Tile Math Addition Instructions

Activity Objective

Tile Math is intended for small group independent center work. The top portion of these addition pages will help reinforce basic addition facts. The bottom portion will help students learn how to balance an equation. Working on both parts will also help students learn some basic principals of logic.

Preparation

Printout and laminate the 10 Tile Math addition sheets.
Printout the 10 Tile Math answer key sheets and place in a notebook or folder.
Printout the Tile Math digit squares sheet, laminate it, and then cut out the squares. Keep the digit squares clipped together in groups of 0-9.
Have whiteboards and dry erase markers, or scratch paper and pencils for each student at the center.

How to Use

Each student at the center is to get their own Math Tile addition sheet and their own set of digit squares. They should double check that there are no missing digits, and no doubled digits.

On the upper portion, the students are to carefully do each addition problem and place the digit square that matches the sum, or missing addend on the gray square.

When the students get to the bottom portion, they will have four squares left to work with in solving the two addition balance puzzles. They can use trial and error, or work through the givens. Whichever way they do it, they also must show their thinking on a white board or scratch paper. They are going to want to guess here and have you check it, but don't fall into that trap, have them prove their work.

It takes most students ten to fifteen minutes to complete one Math Tile addition sheet. The subtraction sheets (in subsequent sets) take 15 -20 minutes, and the multiplication and division sheets take 20-25 minutes.

You can have two people working on the same sheet together, but it never seems to cut down on the time it takes.

Directions: You have number-tiles 0-9. Each one must be used only once to solve the entire math sheet.

Tile Math

$$\begin{array}{r} \square \\ +\ 9 \\ \hline 9 \end{array} \qquad \begin{array}{r} 7 \\ +\ \square \\ \hline 1\ 0 \end{array} \qquad \begin{array}{r} 3 \\ +\ 1 \\ \hline \square \end{array}$$

$$\begin{array}{r} \square \\ +\ 5 \\ \hline 1\ 3 \end{array} \qquad \begin{array}{r} 3 \\ +\ \square \\ \hline 5 \end{array} \qquad \begin{array}{r} 4 \\ +\ 2 \\ \hline \square \end{array}$$

$$\square + 9 = \square + 1\ 1$$

$$1\ \square + 1\ 6 = 3\ \square$$

$$\begin{array}{r} \square \\ +\ 5 \\ \hline 8 \end{array} \qquad \begin{array}{r} 6 \\ +\ \square \\ \hline 1\ 0 \end{array} \qquad \begin{array}{r} 7 \\ +\ 1 \\ \hline \square \end{array}$$

$$\begin{array}{r} \square \\ +\ 7 \\ \hline 9 \end{array} \qquad \begin{array}{r} 3 \\ +\ \square \\ \hline 9 \end{array} \qquad \begin{array}{r} 2 \\ +\ 5 \\ \hline \square \end{array}$$

$$\square + 4 = 9 + \square$$

$$3 + \square = \square\ 2$$

Directions: You have number-tiles 0-9. Each one must be used only once to solve the entire math sheet.   **Tile Math**

	[ ]			6			1
+	5		+	[ ]		+	1
9			1	4			[ ]

	[ ]			9			2
+	7		+	[ ]		+	3
1	3		1	0			[ ]

[ ] + 5 = 7 + [ ]

3   [ ] + 2 = [ ]   2

Directions: You have number-tiles 0-9. Each one must be used only once to solve the entire math sheet.   **Tile Math**

	▦			6			4
+	1		+	▦		+	2
	9			8			▦
	▦			3			7
+	7		+	▦		+	2
1	4			8			▦
▦	+	8	=	9	+	▦	
▦	8	+	2	=	▦	0	

	[ ]			2			4
+	5		+	[ ]		+	3
	7			8			[ ]
	[ ]			3			1
+	7		+	[ ]		+	0
1	2		1	2			[ ]
1	[ ]	+	2	=	[ ]	+	9
[ ]	0	+	4	0	=	[ ]	0

	☐			2			2
+	3		+	☐		+	3
	9			9			☐
	☐			3			0
+	3		+	☐		+	0
1	2			7			☐

1	☐	+	0	=	☐	+	9
1	☐	+	1	0	=	☐	8

	[ ]			2			6
+	3		+	[ ]		+	3
1	0			7			[ ]
	[ ]			3			1
+	3		+	[ ]		+	2
	4			3			[ ]
1	[ ]	+	3	=	[ ]	+	9
1	[ ]	+	1	4	=	2	[ ]

Directions: You have number-tiles 0-9. Each one must be used only once to solve the entire math sheet.

	▨			2			6
+	3		+	▨		+	4
	8		1	1		▨	0
2	▨			3			2
+	3		+	▨		+	2
2	3			6			▨
▨	+	4	=	1	0	+	▨
1	▨	+	1	1	=	2	▨

Directions: You have number-tiles 0-9. Each one must be used only once to solve the entire math sheet.

Tile Math

	☐			2			6
+	3		+	☐		+	4
	8		1	1		☐	0
2	☐			3			2
+	3		+	☐		+	2
2	3			6			☐
☐	+	4	=	1	0	+	☐
1	☐	+	1	1	=	2	☐

	▨		2	0			9
+	9		+	1	▨		+	4
1	0		3	0		1	▨
	▨			3			0
+	2		+	▨		+	2
	6		1	1			▨
▨	+	8	=	7	+	▨	
1	▨	+	1	4	=	2	▨