
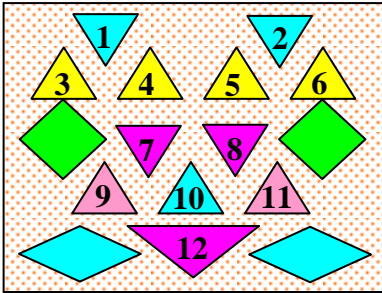


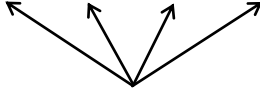

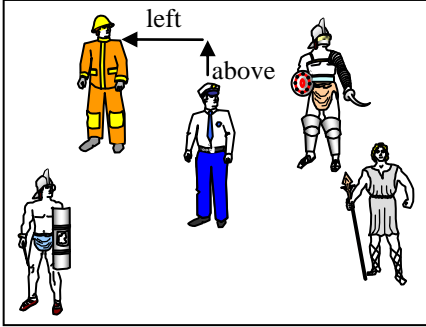
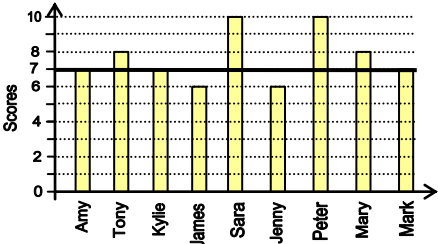
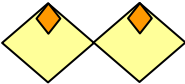
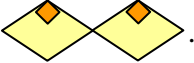
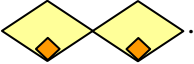
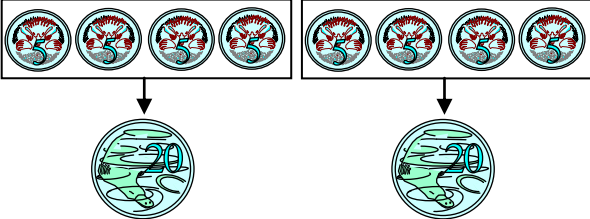
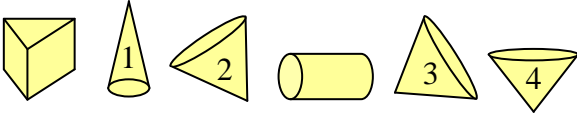

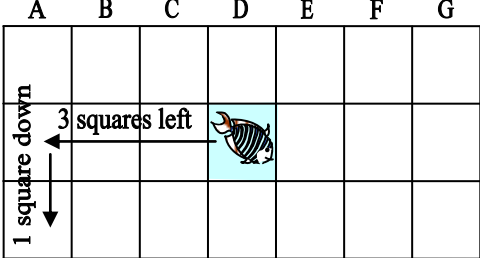
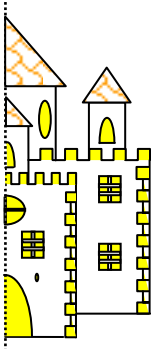
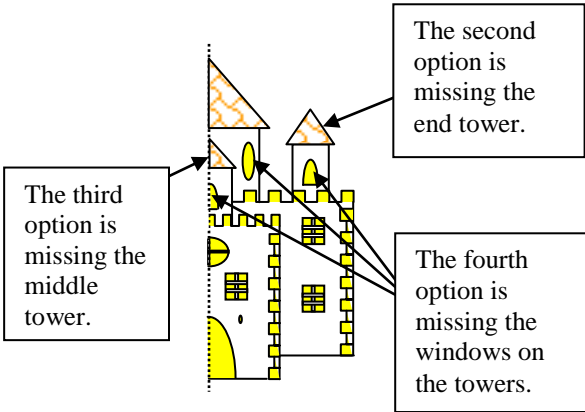
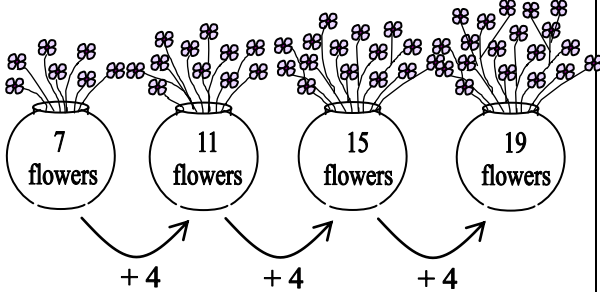
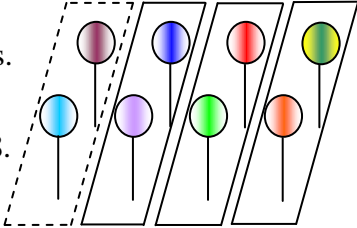
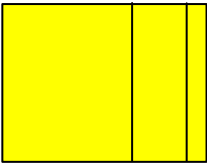
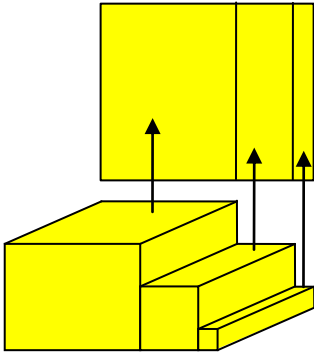


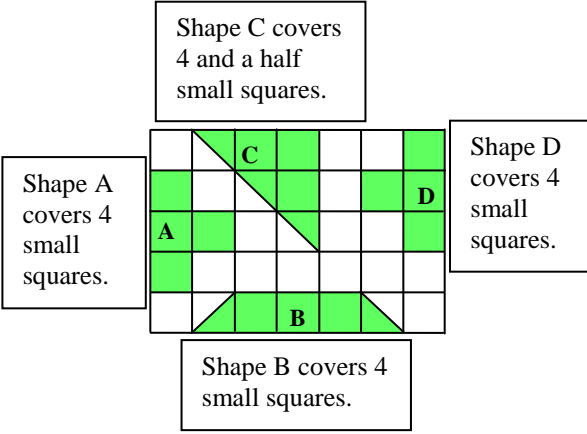

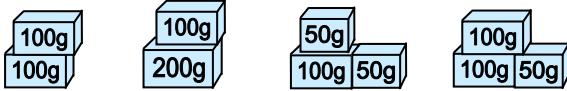
YEAR 3 – PAPER 4
NUMERACY WORKED SOLUTIONS


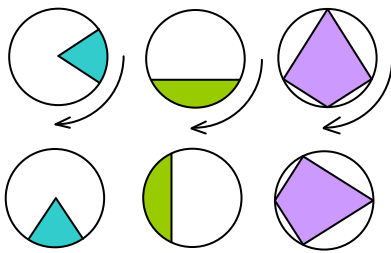
	ANSWER	EXPLANATION	Australian Curriculum Reference A student can
1	8	Each table has 4 legs. So, the two tables have a total of $4 + 4 = 8$ legs.	solve simple addition problems using a range of efficient mental and written strategies. (ACMNA030)
2		The basketball, large newspaper and the large container of milk would each weigh more than the candle.	measure, order and compare objects using familiar metric units of mass. (ACMMG061)
3	12	As shown, there 12 triangles in the picture. 	recognise and classify familiar two-dimensional shapes using obvious features. (ACMMG022)
4	11	represents 1 and represents 5 So represents 11.	create displays of data using lists and tables and interpret them. (ACMSP050)
5	4	Outlook Zoo  Green Valley Zoo   From the diagram we can see that Outlook Zoo has 4 more tigers than Green Valley Zoo.	create displays of data using picture graphs and interpret them. (ACMSP050)

