TOPIC: Multiplication

FOCUS OF ACTIVITIES:
• multiplication facts up to 81
• multiplication of whole numbers by 10

INSTRUCTIONS:
For Activity 3, you will need 10 small pieces of paper. Complete the activities as indicated.

ACTIVITIES:

1. Here is a 10 by 10 multiplication table.

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There are quite a few numbers smaller than 100 that don't appear on a 10 by 10 multiplication table.
What are some of the missing numbers?

Why are they missing?

2. (a) Cross out all the multiplication facts (such as \(1 \times 10 = 10\)) that are “easy” for you.

Which ones are left?

(b) Do you know the “9 times” trick?
To multiply \(9 \times 3\), fold down your “3” finger. How many fingers are there on each side of the “3” finger? 2 and 7?

The answer to \(9 \times 3\) is 27!

3. Write the digits 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 on 10 pieces of paper - one digit to a paper.

Pick any 3 and place the papers face down.

Turn one paper over and write the number in one of the spaces here.

Do the same with each of the remaining 2 papers (numbers).

(a) Multiply. Is this the greatest product possible?

Why? If not, what would you do to make it the greatest?

Try this again a few times.

(b) Now try it with larger numbers.
Pick 4. Use the spaces here.

(c) Make the smallest product for each set of numbers you chose.

(d) Find a product close to 100, 500, 1000.
easy now!
because you were unaware that you were sheared. Please! the rest should be
a product. Is this a case of "you should have quit while you were ahead"? No.
combinations of 5, and 8 to find a number which would multiply to give us a larger
two thirds ago. The only way to find that out, however, was to keep trying new
How about 65 x 2? That will give us 170. It looks as if we had the largest product
certainly is.

How about 65 x 2. That will give us 170. Is there anything else to try? There

x 6. That will give us 200. Let's keep trying to get a larger product.
biggest answer. We may find that we have the largest product already. Let's try 25
Now let's see if we can use the numbers 5 and 8 to make a question that has a

5
X
8 2

That will give us 140. Let's keep trying this way:

2, 5 and 8 and then you placed them in this way:

Let's say that you are working with the numbers

3. Greatest Product

numbers formed by multiplying two numbers between 1 and 10.
why they are missing from the table. Remember that on the table, we have
All of these numbers have one factor between 1 and 10, but not the other. That's
... 4 = 2 x 19
22 = 2 x 13
26 = 2 x 13
38 = 2 x 19
So, the other missing numbers are: 22. 26, 33, 34, 38, 39, 44. 46. 51. 52, 55.

Some of the other missing numbers are 22, 26. 33, 34, 38, 39, 44. 46, 51. 52, 55.

between 1 and 10. That is also true of all the other numbers in the above list.

11 x 11. That is, 11 cannot be expressed as a product of two numbers

1 times themselves. These numbers are said to be prime numbers. For example

59, 61, 67, 71, 73, 79, 83, 87, 89, 97. These numbers can be expressed only as

Some of the missing numbers are: 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53.
TOPIC: Measurement

FOCUS OF ACTIVITIES: The activities will assist in understanding the differences between perimeter and area.

INSTRUCTIONS: Complete the activities as indicated.

ACTIVITIES:

1. Given 12 square tiles, make all the rectangles you can that use all the tiles.
   
   Find the perimeter of each rectangle.

2. The length of a rectangle is 6 cm and its perimeter is 16 cm. What is the area of the rectangle in square centimetres?

3. Design a rectangular pen for a pony so that the pony has the most area in the middle to run around. The perimeter should be 80 m. Use only whole numbers. Consider at least three different pens, and from your work derive a formula for finding perimeter and area, and explain what they mean.

4. Find the area of a rectangle with a perimeter of 20 cm.

5. Using only whole numbers, how many different figures can you draw with an area of six square units? (Suggest that you draw the figures on geopaper or graph paper.)
There are other figures to investigate.

Note: 2 x 3 and 3 x 2 are the same so are 1 x 6 and 6 x 1.

5. Answer for rectangles only: 2 -- 1 x 6 2 x 3

4. Answers will vary.

3. 3 examples that work towards a square 20 x 20 with area 400 m²:

2. \( A = 12 \text{ cm}^2 \)

Note: 1 x 12 and 12 x 1 are considered to be the same.

Perimeter = 14 units

Perimeter = 16 units

Perimeter = 26 units

ANSWERS:
TOPIC: Number Sense & Numeration

FOCUS OF ACTIVITIES: Identify and appreciate the use of numbers in the media.

INSTRUCTIONS:

Your child will need access to a local newspaper in order to see how numbers are used in newspapers.

ACTIVITIES:

1. Examine numbers on the sports page in the newspaper. Classify ways in which these numbers are used.

2. Examine the statistics on the sports page in a newspaper. Describe relationships you see among the numbers listed.

3. Find examples of each of the following in the newspapers:
   
   (a) Fractions
   
   (b) Decimals

   (c) Numbers greater than 10 000

   For each of these, state how they are used in the newspaper.

4. Circle five numbers used in headlines and articles in the newspaper. Determine if they are exact or approximate values. Explain your thinking.

5. What is the average (mean) length of the sentences on page 1 of the newspaper? How did you arrive at your answer?
To find the mean, select about seven sentences from an article, determine how many words are in each sentence, find the total by adding and then divide by the number of sentences selected.

5.

Numbers which are approximate values usually end in zero.

3. Tied

2. Determining the team standing from the number of games played, won, lost and

1. Answers will vary.

ANSWERS: