**Math – 100 Chart Coding**

The goal of this task is to move from one point on the 100 chart to another by using coding. Remember, coding is specific step by step instructions.

Materials

* 10 playing cards (Ace to ten) or pieces of paper with the numbers 1 to 10 written on them
* a 100 chart – you can print [one](https://focusonmath.files.wordpress.com/2012/04/screen-shot-2012-04-22-at-3-18-39-pm1.png), use one that you made by yourself, or use one on your computer screen
* a game piece to move on your 100 chart (if you are using a paper 100 chart)

Step 1

To begin, you need to pick two cards. Take the numbers on your cards and make a 2-digit number. If you picked a 2 and 5, you could make 25 or 52. Choose one of those 2 digit numbers. This will be your starting number. Shuffle your cards, pick two cards again and make another number. This will be your ending number.

Example: My starting number will be 25 and my ending number will be 46.

Step 2

Put your game piece on the starting number. If you are doing this on the computer, you could put your mouse on the first number.

Step 3

Write the code to get your game piece from the starting number to the ending number but here are the rules: your game piece can only move one square at a time and can only understand the commands ‘add’ or ‘subtract’

Step 4

Get a family member to test your code. Did they get to the correct ending number?

Here is an example:

Starting number: 25

Ending number: 46

My Code

Add 10

Add 10

Add 1

Let’s test it.



That one was pretty easy.

Try some numbers that are not quite so close together.

Try starting with a bigger number and ending with a smaller number.

Do this activity at least 5 times.

Next week, we are going to try doing this on a bigger game board and instead of using a game piece, you will use a human.