Important Concepts . . .

Preview Review

Mathematics Grade 6 TEACHER KEY

W3 - Quiz

V5-07

Important Concepts of Grade 6 Mathematics

Materials Required: A textbook is not needed. This is a stand-alone course.

Mathematics Grade 6
Version 5
Preview/Review W3 - Quiz TEACHER KEY

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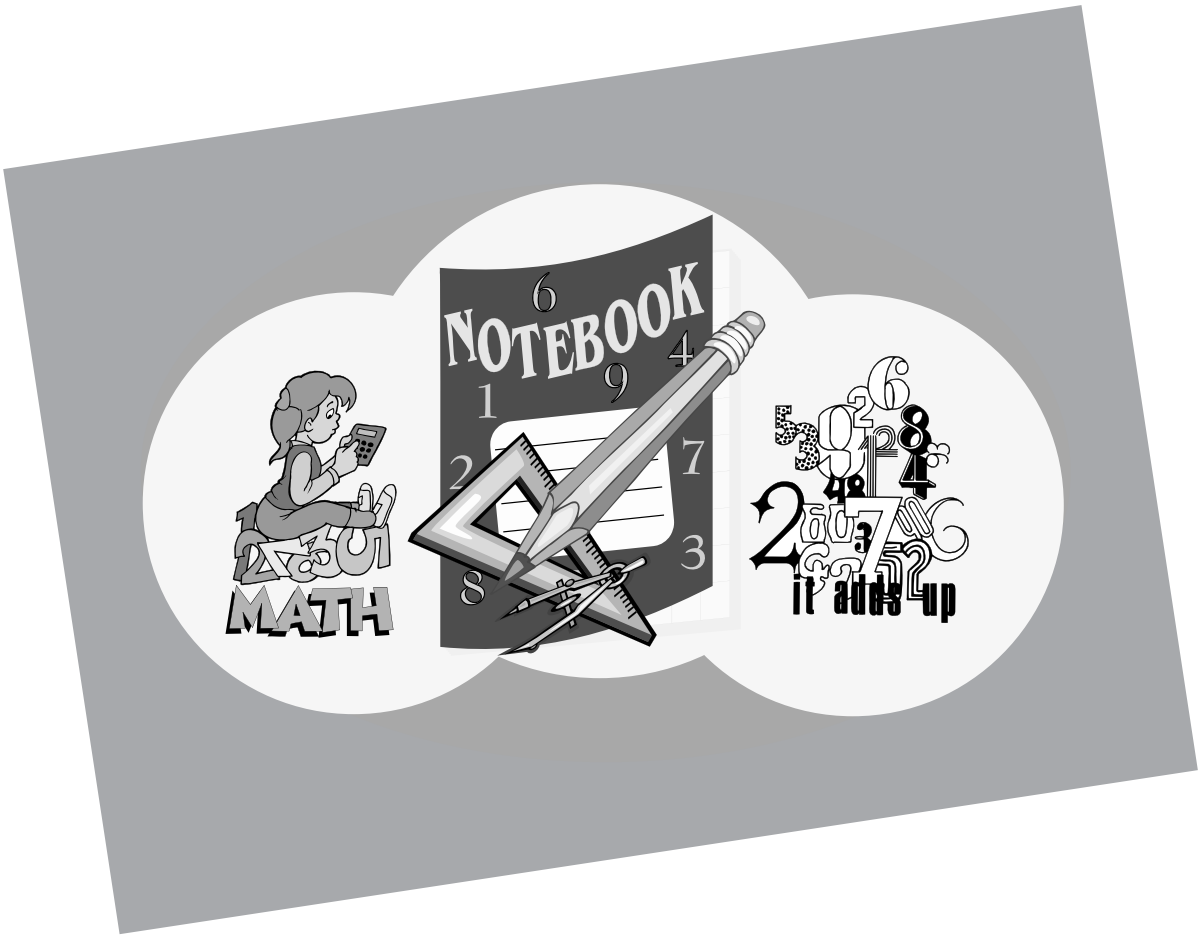
Preview/Review Concepts for Grade Six Mathematics

