die roll activity



Welcome! This tutorial will help you create a die. Let's get started!

Let's create a condition for when the BBC micro:bit is shaken.



We need to show a random value from 1 to 6 on our die. So let's make a local variable called **roll**.



We need a condition for if **roll** is 5. We will show a 6 if **roll** is 5 because **roll** has a range from 0 to 5. We can use show LEDs to display the side of a die that shows 6.



Let's use an else if condition for if **roll** is 4. If **roll** is 4 we can show 5 dots on the die.



Now we need to repeat the same steps for if **roll** is 3. If **roll** is 3 we will show 4 on the die.

BBC micro:bit : die roll activity



Let's also repeat these steps to show the 3, 2, and 1 on the die. We are almost done with our die!

on shake

snake		
set roll to pick random 0 to 5		
do show leds		
0 1 2 3 4		
3 0 0 0 0		
4 🛛 🗸 💭 🗸 🗩		
else if (roll v = v (4		
do show leds		
30 7 0 7 0		
do show leds		
0 1 2 3 4		
1 🛛 🗸 🖨 🏹 🖨		
2 0 0 0 0 0		
3 🛛 🗸 💭 🏈		
4 • • • • •		





Excellent, you're ready to continue with the <u>challenges</u> (https://www.microbit.co.uk/blocks/lessons/die-roll/challenges) !

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die roll challenges

Before we get started

Complete the following guided tutorial (https://www.microbit.co.uk/blocks/lessons/die-roll/activity), your code should look like this:

Should look like this.

do	set roll v to pick random 0 to 5	
	do show leds	do show leds
	0 1 2 3 4	
	do show leds	do show leds
	0 1 2 3 4	
		3 0 0 7 0
		4 8 8 8 8 8
	do show leds	else show leds 0 1 2 3 4
	3 7 7 7	
	4 8 8 8 8 8	

Challenge 1

Modify the line of code with pick random so that only number 1-4 can appear on the die.



Challenge 2

Let's make a trick die! Modify the line of code with pick random so that only numbers 3-6 can appear on the die. Also note that we need to ensure roll = 0 when only 1 dot is shown on the BBC micro:bit.





Challenge 3

Add a couple more conditions so that the BBC micro:bit randomly chooses a number between 1 and 8.

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