Helping With Math

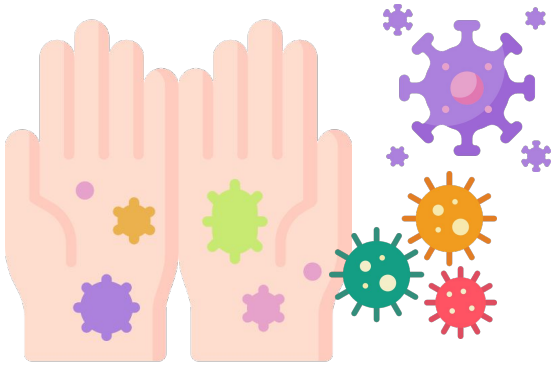
Multiplying and Dividing Numbers by Power of 10

GRADE 5

Multiplication and division play a significant role in understanding decimal numbers. This worksheet will help you further understand concepts of numbers. This contains fun and relevant activities for your learning!

Did you know that viruses spread so fast that it can actually considered as “exponential”?

Virus can multiply its number by almost 100% times its original amount! There is no wonder why the recent coronavirus epidemic is continuously contracting numerous people.



MULTIPLICATION AND DIVISION

- **Multiplication** is a repeated addition. It has multiplicand, multiplier and product.
- **Division** is a repeated subtraction. It has dividend, divisor, and quotient.

REMEMBER!

$10^3 = 10 \times 10 \times 10$

$10^2 = 10 \times 10$

POWER OF 10

- This principle helps us to be organized in our system of naming and writing numbers.
- It is a very helpful way to write down small and large numbers.

EXAMPLES:

- When we write 5, 982, it means that it is the sum of

5 thousands + 9 hundreds + 8 tens + 2 ones

$(5 \times 1000) + (9 \times 100) + (8 \times 10) + (2 \times 1)$

$(5 \times 10^3) + (9 \times 10^2) + (8 \times 10^1) + (2 \times 10^0)$

MULTIPLYING DECIMALS

EXAMPLES:

- When we write 7, 216, it means that it is the sum of

7 thousands + 2 hundreds + 1 tens + 6 ones

$(7 \times 1000) + (2 \times 100) + (1 \times 10) + (6 \times 1)$

$(7 \times 10^3) + (2 \times 10^2) + (1 \times 10^1) + (6 \times 10^0)$

How do we multiply a number/decimal by a power of 10?

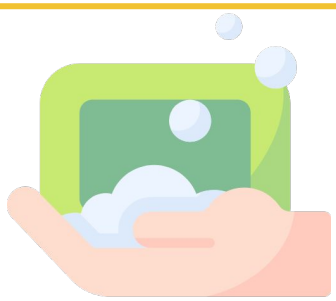
EXAMPLES:

Move the decimal point *right* as many places as there are 0's in the power. If there are not enough digits, add on 0's.

1.32 x 10 = 13.2 (move the decimal point one place to the right)

1.32 x 100 = 132 (move the decimal point two places to the right)

1.32 x 100 = 1320 (move the decimal point three places to the right and add 0)



PRACTICE EXERCISES

EXAMPLES:

Just add on as many 0's as appeared on power

6 x 10 = 60 (Add on one 0)

6 x 100 = 600 (Add on two 0's)

6 x 100 = 6, 000 (Add on three 0's)

Solve for the product or quotient.

8.57 x 100	→	
1.05 x 1000	→	
31 ÷ 1000	→	
6.2 ÷ 100	→	

TABLE OF ACTIVITIES

1. Quarantine Activity
2. Beat the Viruses
3. Wear Your Mask, Solve the Task
4. Safety Protocols
5. Virus Outbreak
6. Viral Disease Symptoms
7. Coronavirus Strands
8. Virus Transmission
9. Self-Protocol
10. Coronavirus Update Around the World

QUARANTINE ACTIVITY

Oh no! The hometown is under community quarantine because of a virus outbreak. Help Aaron accomplish this quarantine activity for his school work. Write FACT or BLUFF.

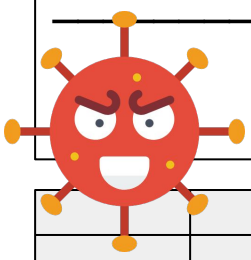
_____ 1. Multiplication is a repeated addition.

_____ 2. The Power of 10 is very useful in writing small and large numbers.

_____ 3. The expression 10^3 is equal to 10 x 10.

_____ 4. 1, 522 means that it is the sum of 1 thousands + 2 hundreds + 2 tens + 5 ones

_____ 5. In multiplying a number by a power of 10, Just add on as many 0's as appeared on power to get the answer.



Write in your own words the rules in multiplying and dividing numbers by power of 10.

