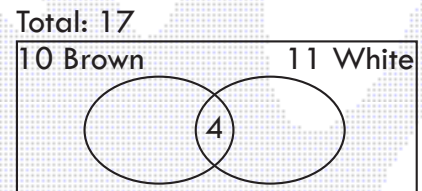


## 2022 Grade Two Spirit of Math Contest Solutions

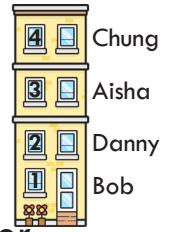
- 1) **D** Pair up the numbers to make the calculation easier:  
 $6 + 4 + 17 + 3 + 8 + 2 = 10 + 20 + 10$   
 $= 40$
- 2) **B** Odd numbers end with the digits 1, 3, 5, 7, or 9. Of the given numbers, 15 is the only odd number.
- 3) **A** The month after March is April.
- 4) **A** Adil ate seven cookies so he has  $15 - 7 = 8$  cookies left.
- 5) **B** Arjun read 5 books in June, 15 books in July, 10 books in August, and 5 books in September. So, he read the most number of books in July.
- 6) **C** Each new term is created by adding six to the previous number. Therefore, the next term is  $30 + 6 = 36$ .
- 7) **B** If Yasmin can make 4 leaps in 1 minute, she can make  $4 \times 6 = 24$  leaps in 6 minutes.
- 8) **D** Since Jane is twice as old as Jason, she is  $9 \times 2 = 18$  years old. Next year, Jane will be one year older so she will 19 years old.
- 9) **C** Ted has three jelly beans and Sadie has  $3 + 4 = 7$  jelly beans. Together, they have  $3 + 7 = 10$  jelly beans.
- 10) **B** San started reading at the top of page 3 so he did not read 2 pages. The last page San read was page 9 so he read  $9 - 2 = 7$  pages.
- 11) **B** Since Oliver is the 3<sup>rd</sup> person from the front of the line, there are 2 people in front of Oliver. Since Oliver is the 4<sup>th</sup> person from the back, there are 3 people behind Oliver. Including Oliver himself, there are  $2$  (in front) +  $1$  (Oliver) +  $3$  (behind) =  $6$  people in the lineup.
- 12) **A** There are  $10 + 11 = 21$  brown or white cats, but there are only 17 cats in total. So,  $21 - 17 = 4$  cats have been counted twice. Therefore, 4 cats are both brown and white.



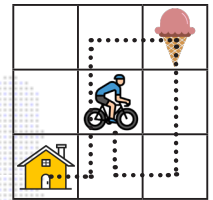
- 13) **A** Ball C is heavier than Ball B, but Ball A is heavier than Ball C. Therefore, Ball A is heavier than Ball B and Ball C. So, Ball A is the heaviest.
- 14) **B** A) "How many legs were there in total?" is given in the question.  
B) "How many legs does a centimete have and how many legs does a millimillar have?" is needed to calculate how many of the legs belong to the centimetes or millimillars and is therefore the logical question to ask.  
C) "Did he find more centimetes or more millimillars?" does not help solve the problem.  
D) "Where did he find these new creatures?" does not help solve the problem.

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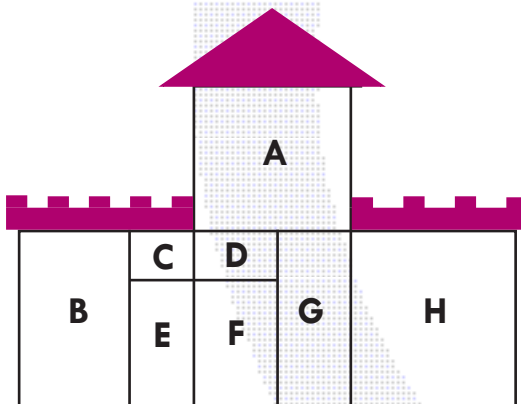
- 15) **A** Danny lives right above Bob, but not on the fourth floor, so he lives on the second or third floor and Bob lives on the first or second floor. Aisha and Chung do not live on the first floor, so Bob must live on the first floor and Danny on the second floor. Chung lives above Aisha so Aisha must be on the third floor.



- 16) **B** Each of the seven pianists shook hands with 6 performers. That is  $7 \times 6 = 42$  handshakes. However, each handshake has been counted twice, so the total is  $42 \div 2 = 21$  handshakes.
- 17) **C** Since the time in Beijing, China is ahead of the time in Vancouver, Canada, add 16 hours to 9:42 p.m. Since 12 hours after 9:42 p.m. is 9:42 a.m. and 4 hours after that is 1:42 p.m., the time in Beijing is 1:42 p.m.
- 18) **C** Letter E must be 3 or 8 to get the 6 in the units place because  $3 + 3 = 6$  and  $8 + 8 = 16$ . Since there is the 7 in the tens place, letter E must be 8 to carry over one to the tens place. Since there is the 5 in the hundreds place, letter B must be 4 since we carry over one from the tens place. The addition problem is  $488 + 88 = 576$ . The sum of B and E is  $8 + 4 = 12$ .
- 19) **B** One way Jaxon's character can buy the ice cream and bike home is to move one space down, one space right, one space up, one space up, buy ice cream, and then move one space left, one space down, one space down, and one space left. Using the symbols, this is DRUU\*LDDL, or option B. Of the given options, this is the only option that directs Jaxon's character to the ice cream and then home. The path taken is shown in the diagram.



- 20) **C** Label each region of the diagram and make a chart to help you count.



# of letters	Rectangle Names	Total
1	A, B, C, D, E, F, G, H	8
2	CD, CE, DF, EF, GH	5
3	BCE, DFG	2
4	ADFG, CDEF, DFGH	3
5	BCDEF, CDEFG	2
6	BCDEFG, CDEFGH	2
7	BCDEFGH	1
	<b>Total</b>	<b>23</b>

