Math Mountains

In the Math Expressions program, students must apply the concept of Math Mountains to **story problems** and **missing addends**.

(Examples of missing addends would be 5 + ❒ = 8 or 9 - ❒ = 5.)

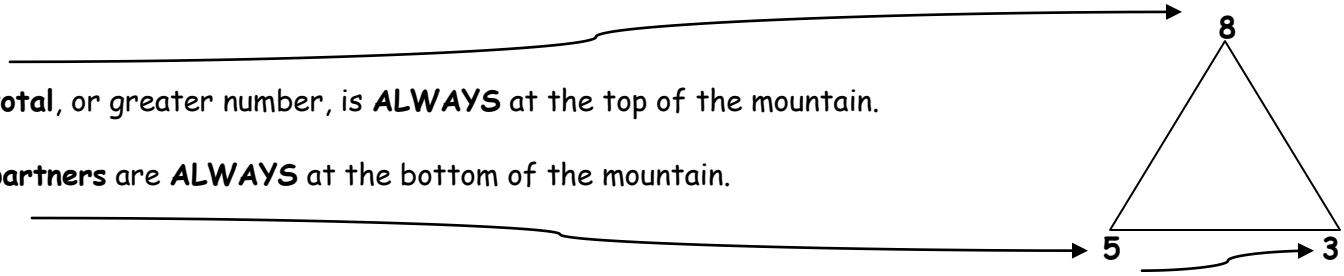
One way to help children develop these skills is to take advantage of real-life situations requiring them to analyze the relationships between **known and unknown quantities**. For example, there are 8 people eating dinner at our house for Christmas. There are five plates on the table…how many more plates do we need? The total number of people coming does not change whether it is viewed as an addition or as a subtraction problem. For example,

(8 – 5 = ❒ or 5 + ❒ = 8)

Learning to use Math Mountains efficiently can help with this concept. **Key things to remember:**

The **total**, or greater number, is **ALWAYS** at the top of the mountain.

The **partners** are **ALWAYS** at the bottom of the mountain.



A **MATH MOUNTAIN** is an important tool for children as they look for missing partners/addends.

In an **addition** problem, 5 + ❒ = 8, what do you add to 5 to make an 8? The number 8 goes at the top of a math mountain, 5 goes at the bottom, and students solve to find the missing partner.

In a **subtraction** problem, 8 - ❒ = 5**,** a math mountain is still used. 8 goes at the top, and the partner 5 goes at the bottom. We solve for the missing, or unknown, partner. If you notice your child struggling with this concept, please contact your child's teacher for additional ways to support your child while learning these important skills.

Special Note: Understanding **Math Mountains** and seeing the relationship between addition and subtraction facts is an important part of your child's overall understanding of basic math concepts. In the **Math Expressions** program, subtraction problems are first solved by crossing off the number to be subtracted. Then children use the **Counting Up** strategy to solve subtraction problems. This may be new for some parents; however, the children will benefit from practicing counting up now rather than counting backwards to subtract. Eventually, students will count backwards for small numbers. For example, it makes more sense to solve 10 – 2 by counting back two numbers (**10**, 9, 8.) Counting backwards to solve 10 – 8 would not be an efficient way to solve the problem. Counting up two numbers to 10 (**8**, 9, 10) makes more sense. Trying to go back and forth between the two strategies too early, however, confuses many children. Just REMEMBER to relate these problems to "Math Mountains," and it will help your child master these concepts. Thank you for supporting your child's learning at home.