# 6th grade Home Learning Activities

Wednesday, January 30, 2019

- **English**: Complete all three parts in "Progress Test 1." (worksheets pages 22-27)

- **Math**: Complete the worksheet titled, "Packed Full of Power" and the worksheet titled, "Riddle: What happened when the frog parked its car in a 'No parking' zone?" Follow the directions listed on each worksheet.

Thursday, January 31, 2019

- **English**: Read Chapter 10 in your novel Number the Stars, pages 80-87. Feel free to close read and annotate your novel. If you do not have your novel at home, please go on youtube.com and listen to the audio version of Chapter 10.
    Once you are done reading, complete the questions for Chapter 10 that are provided in your packet. For "literal questions" you must write your answers using PQA (part of the question in your answer). For the "inferential question" and the "opinion question," your response must be in ACE (answer-cite-explain) format. Use the attached notebook paper to write your responses.

- **Math**: Complete the worksheet titled, "Skill: Factoring." This worksheet has a giraffe on it (page 12 on the bottom). One problem from each section has been done for you as an example. Also, complete the worksheet titled, "Prime Time." Follow the directions listed on each worksheet.

# Packed Full of Power

Name _____

Numbers can be abbreviated using exponential and scientific notation.

An **exponent** tells how many times a factor is multiplied by itself.

$5^3 = 5 \times 5 \times 5 = 125$     5 is multiplied by itself 3 times.

**Scientific notation** is the power of 10 multiplied by another number between 1 and 9.

$7,000,000 = 7 \times 10^6$

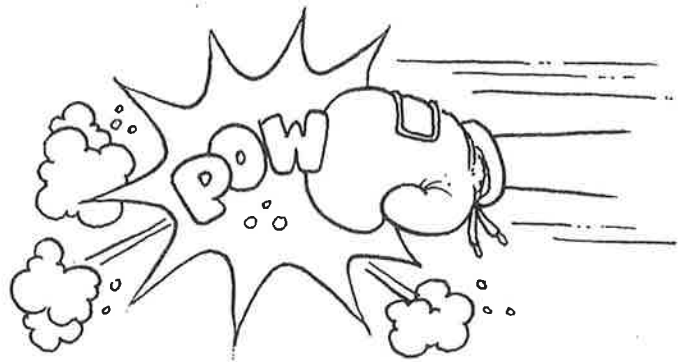Hint: To know what power of 10 to use, simply match the power of 10 to the number of zeros in the number.

$4,\underline{000} = 4 \times 10^3$         $900,\underline{000} = 9 \times 10^5$

Write each number using an exponent.

A. 3 to the fourth power _____

B. 6 to the third power _____

C. 9 to the eighth power _____

Solve.

D. $2^3 = $ _____         $6^2 = $ _____         $4^4 = $ _____         $7^3 = $ _____

E. $3^2 = $ _____         $1^{10} = $ _____         $3^4 = $ _____         $9^2 = $ _____

F. $4^3 = $ _____         $2^5 = $ _____         $0^4 = $ _____         $3^3 = $ _____

Write the value.

Clue: $10^1 = 10$, $10^2 = 100$, $10^3 = 1,000$, $10^4 = 10,000$, $10^5 = 100,000$, $10^6 = 1,000,000$

G. $3 \times 10^2 = $ _____         $8 \times 10^3 = $ _____         $6 \times 10^6 = $ _____

H. $6 \times 10^4 = $ _____         $4 \times 10^5 = $ _____         $5 \times 10^2 = $ _____

# Riddle

## What happened when the frog parked its car in a "No Parking" zone?

Find the prime factorization for each number below. Then write the corresponding letter on the line in front of the number. The letters will spell out the solution when read from **bottom to top**, starting on the right.

__Y__ 4 = $2 \times 2$

_____ 6 = _____

_____ 9 = _____

_____ 10 = _____

_____ 12 = _____

_____ 15 = _____
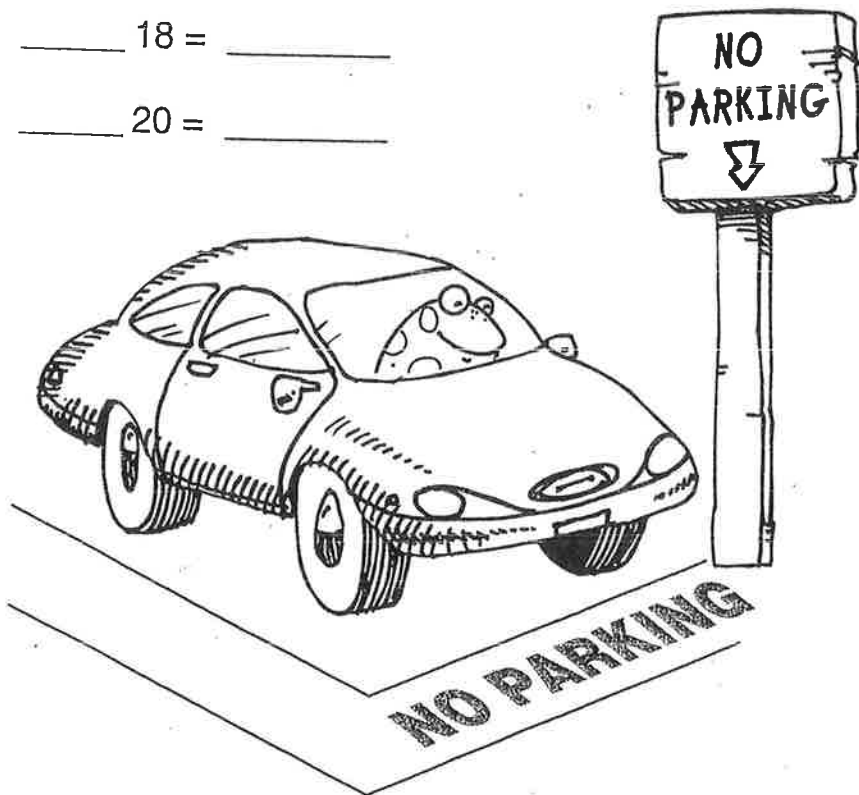
_____ 18 = _____

_____ 20 = _____

_____ 21 = _____

_____ 25 = _____

_____ 27 = _____

_____ 30 = _____

_____ 32 = _____

| | |
|---|---|
| $2 \times 3$ | A |
| $2 \times 5$ | A |
| $3 \times 5$ | A |
| $5 \times 5$ | A |
| $2 \times 2 \times 3$ | D |
| $2 \times 2 \times 2 \times 2 \times 2$ | I |
| $2 \times 3 \times 3$ | O |
| $3 \times 7$ | S |
| $2 \times 2 \times 5$ | T |
| $2 \times 3 \times 5$ | T |
| $3 \times 3$ | W |
| $3 \times 3 \times 3$ | W |
| $2 \times 2$ | Y |

NO PARKING ⬇

NO PARKING

Calculate prime factorization for numbers less than 250