

**MATHEMATICS  
THIRD GRADE**

**1. Uses a variety of strategies in the problem-solving process**

- Constructs physical representations for complex problems **(Grade 3)**  
**Use manipulative to solve problems**  
**Draws picture to solve problem**
- Distinguishes between pertinent and irrelevant information when solving problems **(Grade 3)**  
**Identify important information needed to solve the problem**

**2. Understands and applies basic and advanced properties of the concepts of numbers**

- Uses concrete, pictorial, and symbolic representations to identify, order, and rename numbers **(Grade 3)**  
**Use of base ten blocks**  
**Uses ordinal numbers**  
**Uses expanded form**
- Understands the basic difference between odd and even numbers **(Grade 3)**  
**Tells the difference between odd and even numbers**
- Understands the basic meaning of place value **(Grade 3)**  
**Knows place value to ten thousands**

**3. Uses basic and advanced procedures while performing the process of computation**

- Adds, subtracts, multiplies, and divides whole numbers **(Grade 3)**  
**Recall basic facts**  
**Computation skills**  
**Mentally adds and subtracts basic combinations of whole numbers**
- Rounds whole numbers **(Grade 3)**  
**Rounds whole numbers to hundreds and tens**
- Understands that choices must be made when determining which operations to use **(Grade 3)**  
**Knows key words to solve operations**
- Carries out arithmetic computations involving dollars and cents **(Grade 3)**  
**Counting money**  
**Determining change to \$1.00**  
**Adding and subtracting \$ amounts**

**4. Understands and applies basic and advanced properties of the concept**

## of measurement

- Selects and uses appropriate tools for given measurement situations  
**(Grade 3)**
  - Uses appropriate measuring tools for length**
  - Uses appropriate measuring tools for volume**
  - Uses appropriate measuring tools for weight**
- Selects and uses appropriate units of measurement **(Grade 3)**
  - Selects appropriate units for length**
  - Selects appropriate units for volume**
  - Selects appropriate units for weight**

## 5. Understands and applies basic and advanced properties of the concept of geometry

- Knows basic geometric language for describing and naming shapes (e.g., trapezoid, parallelogram, cube, sphere) **(Grade 3)**
  - Knows cube, sphere, cylinder, pyramid, rectangular prism, cone**
- Understands that shapes can be congruent or similar **(Grade 3)**
  - Identifies congruent shapes**
  - Identifies similar shapes**

## 6. Understands and applies basic and advanced concepts of probability, statistics, and data analysis

- Understands that data represents specific pieces of information about real-world objects or activities **(Grade 3)**
  - Reads a graph and can what it means**
- Collects and organizes simple data sets to answer questions
- Constructs and interprets simple bar graphs, pictographs, and line graphs **(Grade 3)**
  - Uses information to complete graphs**
- Predicts the most likely outcomes **(Grade 3)**
  - Understands that the word “chance” refers to the likelihood of an event**

## 7. Understands and applies basic and advanced properties of function and algebra

- \_\_\_\_\_ • Recognizes a wide variety of patterns and the rules that explain them **(Grade 3)**
  - Recognizes basic linear patterns**
  - Recognizes simple repeating patterns**
  - Recognizes growing patterns**
  
- Understands the basic concept of an equality relationship **(Grade 3)**
  - Knows an equation is a number sentence that shows two quantities that are equal**
  
- Solves simple open sentences involving operations on basic facts
  - Solves problems with missing addend (e.g.  $\_ + 3 = 8$ )**