Unit 5 Family Letter

## Dear Family,

In this unit, Numbers and Number Patterns, your child will find factor pairs of whole numbers and identify numbers as prime or composite. Your child will also generate a pattern from a rule and describe and extend a pattern.

## STEM Career Kid for this Unit

## Hi, I'm Haley.

I want to be an astronomer. I will use math in my job when I study space. I'll show students how I will use the math of this unit in my work.

What math terms will your child use?

| Term | Student Understanding |
| :--- | :--- |
| composite <br> number | a whole number that has more than 1 factor pair |
| factor pair | a set of two factors that are multiplied together to <br> get a product |
| pattern rule | the rule tells us how to find the next term in the <br> sequence |
| prime <br> number | a whole number with exactly two factors, 1 and itself |
| sequence | numbers that follow a repeated pattern |
| numerical <br> pattern | a sequence of numbers that follow a rule. |

## What can your child do at home?

Math
@ Home Activity

You can help your child practice finding factor pairs of a number. Use two playing cards to create a two-digit number and then have them list all of the factor pairs of that number.

## What Will Students Learn in This Unit?

## Prime and Composite Numbers

Your child will learn that a composite number is a whole number that has more than two factors and a prime number is a whole number that has exactly two factors, 1 and itself.

Example:
The factor pair of 17 is 1 and 17.17 is a prime number.
The factor pairs of 28 are 1 and 28, 2 and 14, and 4 and 7.28 is a composite number.

## Finding the Factors of a Number

Your child will learn that they can use division patterns to determine factor pairs of a number.

Example:
Divisibility rules can help you determine the factor pairs of 18 .
A number is divisible by 2 if it is an even number. 18 is an even number.
$18 \div 2=9$
A number is divisible by 3 when the sum of the digits is divisible by $3.1+8=9$
$18 \div 3=6$
The factors pairs of 18 are 1 and 18,2 and 9,3 and 6 .

## Generate a Pattern

Your child will use a given rule to grow a numerical pattern.
Example:
Rule: Start with 5, add 7.
The first five terms are: $5,12,19,26,33$.

## Describe and Extend a Pattern

Your child will analyze a numerical pattern to determine the rule and then find the next few terms.

Example:
50, 44, 38, 32, 26
Since the difference between each term is -6 , the rule is start at 50 and subtract 6 .
$26-6=20,20-6=14,14-6=8,8-6=2$
The next four terms would be: 20, 14, 8, 2.

