

GUESS MY RULE

Riley's Input/Output Machine

After reading and discussing Riley the Robot, children may work with a partner on this fun activity.

Kathleen L. Stone
kathleenstone.com

Materials:

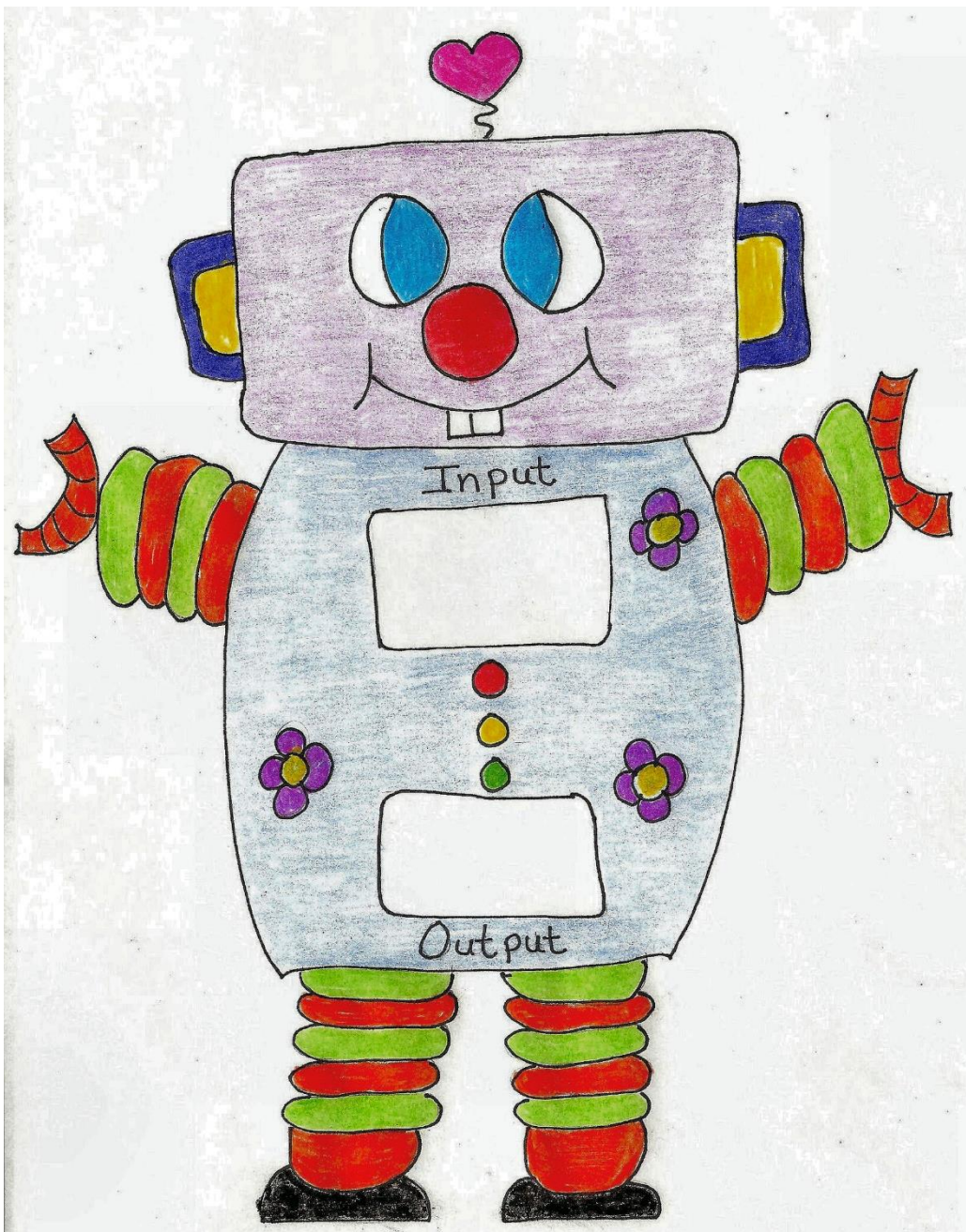
- laminated *Riley the Robot* recording sheet
- dry-erase pen and eraser *
- cards with *Riley's* rules
- 20-30 linking cubes in two colors

Directions:

- Partner A chooses one of Riley's rules but does not show it to Partner B.
- Partner B connects between 1 - 15 linking cubes (all the same color) near Partner A and records that number under INPUT on Riley's recording sheet.
- Partner A adds (or subtracts) linking cubes (of the second color) to those cubes according to Riley's rule.
- Partner B records the total number of cubes in the OUTPUT column on Riley's recording sheet.
- Partner B may guess the rule by writing the rule on Riley's recording sheet. They must then check the rule by placing a different amount of cubes near Partner A and record this number under INPUT on Riley's recording sheet. They should also record the OUTPUT number that follows the rule.
- Partner A adds (or subtracts) linking cubes (of the second color) to those cubes according to Riley's rule. If Partner B's rule is NOT correct, Partner B corrects the data in the INPUT/OUTPUT table and tries a different INPUT number.
- When Partner B correctly guesses the rule and proves it by writing a different INPUT/OUTPUT combination that works with the rule, the partners switch roles.

* I hot glued pom poms on the end of dry erase marker caps to be used as erasers.

Guess My Rule

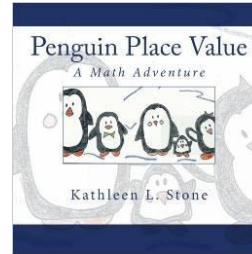


Input	Output

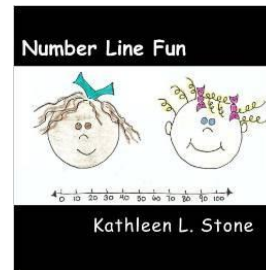
+ 1	+ 9	- 7
+ 2	+ 10	- 8
+ 3	- 1	- 9
+ 4	- 2	- 10
+ 5	- 3	+
+ 6	- 4	+
+ 7	- 5	-
+ 8	- 6	-

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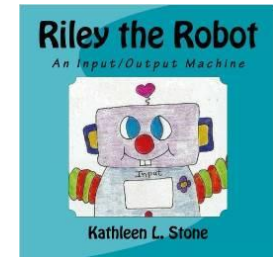
Penguin Place Value
A Math Adventure



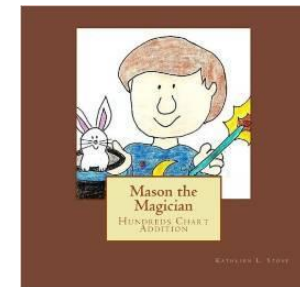
Number Line Fun
Solving Number Mysteries



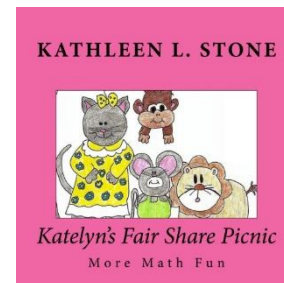
Riley the Robot
An Input/Output Machine



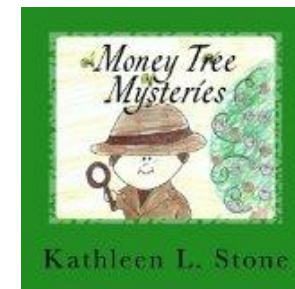
Mason the Magician
Hundreds Chart Addition



Katelyn's Fair Share Picnic
More Math Fun



Money Tree Mysteries
Adventures with Quarters



Additional ideas and resources are available at:

www.kathleenlstone.com