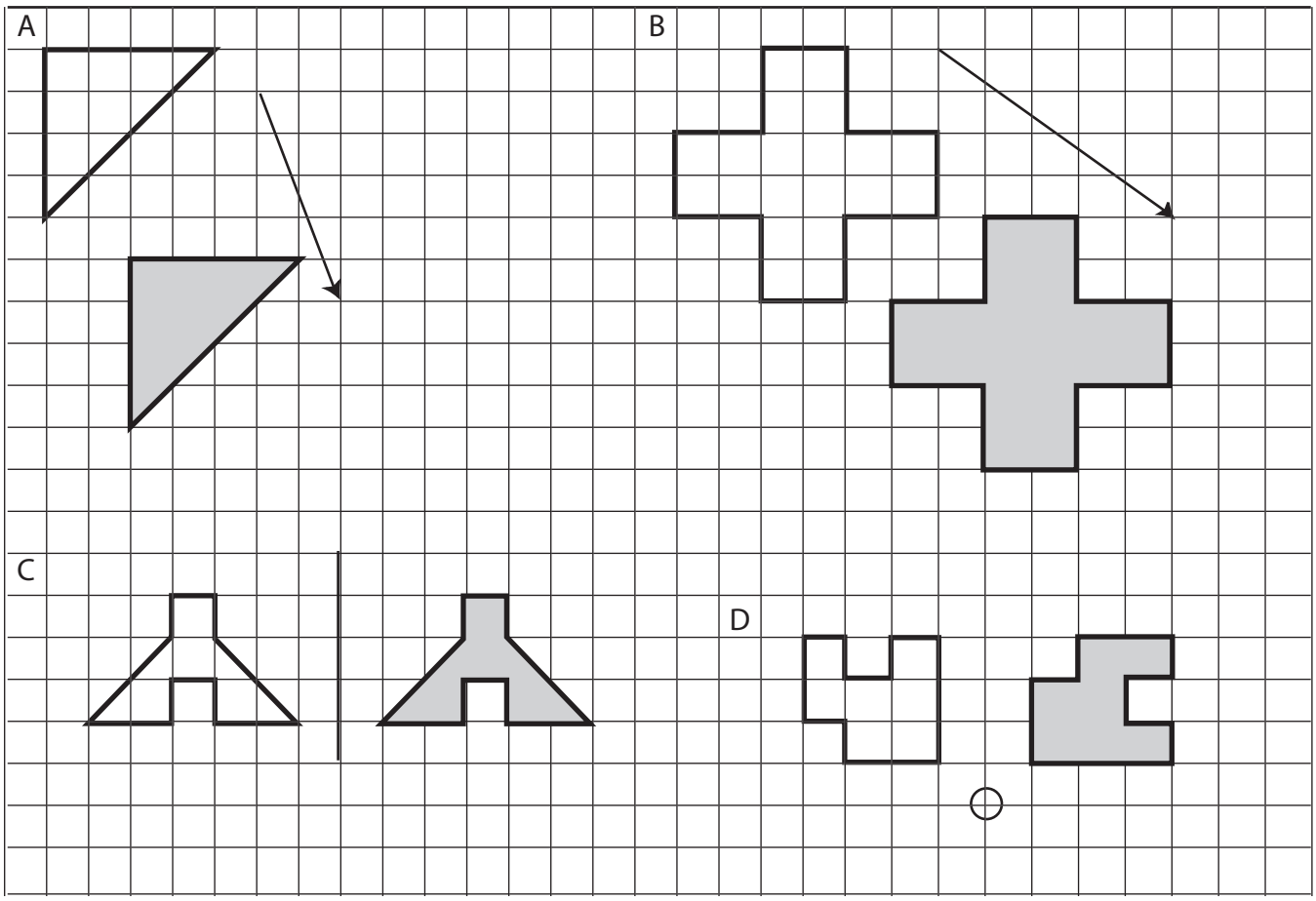
TEACHER KEY



W3 - Quiz

W3 - Quiz

Score: /50



1. Using the slide arrow shown at **A** above, move the triangle to the correct position.

2. Using the slide arrow shown at **B** above, move the cross to the correct position.

3. At position **C**, use what you know about flips to reposition the object.

4. At position **D**, turn the object one-quarter turn clockwise.

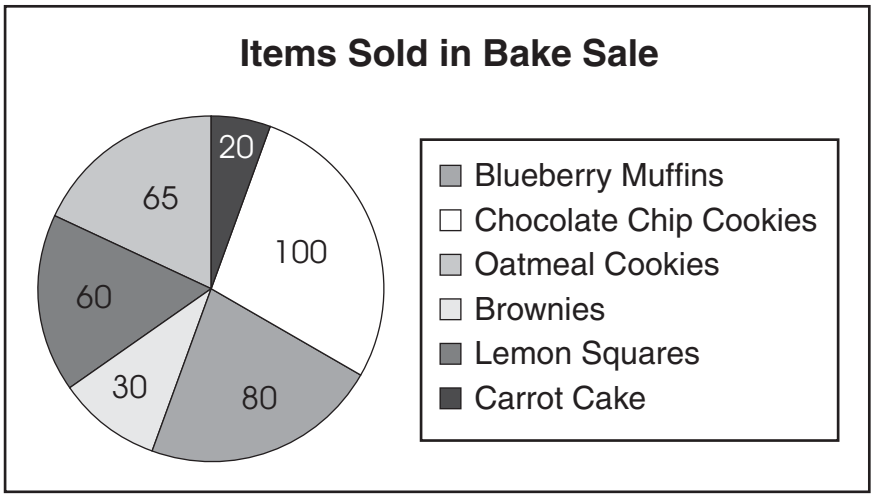
5. Write the correct word from those given below. The transformation that will result in the creation of a mirror image of the original object is

