

## Grade 6

### Division Standard Algorithm

MACCSS Standards Being Addressed:

- 6.NS.2 Fluently divide multi-digit numbers using the standard algorithm.
- 6.NS.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

#### *Rational:*

In grades 4 and 5 the students gained a better understanding of the process of division by solving division problems with the a partial quotient/repeated subtraction division process. In grade 6, the students will use their knowledge of division and place value to **discover** general methods and shortcuts for division.

#### Example:

$$\begin{array}{r} 10.5 \\ 12 \overline{) 126.0} \\ \underline{-12} \phantom{0} \\ 06 \\ \underline{-0} \\ 60 \\ \underline{-60} \\ 0 \end{array}$$

This division method is the method many of you were taught in school. In sixth grade we informed the students that there is no longer a remainder in our division problems. The students are asked to divide problems out three places after the decimal and to round their answers to the nearest hundredth. They will be expected to round to the nearest hundredth unless directions state otherwise.