Math Study Guide for Unit 2 Multiplication

## Vocabulary to Know

| Factor | Product | Partial Product |
| :--- | :--- | :--- |
| Array | Estimate | Rounding |
| Associative Property - <br> $3 \times(5 \times 10)$ is the same as <br> $(3 \times 5) \times 10$ | Commutative Property - <br> $(2 \times 10) \times(6 \times 10)$ can be <br> reorganized to <br> $(2 \times 6) \times(10 \times 10)$ | Distributive Property - <br> $3 \times(2+4)$ is the equal to <br> $(3 \times 2)+(3 \times 4)$ |
| Area Model or Place Value <br> Sections Method | Expanded Method | Algebraic Method |

## Concepts to Know

- Factoring the Tens
- $30 \times 500$ is the same as $(3 \times 10) \times(5 \times 10 \times 10)$ when we factor out the 10 s
- Similarities and Difference between the various Multiplication Methods
- For example, the Area Model (Place Value Sections) and the Expanded method both have you EXPANDING the numbers at some point in the process
- Multiplying 1 digit by 2,3 , and 4 digit numbers
- Example $7 \times 34,8 \times 259$, and $9 \times 4183$
- Multiplying 2 digit by 2 digit numbers
- Example $43 \times 78$
- Estimating a product AND THEN finding an actual answer (2 parts to these questions)
- Understand how to solve a Word Problem
- Remembering that Problems include EXTRA INFORMATION or TOO LITTLE INFORMATION


## Final Thoughts

- Practice FACT FLUENCY - Simple mistakes are made when multiplying Basic Facts and adding
- CHECK YOUR ANSWER by doing another Method to Multiply
- Word Problems require you to READ! REREAD! THINK! and SOLVE!
- TAKE YOUR TIME to make certain that all answers make sense!!