_____

_____

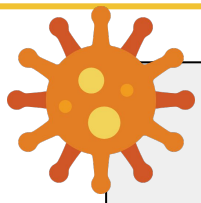
_____

_____

BEAT THE VIRUS

Ooops! Mr. Bob accidentally sneeze without his facemask on! Beat the spread of the virus by answering the questions below. The first one is done for you.

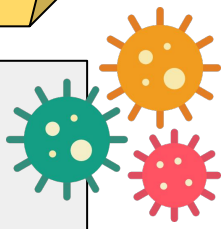
EXAMPLE: **5, 982 = 5 thousands + 9 hundreds + 8 tens + 2 ones**



7, 856

3, 109

2, 148



5, 900

4, 621

8, 245

WEAR YOUR MASK, SOLVE THE TASK

Mary and Alex followed the protocol of wearing facemasks to protect themselves from the virus. Also, try to help them with their tasks below. Match column A to column B.

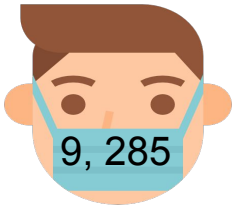
1. 5 x 1000
6 x 100
1 x 10
1 x 1

2. 9 x 1000
2 x 100
8 x 10
5 x 1

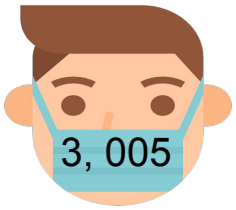
3. 1 x 1000
0 x 100
7 x 10
8 x 1

4. 3 x 1000
0 x 100
0 x 10
5 x 1

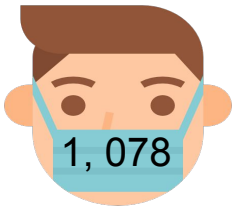
5. 6 x 1000
1 x 100
2 x 10
1 x 1

A. 

B.

C. 

D.

E. 

SAFETY PROTOCOLS

These are standard safety protocols against CoViD-19. Make sure to get familiarized with it, Can you identify the 4-digit number that is being described in each row? Write your answer in the box.

$(1 \times 10^3) + (2 \times 10^2) + (5 \times 10^1) + (2 \times 10^0)$

$(3 \times 10^3) + (5 \times 10^2) + (7 \times 10^1) + (1 \times 10^0)$

$(4 \times 10^3) + (0 \times 10^2) + (9 \times 10^1) + (0 \times 10^0)$

$(5 \times 10^3) + (9 \times 10^2) + (3 \times 10^1) + (5 \times 10^0)$

$(7 \times 10^3) + (8 \times 10^2) + (7 \times 10^1) + (2 \times 10^0)$

$(9 \times 10^2) + (1 \times 10^3) + (1 \times 10^1) + (0 \times 10^0)$

VIRUS OUTBREAK

You heard the news! There is a virus outbreak on the nearby town. Build your virus protection as you solve for the product of the following numbers. Write the letter of your choice on the box.

☐	30 X 10	☐	5 X 1000	☐	7 X 100
☐	14 X 1000	☐	20 X 10	☐	28 X 100

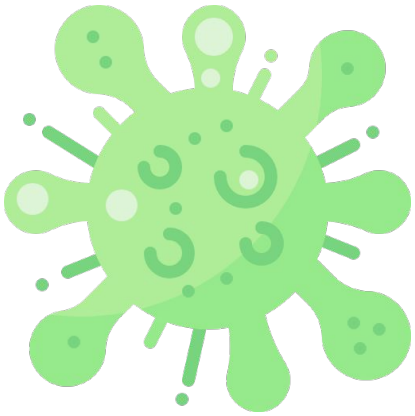
A. 200	B. 300
C. 700	D. 2, 800
E. 5, 000	F. 14, 000

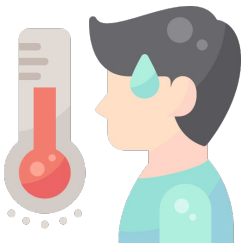
VIRAL DISEASE SYMPTOMS

This is unfortunate! Peter is experiencing the following symptoms. Help him recover from it by getting the product of each given.

What should you do if you get contracted with a viral disease? Cite five health practices.

1.
2.
3.
4.
5.