flip .

rotation slide

flip turn

6. Jennifer's soccer team held a bake sale to raise money to attend an upcoming provincial tournament. The pie graph below shows the distribution of baked goods sold.



a. If a total of 180 chocolate chip and oatmeal cookies were sold, the total number of baked goods sold is likely ___***360***___ .

175 270

360 400

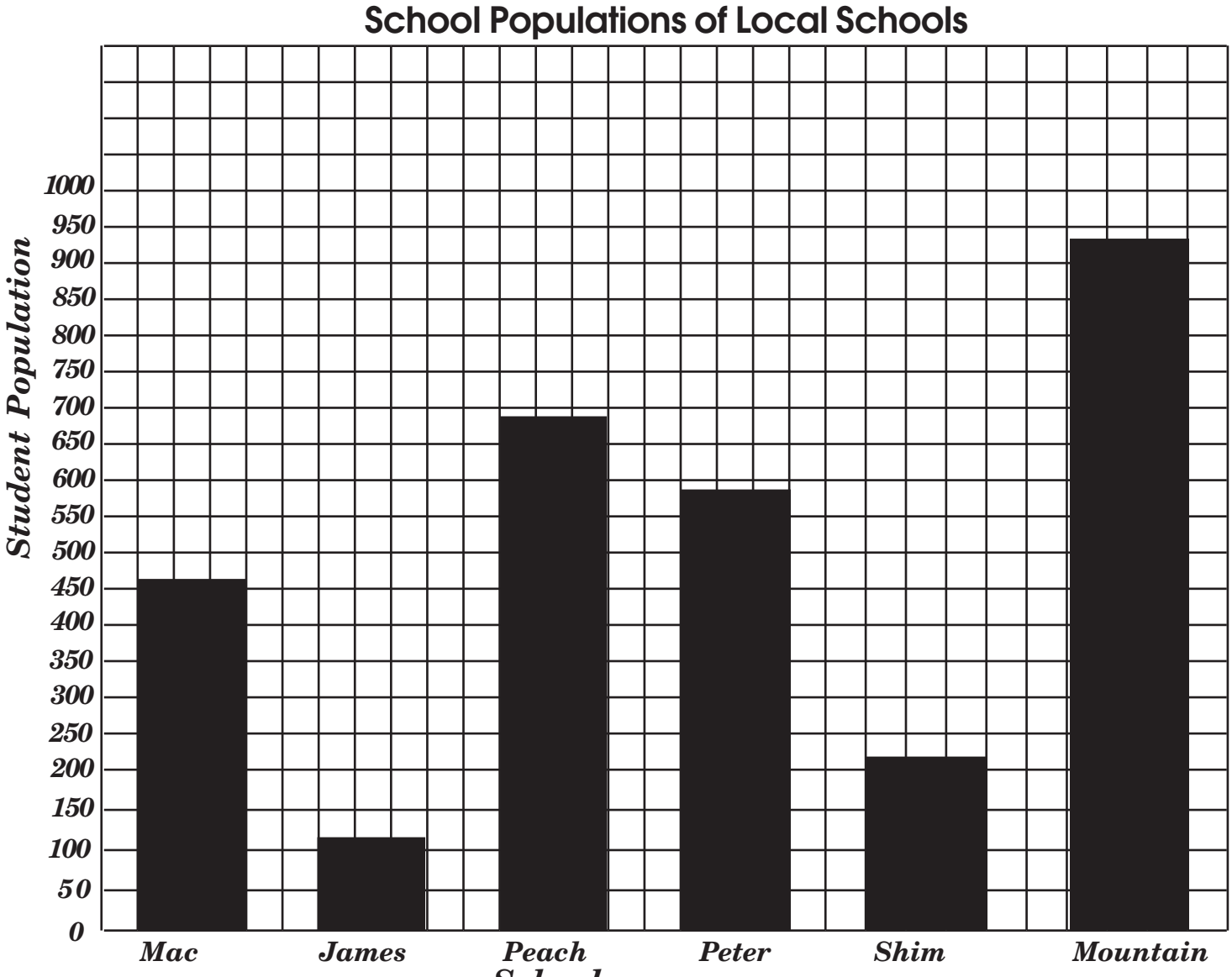
b. The item that represents approximately 22% of the total number of baked goods sold is ___***oatmeal cookies***___.

