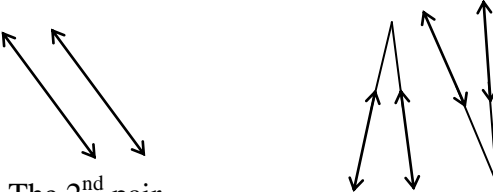
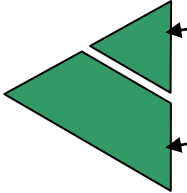
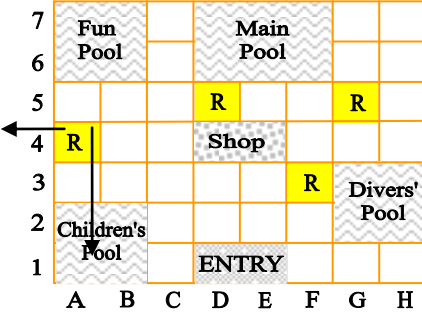
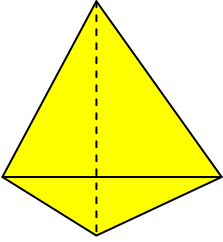
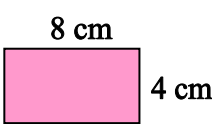
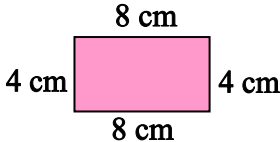
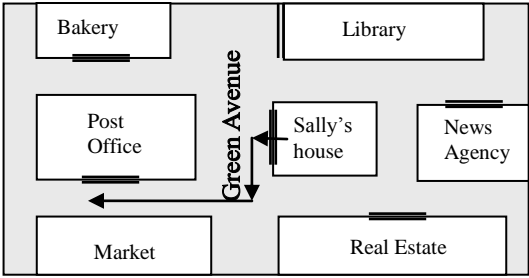
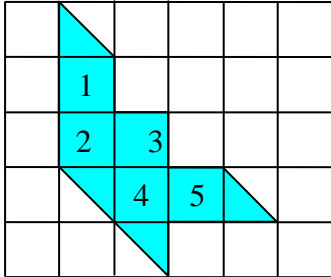

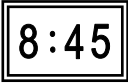
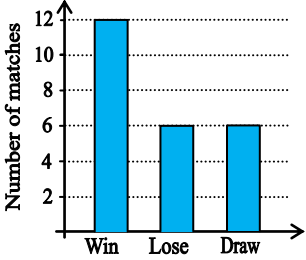
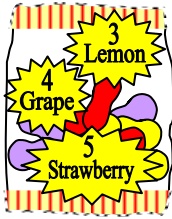

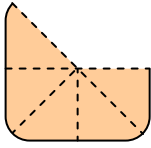
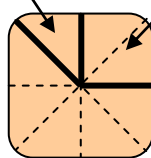
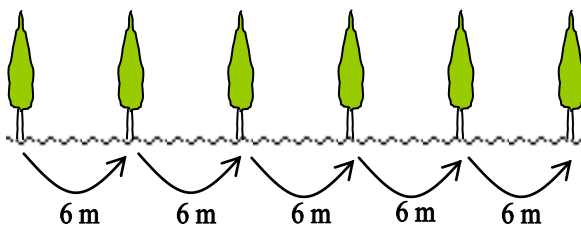


5	37 litres	<p>As shown, the shaded section ends just before 40, so the tank in this car contain about 37 litres.</p> 	<p>use scaled instruments to measure and compare capacities. (ACMMG084)</p>
6	60	<p>The larger container has 254 marbles and the smaller container has 194.</p> <p>The larger container has $254 - 194 = 60$ more marbles than the smaller container.</p>	<p>use efficient mental and written strategies to solve problems. (ACMNA291)</p>
7		<p>Parallel lines never meet, even if they are extended. The first pair of lines meet.</p>  <p>The 2nd pair of lines will never meet.</p> <p>The 3rd and 4th lines will meet if extended.</p>	<p>investigate conditions for two lines to be parallel and solve simple numerical problems using reasoning. (ACMMG164)</p>
8	Trapezium	 <p>The top piece is a triangle.</p> <p>The bottom piece has one pair of parallel sides, so it is a trapezium.</p>	<p>compare and describe two dimensional shapes that result from combining and splitting common shapes. (ACMMG088)</p>
9	A4	<p>This Restroom is closest to the Children's Pool.</p> 	<p>use a grid reference system to describe locations. (ACMMG113)</p>

