| Competency | Subject Matter         | Key Concepts                            | Requirement        |
|------------|------------------------|-----------------------------------------|--------------------|
| 1          | Addition and           | Whole Numbers with Carrying and         | 4/5                |
|            | Subtraction            | Borrowing                               |                    |
| 2          | Multiplication         | Up to 12 x 12                           | 45/50 in 5 minutes |
| 3          | Division               | Up to 144 ÷12                           | 45/50 in 5 minutes |
| 4          | Mult/Div – Large       | Multiplication and Division -           | 4/5                |
|            | Numbers                | Longhand                                |                    |
| 5          | Exponents              | Notation and Evaluation                 | 4/5                |
| 6          | Order of Operations    | 1. Parenthesis                          | 4/5                |
|            | -                      | 2. Exponents                            |                    |
|            |                        | 3. Multi/Div (Left to Right)            |                    |
|            |                        | 4. Add/Subt. (Left to Right)            |                    |
| 7          | Factoring, LCM,        | Factor Numbers                          | 5/6                |
|            | Simplifying Fractions  | Prime Factorization                     |                    |
|            |                        | Improper $\rightarrow$ Proper Fractions |                    |
|            |                        | Proper $\rightarrow$ Improper Fractions |                    |
|            |                        | Equivalent Fractions                    |                    |
|            |                        | Simplifying Fractions                   |                    |
| 8          | Addition and           | Addition and Subtraction of             | 3/4                |
|            | Subtraction of         | Fractions                               |                    |
|            | Fractions              |                                         |                    |
| 9          | Multiplication and     | Multiplication and Division of          | 4/5                |
|            | Division of Fractions  | Fractions                               |                    |
| 10         | Conversions between    | Conversions between Fractions and       | 6/7                |
|            | Fractions and Decimals | Decimals and Rounding                   |                    |
| 11         | Decimals – Add/Subt.   | Carrying and Borrowing                  | 3/4                |
|            |                        |                                         |                    |
| 12         | Decimals - Mult/Div    | Multiplication and Division with        | 3/4                |
|            |                        | Rounding                                |                    |
| 13         | Fractions Review       | Review of Competency 8 and 9            | 3/4                |
|            | Add/Subt               |                                         |                    |
|            | Mult/Div               |                                         |                    |

## MAT 030 – Core Competency Requirements