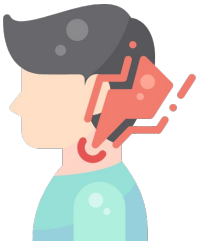




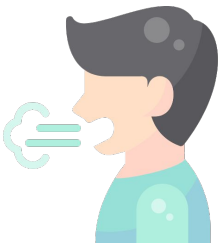
5) 101.57
x 100

4) 0.57
x 10

3) 11.05
x 1000



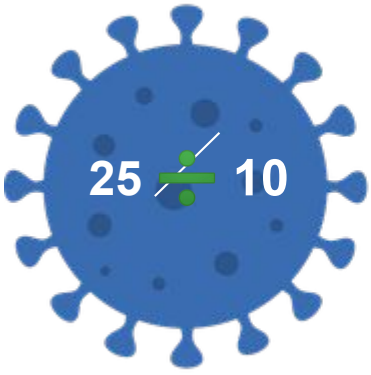
2) 5.29
x 10

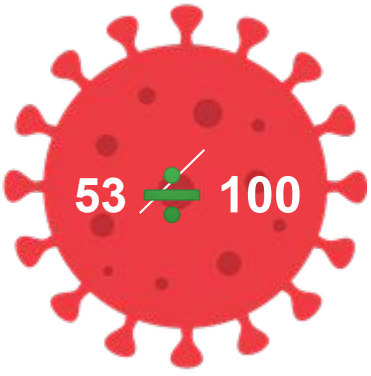


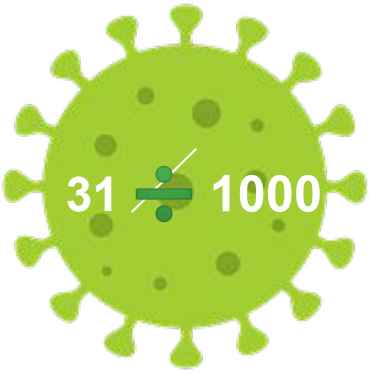
1) 2.57
x 100

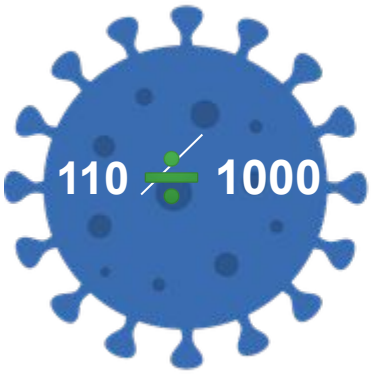
CORONAVIRUS STRANDS

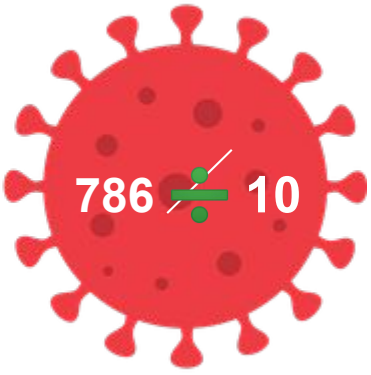
Look at these coronavirus through a microscope. Oh yes! There are math problems in them. Solve for the quotient.

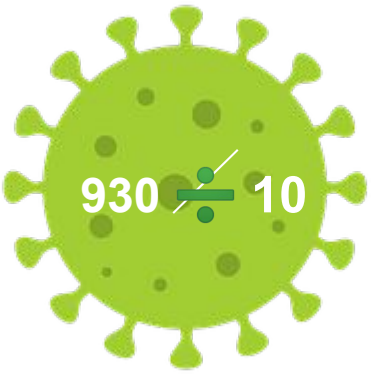


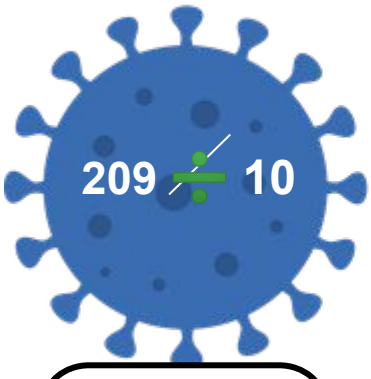


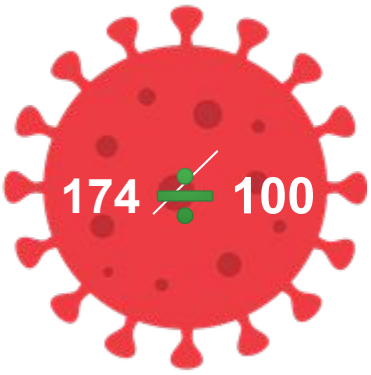


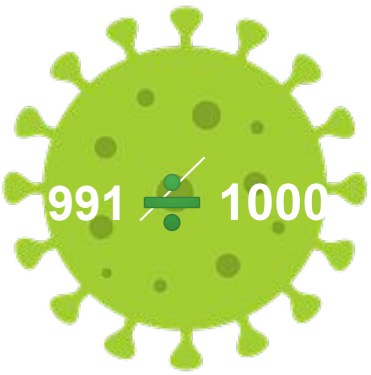












VIRUS TRANSMISSION

Know the ways on how virus can be transmitted from one person to another. Alongside, solve for the quotient of the following. Use a separate sheet of paper as necessary.

