# CHAPTER 3 Mathematics

Math is vital for developing critical thinking skills across the curriculum. Math is not just adding and subtracting; it also includes conceptual lessons such as estimating, visualizing, deducing, and recognizing patterns. Math helps students in everyday, real-life situations such as averaging test scores, shopping, making change, telling time, measuring, and more.

#### **Math Acrostics**

An acrostic is a poem or sentences in which each line begins with the letter in a chosen word. Share the following math acrostic with students: **M**ath is a way of thinking.

Architects, engineers, cashiers, waiters, teachers, parents, and students use math every day!

- There are rules for the way we add, subtract, multiply, and divide. Hexagons, pentagons, and octagons
- are all polygons.
- Each number has a value.
- Multiplying is like repeated addition.
- Adding results in a sum.
- **T**elling time is math too!
- Integers are whole numbers.
- **C**ounting correctly is important!
- Subtraction is the opposite of addition.

Have students write their own math acrostics! They can use one of the following words or think of one of their own: *addition, subtraction, multiplication, division, fractions, ratios, geometry, money, percent.* 

## Inclusion Tip

Before students begin this activity, check to see if their word is spelled correctly. This is a perfect time to introduce a glossary. Make sure students include concepts related to their word. Afterward, bind students' acrostics into a class math book for all to share.

## Logic Boxes

Math develops logical reasoning and thinking skills that can be transferred across the curriculum. Logic boxes are a great way to help students approach word problems that include critical thinking and breaking down information. Use this simple tool over and over again to help students organize information to solve problems.

#### Inclusion Tip

It is imperative that introduction to logic boxes be modeled on an overhead or the board before students attempt using them on their own. This help to avoid frustration and misunderstanding directions. Encourage more advanced learners to create their own logic problems and personalize them with a topic of interest.

#### Math Wheels

In order to be successful mathematicians, students must have command of basic addition, subtraction, multiplication, and division facts. That means being able to respond to facts quickly using "mental math." The **Math Wheels reproducible (page 52)** can be used repeatedly by varying the sign and numbers in the concentrically divided circles to teach and reinforce basic math skills.

#### **Inclusion Tip**

Have students review math facts by making flashcards. To add a visual component, students can shade in horizontal and vertical rows on graph paper that symbolize and further strengthen math concepts.



# Math Wheels