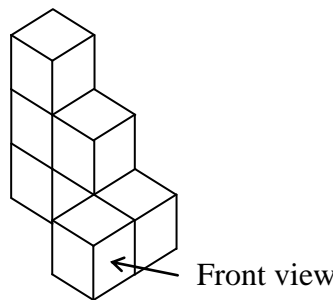
10		<p>The 2nd and 4th shapes are triangular prisms. The 3rd shape is a rectangular prism.</p> <p>Only the 1st shape is a triangular pyramid, as it has a triangular base and a pointed apex.</p>	<p>construct simple prisms and pyramids. (ACMMG140)</p>
11	<p>Card 1 Card 3 Card 4</p>	<p>The sum of cards 2, 3 and 4 is $17 + 7 + 4 = 28$. The sum of cards 1, 2 and 4 is $20 + 17 + 4 = 41$. The sum of cards 1, 2 and 3 is $20 + 17 + 7 = 44$.</p> <p>Only the sum of cards 1, 3 and 4 is $20 + 7 + 4 = 31$.</p>	<p>use efficient mental and written strategies to solve problems. (ACMNA291)</p>
12	<p>Kevin</p>	<p>The higher the name on the graph, the more time it took the competitor to complete the race.</p> <p>Since Kevin is the highest name, he took the longest time to complete the race, meaning he came last.</p>	<p>describe and interpret different data sets in context. (ACMSP120)</p>
13		<p>The perimeter of the first rectangle is</p> $8 + 4 + 8 + 4 = 24 \text{ cm.}$ <p>The perimeters of the other three rectangles are each 48 cm.</p> 	<p>calculate the perimeter and area of rectangles using familiar metric units. (ACMMG109)</p>
14	<p>Post Office</p>	 <p>Sally will walk between the Market and Post Office.</p>	<p>describe routes using landmarks and directional language. (ACMMG113)</p>
15	<p>7 square units.</p>	<p>There are 5 whole squares.</p> <p>Also, the 4 half squares are equal to 2 more whole squares.</p> <p>So the shaded area is $5 + 2 = 7$</p> 	<p>compare the areas of regular and irregular shapes by informal means. (ACMMG087)</p>


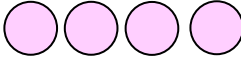
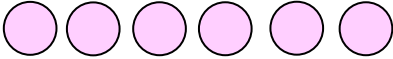
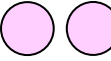










16	5 g	The closest answer for the mass of a pencil is about 5g.	measure, order and compare objects using familiar metric units of mass. (ACMMG061)
17	9	The cross section of this prism has 7 sides. For each of these sides there is a rectangular face attached. This means there are 7 faces around the solid. Also, there are 2 more faces – one in the front and the other in the back. Hence, the solid has a total of 9 faces.	connect three-dimensional objects with two-dimensional representations. (ACMMG111)
18		The first set of scales has 4 mangoes and 5 bananas. So, mangoes are heavier than bananas. The second set of scales has 2 mangoes and 4 apples. So, mangoes are heavier than apples. ie. mangoes are the heaviest. By doubling we get 4 mangoes weigh the same as 8 apples. So 4 mangoes weigh the same as 5 bananas and 8 apples. This means apples are the lightest.	compare masses of objects using balance scales. (ACMMG038)
19		The minute hand is pointing at the nine, this indicates 45 minutes after an hour. 8:45 is the only correct possibility from the alternatives presented.	convert between units of time. (ACMMG085)
20	7.5 cm	The base of the stapler begins at 3cm and ends at 10.5cm, so its length must be $10.5 - 3 = 7.5$ cm	use scaled instruments to measure and compare lengths. (ACMMG084)
21	65.04	6 tens is 60 5 ones is 5 4 hundredths is 0.04 The total is $60 + 5 + 0.04 = 65.04$	recognise that the place value system can be extended to tenths and hundredths. (ACMNA079)

22	2.7	$\begin{array}{r} 4 \\ 5.10 - \\ \underline{2.3} \\ 2.7 \end{array}$	add and subtract decimals. (ACMNA128)
23		<p>The total number of wins is $2 + 3 + 0 + 3 + 3 + 1 = 12$</p> <p>The total number of losses is $1 + 0 + 2 + 1 + 0 + 2 = 6$</p> <p>The total number of draws is $1 + 1 + 2 + 0 + 1 + 1 = 6$</p> <p>So the fourth graph shows these results.</p>	construct displays, including column graphs, dot plots and tables, appropriate for data type. (ACMSP119)
24		<p>It is most likely to choose a strawberry jellybean, so the bag must contain more strawberry jellybeans than any other flavour.</p> <p>Also, it is least likely to choose a lemon jellybean, so the bag must contain less lemon jellybeans than any other flavour.</p> <p>As the last bag has 5 strawberry, 4 grape and 3 lemon jellybeans, then it is the bag that satisfies the conditions above.</p>	describe possible everyday events and order their chances of occurring. (ACMSP092)
25		<p>Any straight slice through a sphere will produce a circular cross section.</p>	compare and describe two dimensional shapes that result from combining and splitting common shapes. (ACMMG088)
26	8	<p>33 boys chose freestyle and 25 chose butterfly. As $33 - 25 = 8$, so 8 more boys chose freestyle than butterfly.</p>	describe and interpret different data sets in context. (ACMSP120)

