

Independent Math Journals

Promoting communication in math is important for students. Using math journals as an independent activity is a key aspect to the Balanced Math Program.

Independent math journals require students to:

- explain
- respond
- justify their mathematical knowledge.

Encouraging students to explain an idea in written form compels the students to focus on and make mental connections with an idea or a math concept. Writing about math allows students the opportunity to become personally involved with an idea and make sense out of their thoughts as well as giving their ideas some structure.

The reflective thinking involved in writing a math journal is a positive experience that helps students develop a framework for their thoughts about math. This leads to a more comprehensive understanding of concepts.

Using math journals as a consistent component to the Balanced Math Program is beneficial for many reasons. Students begin to internalize their ideas about math concepts, allowing them to build communication skills needed to explain how they arrived at a solution. When students write about their personal knowledge in math, the journal serves as an assessment tool.

The students are forced to make sense of what they know and this provides the teacher with a window into what the students are thinking about a math concept.

Individual writing in a math journal is a personal activity. Students are given the opportunity to convey their thoughts and ideas in a way that protects them from sharing their ideas with the class as a whole. This security allows to students to be honest and this honesty provides a more accurate view for the teacher when evaluating the students' level of understanding. Teachers can quickly identify students who are having difficulty grasping a concept. This type of communication enables teachers to identify what the student knows and therefore, target individual needs for each student as well as general needs for the class as a whole.

Math Word Walls and Personal Dictionaries

To build mathematical language and the use of mathematical vocabulary, the use of math word walls is encouraged in the Balanced Math Program. Teachers employ word walls to promote the use of terminology and parts of speech in language arts, so why not do the same for math?

Mathematical terminology is very specific to the subject and is not commonly used in the students' general vocabulary. When students write about math on a consistent basis, their use of math terms increases, promoting further understanding of what the terms mean.