1.45 ÷ 100

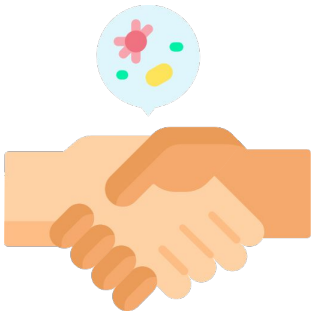
12.20 ÷ 10

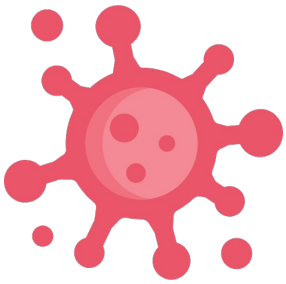
27.13 ÷ 1000

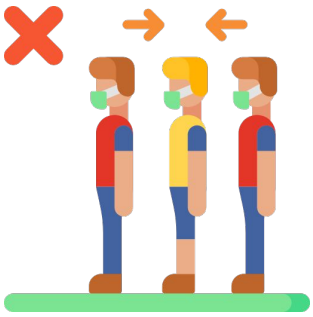
420. 32 ÷ 1000

602.26 ÷ 100

847.20 ÷ 10







SELF-PROTECTION

Let us protect ourselves from the virus by practicing these self-protection rules. Also, solve each given item.

2. 57 x 10
+
3.54 ÷ 100

41. 04 x 100
+
21.50 ÷ 1000

10. 02 x 100
+
1.89 ÷ 10

15 x 100
+
0.54 ÷ 10

250 x 10
+
16.12 ÷ 100

CORONAVIRUS UPDATE AROUND THE WORLD

This is a copy of the WHO COVID-19 Dashboard. Examine the data and answer the questions that follow.

1. Which region has the most number of cases?

   _____

2. Which region has the least number of cases?

   _____

3. Compare the data across all regions. How greater the number of confirmed cases from the Americas region is compared to Africa?

   _____
   _____
   _____

4. What is your overall reflection of the current pandemic that we are experiencing?

   _____
   _____
   _____.

ANSWER GUIDE

Activity 1

1. FACT 2. FACT 3. BLUFF 4. BLUFF 5. FACT

For the second part, the answers of the learners may vary.

Activity 2

1. 7 THOUSANDS + 8 HUNDREDS + 5 TENS + 6 ONES
2. 3 THOUSANDS + 1 HUNDREDS + 0 TENS + 9 ONES
3. 2 THOUSANDS + 1 HUNDREDS + 4 TENS + 8 ONES
4. 5 THOUSANDS + 9 HUNDREDS + 0 TENS + 0 ONES
5. 4 THOUSANDS + 6 HUNDREDS + 2 TENS + 1 ONES
6. 8 THOUSANDS + 2 HUNDREDS + 4 TENS + 5 ONES

Activity 3

1. D
2. A
3. E
4. C
5. B

Activity 4

1. 1252
2. 3571
3. 4090
4. 5935
5. 7872
6. 1910

Activity 5

1. B 2. E 3. C 4. F 5. A 6. D

ANSWER GUIDE

Activity 6

1. 257 2. 52.9 3. 11050 4. 5.7 5. 10157
- Rest, drink plenty of fluid, eat nutritious food, stay in a separate room from other family members, and clean and disinfect frequently touched surfaces.

Activity 7

1. 2.5	2. 0.53	3. 0.031
4. 0.110	5. 78.6	6. 93
7. 20. 9	8. 1.74	9. 0.991

Activity 8

1. 0.0145	2. 1.220	3. 0.02713
4. 0.42032	5. 6.0226	6. 84,720

Activity 9

1. 25.7374	2. 4104. 00215	3. 1020.189
4. 1500.054	5. 2500.1612	

Activity 10

1. Americas 2. Western Pacific 3. Comparison of data may vary, Americas' confirmed cases is more than ten times the confirmed cases of Africa.
4. Answers may vary.

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