

This activity works best after doing the original *Magic Pot* activity.

Divide the class into small groups. Pass out a **cup labeled “1 to 10”** and a **Function Chart** sheet to each group.

In this activity, the “In” number is determined by drawing two numbers from the “1 to 10” cup and then adding them together. For example, if one student draws a 5 and a second student draws a 3, the “In” number becomes $5 + 3 = 8$. Next, a third student draws a new number from the cup. This number will relate to the function. For example, if the student draws a 7, the function will be “add 7.” This would make the “Out” number $= 8 + 7 = 15$.

Have students record the information on the Function Chart sheet. When finished creating a row of “In” and “Out” numbers, have students place the numbers back in their cups before creating the next row of “In” and “Out” numbers.

VARIATION 1: In this variation, students practice using larger numbers to create functions. Pass out a **cup labeled “11 to 20”** to each group.

Students determine the “In” number by drawing two numbers from the “11 to 20” cup, and then adding them together.

For example, if one student draws a 15 and a second student draws a 12, the “In” number becomes $15 + 12 = 27$. Next, a second student draws a number from the cup labeled “1 to 10.” This number will relate to the function. For example, if the student draws a 6, the function will be “add 6.” This would create an “Out” number of $27 + 6 = 33$.

Students will record the information on the Function Chart sheet. When finished creating a row of “In” and “Out” numbers, have students place the numbers back in their cups before creating the next row of “In” and “Out” numbers.

MATERIALS:

- Cups with numbers from previous *Magic Pot* activity
- Function Chart sheet

Function Charts

Function = _____

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Function = _____

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Function = _____

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