brownies oatmeal cookies

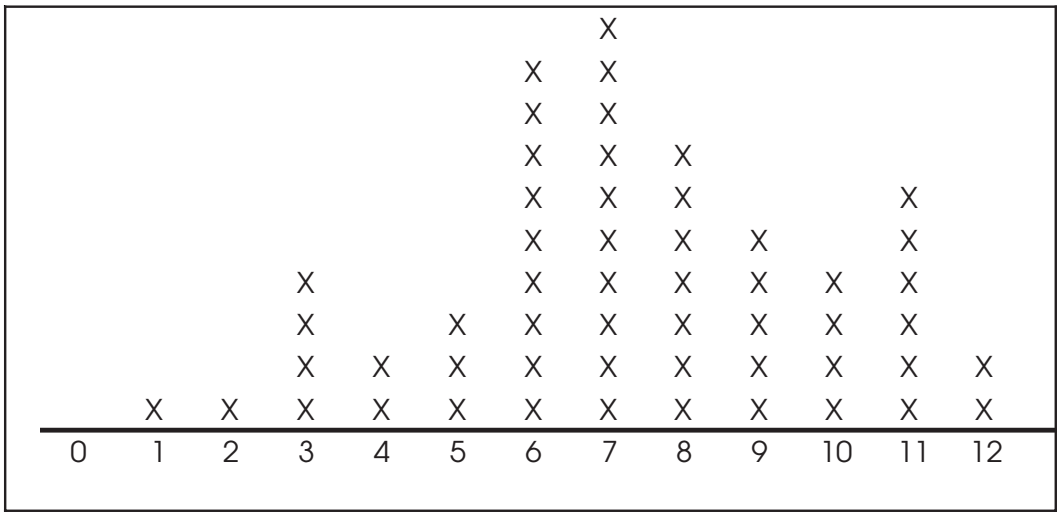
blueberry muffins chocolate chip cookies

7. Nancy gathered data to compare the school populations of all the local schools. Using this data, create a bar graph on the grid provided. Your graph must have a title and axis headings.

School	Student Population
MacDonald Elementary	455
James Valley Elementary	120
Peach Lake Junior High	690
Peter Brook Elementary	580
Shimmering Waters Junior High	235
Mountain View High School	945



8. Mrs Charles gave all her science classes a quiz consisting of twelve questions to review the unit they had just covered. The distribution of the number of answers each student got correct is shown on the line plot below.



a. What is a good title for this line plot?

Scores in 12 Question Quiz (or other acceptable titles)

b. How many students wrote this quiz?

54

c. What is the *mode* for this set of data?

7

d. What is the *mean* of this set of data?

7 or 7.27

e. What is the *range* for this line plot?

1 to 12 (the range from top to bottom is 11 marks)

9. On Saturday, ten people ran in a relay marathon to raise money for a local charity. The distances that each runner ran are listed in the table below.

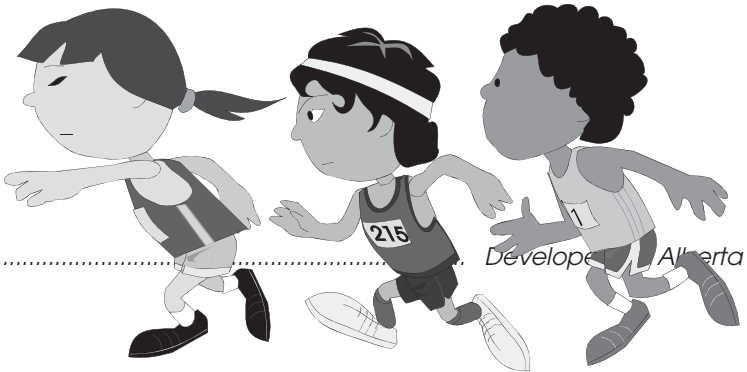
Runners	Distance Run
Runner 1	4.5 km
Runner 2	1.3 km
Runner 3	5.7 km
Runner 4	7.1 km
Runner 5	4.5 km
Runner 6	3.2 km
Runner 7	7.9 km
Runner 8	2.6 km
Runner 9	4.5 km
Runner 10	2.7 km