6			<p>identify the relative positions of key features. (ACMMG044)</p>																				
7	3	<p>By drawing a line through 7, we can see that 3 people, Amy, Kylie and Mark each scored 7.</p>  <table border="1"> <caption>Bar Graph Data</caption> <thead> <tr> <th>Name</th> <th>Score</th> </tr> </thead> <tbody> <tr><td>Amy</td><td>7</td></tr> <tr><td>Tony</td><td>8</td></tr> <tr><td>Kylie</td><td>7</td></tr> <tr><td>James</td><td>6</td></tr> <tr><td>Sara</td><td>10</td></tr> <tr><td>Jenny</td><td>6</td></tr> <tr><td>Peter</td><td>10</td></tr> <tr><td>Mary</td><td>8</td></tr> <tr><td>Mark</td><td>7</td></tr> </tbody> </table>	Name	Score	Amy	7	Tony	8	Kylie	7	James	6	Sara	10	Jenny	6	Peter	10	Mary	8	Mark	7	<p>create displays of data using lists, tables and picture graphs and interpret them. (ACMSP050)</p>
Name	Score																						
Amy	7																						
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Kylie	7																						
James	6																						
Sara	10																						
Jenny	6																						
Peter	10																						
Mary	8																						
Mark	7																						
8	10	<p>At the beginning 30 beads were in the bowl, then 20 beads were taken to make the necklace. So $30 - 20 = 10$ beads were left in the bowl.</p>	<p>solve simple addition and subtraction problems using a range of efficient mental and written strategies. (ACMNA030)</p>																				
9		<p>The pattern starts with 2 small diamonds on the top like this .</p> <p>Then, 2 small diamonds on the bottom like this .</p> <p>As the pattern ended with 2 small diamonds on the bottom, so next will be 2 small diamonds at the top.</p>	<p>investigate and describe patterns with objects. (ACMNA018)</p>																				
10	2	<p>Every four 5 cent coins make one 20 cent coin. So Donald can get two 20 cent coins for his eight 5 cent coins, as shown.</p> 	<p>count and order small collections of Australian coins and notes according to their value. (ACMNA034)</p>																				

11	4	 <p>As we can see, four of the solids are cones.</p>	<p>describe the features of three-dimensional objects. (ACMMG043)</p>
12		<p>Julia is most likely to select a carton of strawberry flavoured milk.</p> <p>This is because there are 3 strawberry flavoured milk cartons, which is greater than the other three flavours.</p>	<p>describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible'. (ACMSP047)</p>
13	A3	 <p>As shown, after Marty moves 3 squares to the left and then one square down, he will be at A3.</p>	<p>create and interpret simple grid maps to show position. (ACMMG065)</p>
14	5	<p>According to the graph, Paul's mark was 17 and Jonathan's mark was 12.</p> <p>So Paul scored $17 - 12 = 5$ marks more than Jonathan.</p>	<p>interpret and compare data displays. (ACMSP070)</p>
15		<p>As the dotted line is the line of symmetry for the completed object, the first option shows the correct other half.</p>  <p>The second option is missing the end tower.</p> <p>The third option is missing the middle tower.</p> <p>The fourth option is missing the windows on the towers.</p>	<p>identify symmetry in the environment. (ACMMG066)</p>

16	19	<p>As shown, the number of flowers in each bowl is increasing by 4.</p> <p>So the next bowl will have 19 flowers.</p> 	<p>describe, continue, and create number patterns resulting from performing addition or subtraction. (ACMNA060)</p>
17	July	<p>March has 31 days.</p> <p>Only July has 31 days, which is the same number of days as March.</p> <p>The other three months have less than 31 days.</p>	<p>use a calendar to identify the date and determine the number of days in each month. (ACMMG041)</p>
18	Two hundred and fifty dollars	<p>There is a 2 in the hundreds column and a 5 in the tens column.</p> <p>This means that the price of this kitty is two hundred and fifty dollars.</p>	<p>recognise, model, represent and order numbers to at least 1000. (ACMNA027)</p>
19	Quarter	<p>Kylie ate two of the 8 lollipops.</p> <p>This means she ate a quarter of 8.</p> 	<p>model and represent unit fractions including $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$ and their multiples to a complete whole. (ACMNA058)</p>
20		<p>The arrows show where the faces of the solid appear when viewed from the top.</p> 	<p>make models of three-dimensional objects and describe key features. (ACMMG063)</p>