27		<p>As shown, Jemima ate 1 piece and Anthony ate 2 pieces.</p> <p>Jemima ate $\frac{1}{8}$ Anthony ate $\frac{1}{4}$.</p> 	<p>solve problems involving addition and subtraction of fractions with the same or related denominators. (ACMNA126)</p>
28	12 m	<p>There are 5 spaces between the trees. Each space is $30 \div 5 = 6$ m.</p>  <p>As the distance between any two trees is 6 m, then the distance from the first tree to the third tree is $6 + 6 = 12$ m.</p>	<p>develop efficient mental and written strategies for multiplication and for division where there is no remainder. (ACMNA076)</p>
29	20	<p>In 8 days there are 4 lots of 2 days.</p> <p>As every 2 days John drinks 5 bottles of water, then in 8 days he will drink 4 lots of 5 bottles, which is 20 bottles.</p>	<p>develop efficient mental and written strategies for multiplication and for division where there is no remainder. (ACMNA076)</p>
30	200	<p>The total number of cars that pass the toll gate over 3 hours is $170 + 210 + 220 = 600$ So the average is $600 \div 3 = 200$ cars.</p>	<p>calculate mean for sets of data. (ACMSP171)</p>
31	31	<p>We are looking for the smallest number that can be divided by 2, 3 and 5, then we must add 1 to it. The smallest number is 30, so there must be 31 students in Mr Smith's class.</p>	<p>solve problems involving division by a one digit number, including those that result in a remainder. (ACMNA101)</p>

32	45 g	<p>Each of the 9 slices has a mass of 60 g. So, the cake has a mass of $9 \times 60 = 540$ g.</p> <p>The mass of each of the 12 slices would be $540 \div 12 = 45$ g.</p>	<p>develop efficient mental and written strategies for multiplication and for division where there is no remainder. (ACMNA076)</p>
33	21	<p>From this diagram it can be seen that there are 14 children who own only a skateboard and 7 who own a bicycle and a skateboard.</p> <p>So, the total number of people who own a skateboard is 21.</p>	<p>interpret and compare a range of data displays. (ACMSP147)</p>
34	32	<p>Start with the final answer and work backwards. $64 \div 8 = 8$ and $8 \times 4 = 32$ So Jayne began with 32.</p> <p>Alternative method: Apply Jayne's operations on each of the answers provided until the result is 64.</p>	<p>develop efficient mental and written strategies for multiplication and for division where there is no remainder . (ACMNA076)</p>
35	12	<p>In 2 years Kylie will be 40, so she is 38 now. Kylie is 26 years older than Jamie. So Jamie's age is $38 - 26 = 12$.</p>	<p>use efficient mental and written strategies to solve problems. (ACMNA291)</p>
36	7	<p>This diagram shows Anthony's solid as a 3D representation.</p> <p>This solid has been made using 7 blocks.</p>	<p>connect three-dimensional objects with their nets and other two-dimensional representations. (ACMMG111)</p>
37	4:30 pm	<p>Fiji is 2 hours ahead of Sydney, so when the plane leaves Fiji at 2:00pm the time in Sydney will be 12:00 noon.</p> <p>The flight takes 4 hours and 30 minutes, so the plane will arrive at 4:30pm.</p>	<p>solve simple time problems. (ACMMG086)</p>



38	\$30	<p>If grace saved this amount </p> <p>Dorothy saved 4 times as much as Grace saved,</p> <p>So she saved this amount: </p> <p>Mary saved 6 times as much as Grace saved, so she saved this amount:</p>  <p>As Mary saved \$60 more than Dorothy, this means  is \$60. So  is \$30.</p> <p>Hence, Grace saved \$30.</p>	<p>select and apply efficient mental and written strategies to solve problems involving all four operations with whole numbers. (ACMNA123)</p>																								
39	4 minutes	<p>Every minute Kevin walks 90 m and Tom walks 80 m, so Kevin will be 10 m closer after every minute.</p> <p>After 1 minute he will be 30 m behind Tom. After 2 minutes he will be 20 m behind Tom. After 3 minutes he will be 10 m behind Tom. After 4 minutes he will be alongside Tom.</p>	<p>select and apply efficient mental and written strategies to solve problems involving all four operations with whole numbers. (ACMNA123)</p>																								
40	9	<p>As shown in the table, Peter has nine \$20 cards.</p> <table border="1"> <thead> <tr> <th>Number of \$5 cards</th> <th>Number of \$10 cards</th> <th>Number of \$20 cards</th> <th>Total value of cards</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>7</td> <td>12</td> <td>\$5 + \$70 + \$240 = \$315</td> </tr> <tr> <td>2</td> <td>7</td> <td>11</td> <td>\$10 + \$70 + \$220 = \$300</td> </tr> <tr> <td>3</td> <td>7</td> <td>10</td> <td>\$15 + \$70 + \$200 = \$285</td> </tr> <tr> <td>4</td> <td>7</td> <td>9</td> <td>\$20 + \$70 + \$180 = \$270</td> </tr> </tbody> </table>	Number of \$5 cards	Number of \$10 cards	Number of \$20 cards	Total value of cards					1	7	12	\$5 + \$70 + \$240 = \$315	2	7	11	\$10 + \$70 + \$220 = \$300	3	7	10	\$15 + \$70 + \$200 = \$285	4	7	9	\$20 + \$70 + \$180 = \$270	<p>select and apply efficient mental and written strategies to solve problems involving all four operations with whole numbers. (ACMNA123)</p>
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