a. What is the *range* of km run? ***1.3 km to 7.9 km***

b. What was the total length of the marathon? ***44 km***

c. What is the *mode* for this set of data? ***4.5 km***

d. What is the *mean* of this set of data? $\frac{44\text{ km}}{10} = 4.4$ ***4.4 km***



10. Find the pattern and write the next 3 numbers in the sequence:

    50, 49, 47, 44, 40, ***35***, ***29***, ***22***,

11. What is the rule that explains the number pattern that relates the first two columns to the third column?

Column 1	Column 2	Column 3
14	6	16
12	5	14
10	4	12
8	3	10
6	2	8

$(\textbf{\textit{Column 1}} - \textbf{\textit{Column 2}}) \times \textbf{\textit{2}} = \textbf{\textit{Column 3}}$

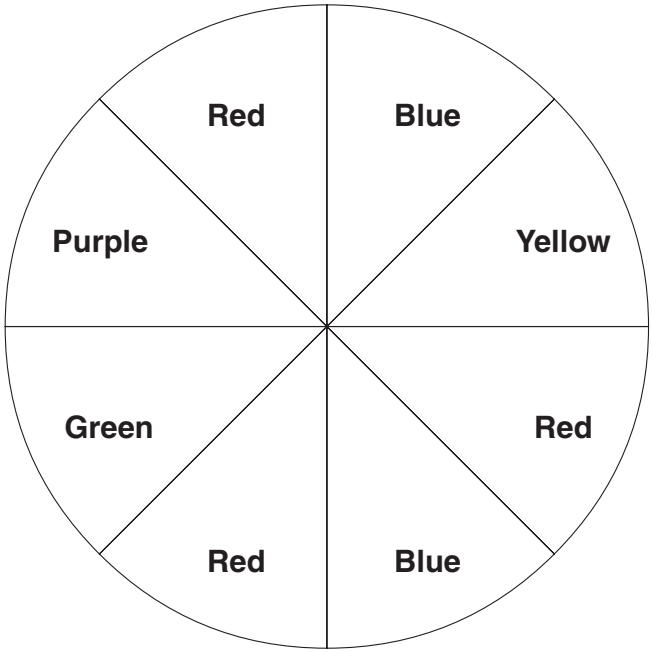
12. Find the correct numbers to make this addition question a true statement.

    Find the values for the letters:

    A = ***1***
    B = ***3***
    C = ***2***
    D = ***4***
    E = ***2***

    A 947
    59B
    C4 703
    D2
    27 E85

13. Using the game spinner, determine the probability of spinning different colours.



a. What is the probability of the spinner landing on red?

$\frac{3}{8}$

b. What is the probability of the spinner landing on purple?

$\frac{1}{8}$

c. What is the probability of the spinner landing on blue?

$\frac{2}{8}$ *or* $\frac{1}{4}$

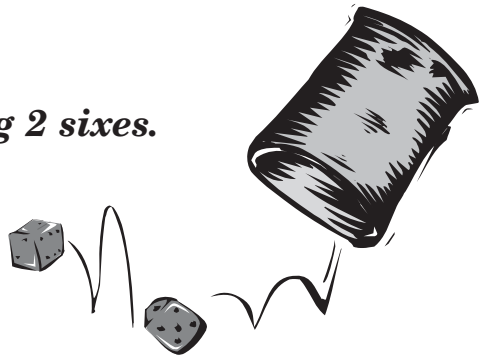
d. Is it more probable to land on green or yellow?

There is equal probability (both have the same probability of $\frac{1}{8}$ ***).***

14. Matthew has a pair of dice, each numbered from 1 to 6. What is the probability that he will roll two sixes on the first roll? Show your work.

$$\frac{1}{6} \times \frac{1}{6} = \frac{1}{36}$$

There is a one chance in 36 of rolling 2 sixes.



15. Jonathan wants to flip a coin to decide who will bat first in a game of baseball. What is the proability that Jonathan will flip a tails?

$$\frac{1}{2}$$