21	C	 <p>Shape C covers 4 and a half small squares.</p> <p>Shape A covers 4 small squares.</p> <p>Shape B covers 4 small squares.</p> <p>Shape D covers 4 small squares.</p> <p>As shown, shape C covers the most number of small squares.</p>	<p>compare and order several shapes and objects based on area, using appropriate uniform informal units. (ACMMG037)</p>
22	51	$30 + 20 = 50$ and $50 + 1 = 51$	<p>solve simple addition problems using a range of efficient mental and written strategies. (ACMNA030)</p>
23	\$50	<p>Each will get a quarter of \$200.</p> <p>As a quarter of \$200 is \$50, then each of them will get \$50.</p>	<p>recognise and interpret common uses of quarters of collections. (ACMNA033)</p>
24		<p>To balance the scales we should place 300g on the empty pan.</p> <p>From the weight of each group listed below, we can see that the second group is needed.</p>  <p>200g 300g 200g 250g</p>	<p>compare masses of objects using balance scales. (ACMMG038)</p>
25	2:30 p.m.	<p>Tania left the movies at 4:30 p.m. and as she arrived 2 hours earlier, then she arrived at the movies at 2:30 p.m.</p>	<p>tell time to the quarter-hour, using the language of 'past' and 'to'. (ACMMG039)</p>

26	7	<p>One bus can carry 50 students.</p> <p>So 6 buses can carry 300 students and 7 buses can carry 350 students.</p> <p>As 330 students cannot be carried by 6 buses, then 7 buses are needed.</p>	<p>represent and solve problems involving multiplication using efficient mental and written strategies. (ACMNA057)</p>
27	8	<p>When the chef cuts the cake into quarters there will be 4 equal pieces.</p> <p>When he cuts each of these pieces in half, he will have a total of 8 pieces.</p>	<p>recognise and interpret common uses of halves, quarters and eighths of shapes. (ACMNA033)</p>
28		<p>The diagram shows how each of the tokens would look after Joanne turned them a quarter turn clockwise.</p> 	<p>identify and describe half and quarter turns. (ACMMG046)</p>
29	Triangular prism	<p>The solid is a triangular prism.</p> <p>It is the only solid in the given four options that has 5 faces, where two of them are triangles.</p>	<p>make models of three-dimensional objects and describe key features. (ACMMG063)</p>
30	7	<p>We can have a rose in the middle position only when an odd number of roses are planted next to each other.</p> <p>If there is an even number of roses we will have two roses in the middle positions.</p> <p>Hence, Grace planted 7 roses as this is the only given odd number.</p>	<p>investigate the conditions required for a number to be odd or even and identify odd and even numbers. (ACMNA051)</p>

31	4	<p>Annika ate 3 of the 11 jellybeans, so she still had 8.</p> <p>As she gave Debby half of the remaining 8, then Debby got 4 jellybeans.</p>	<p>recognise and represent division as grouping into equal sets and solve simple problems using these representations. (ACMNA032)</p>
32	14	<p>Each full bottle can fill 4 cups. So 3 full bottles filled 3 lots of 4, which is 12 cups.</p> <p>Also, the half full bottle filled 2 cups. Therefore, the total number of cups of juice filled was $12 + 2 = 14$.</p> <p>Hence, 14 guests were at Michelle's party.</p>	<p>recognise and interpret common uses of halves, quarters and eighths of shapes and collections. (ACMNA033)</p>
33	30	<p>The number of trees at Success Primary is a quarter of 24, which is 6.</p> <p>So, the total number of trees in these two primary schools is $24 + 6 = 30$.</p>	<p>recognise and interpret common uses of halves, quarters and eighths of collections. (ACMNA033)</p>
34	60 cm	<p>The stack with 2 cubes is 24 cm tall, so each cube is 12 cm tall.</p> <p>As the taller stack has 5 cubes then its height is 5 lots of 12, which is 60 cm.</p>	<p>measure, order and compare objects using familiar metric units of length. (ACMMG061)</p>
35	60	<p>Tarzan has 20 more pages.</p> <p>If we subtract 20 from the total, both books would now have an equal number of pages, which is $140 - 20 = 120$.</p> <p>The number of pages in Batman is a half of 120, which is 60 pages.</p> <p>Tarzan has 20 more pages, which is 80 pages.</p>	<p>recognise and represent division as grouping into equal sets and solve simple problems using these representations. (ACMNA032)</p>