We will begin our next unit of study in math soon. The information below will serve as an overview of the unit as you work to support your child at home. If you have any questions, please feel free to contact me. I appreciate your on-going support.
Sincerely,
Your Child's Teacher

## Unit Name:

## Factors

## Common Core State Standards:

4.OA.4 Find all factor pairs for a whole number in the range $1-100$. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range $1-100$ is a multiple of a given one-digit number. Determine whether a given whole number in the range $1-100$ is prime or composite.

## Essential Vocabulary:

- multiplication/multiply
- division/divide
- area
- array
- factor pair
- factor
- prime
- composite
- product
- area model


## Unit Overview:

In this unit, students will use their knowledge from $3^{\text {rd }}$ grade on multiplication factors to help them find factor pairs using area model/arrays. Students will use their knowledge of finding factor pairs to determine if a number is prime or composite. In addition, for the first time students will learn about prime and composite numbers in relation to rectangular arrays. Students will not be required to use the standard algorithm until $5^{\text {th }}$ grade.

## Strategies/Skills:

Students will build on their understanding of addition and subtraction by using place value strategies to make sense of the standard algorithms. They are expected to use a variety of models to support their reasoning about numbers.

- Area Model/Arrays
- Relationship between multiplication \& division (through various properties)


## Video Support:

Video support can be found on LearnZillion.

- http://learnzillion.com
- Find all the factor pairs of a number using area models https://learnzillion.com/lessons/780-find-all-the-factor-pairs-of-a-number-using-area-models

We will begin our next unit of study in math soon. The information below will serve as an overview of the unit as you work to support your child at home. If you have any questions, please feel free to contact me. I appreciate your on-going support.
Sincerely,
Your Child's Teacher

- Determine multiples of a number using area models https://learnzillion.com/lessons/781-determine-multiples-of-a-number-using-area-models
- Determine if a number is prime or composite using area models https://learnzillion.com/lessons/786-determine-if-a-number-is-prime-or-composite-using-area-models


## Additional Resources:

If you have limited/no internet access, please contact your child's teacher for hard copies of the resources listed in this document.

- NCDPI Unpacking Document: http://www.ncpublicschools.org/docs/acre/standards/common-core-tools/unpacking/math/4th.pdf

