Probability Game

Block Coding Program

**Patterning and Algebra**

**Unit 3 Line Master 2a**

Click the link to access Scratch: Dice Game – Doubles:

<https://scratch.mit.edu/projects/484777128/>

Text

Description automatically generated with medium confidence

The  starts the game, and the space bar rolls the dice.

Play until you win. Play again.   
Compare your results with the class results when   
students rolled number cubes.

Probability Game (cont’d)

Block Coding Program

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**Unit 3 Line Master 2b**

**Examine the Code**

● Click **See Inside**. Look at the code.   
What do you think the different blocks mean?   
How do they relate to the probability experiment?

Graphical user interface

Description automatically generated with medium confidence Graphical user interface, chart

Description automatically generated

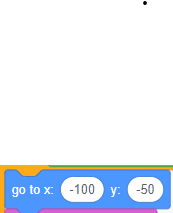
Probability Game (cont’d)

Block Coding Program

**Patterning and Algebra**

**Unit 3 Line Master 2c**

● Connect the blocks to what happened during the experiment.   
For example,   
Graphical user interface, application

Description automatically generated has Cat facing right (looking from Start to Finish).   
 has Cat starting at (–100,50).

|  |  |  |
| --- | --- | --- |
| Graphical user interface, application  Description automatically generated | has Cat go back to Start if  the dice match. | |
|  | |
| If the dice don’t match, the numbers  rolled are added.  Then Cat takes that many steps. | |
| Graphical user interface, application  Description automatically generated | | has the roll tracked each time,  and random numbers are  chosen from 1 to 10. |
| Graphical user interface, application  Description automatically generated | has the Cat being declared  the Winner!  When the Cat touches the red  Finish Line. | |

**Note:**   
Cat starts at –100 and ends up at 150.   
Thinking about the distance on each side of 0,   
100 pixels + 150 pixels = 250 pixels.