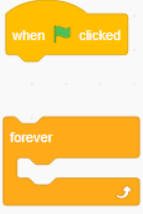






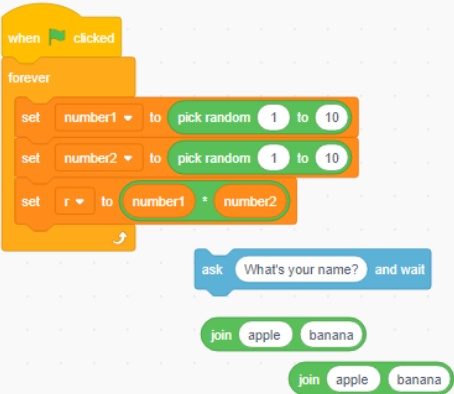
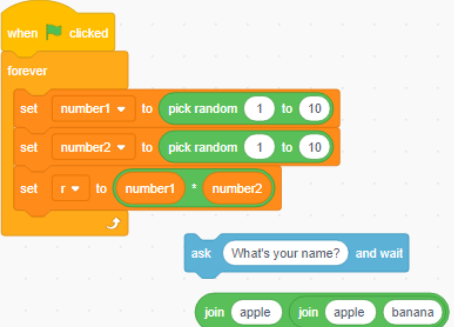

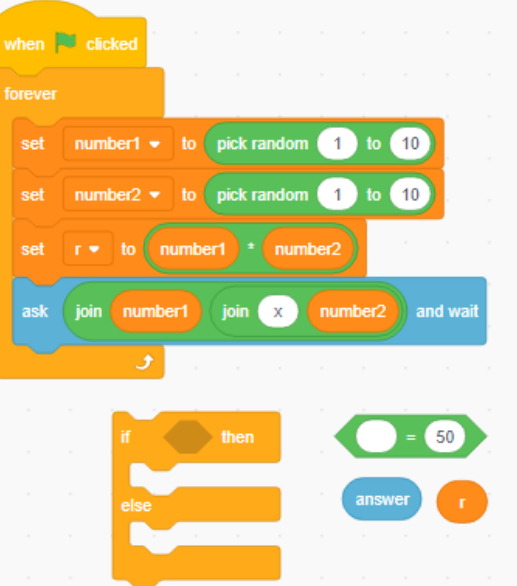


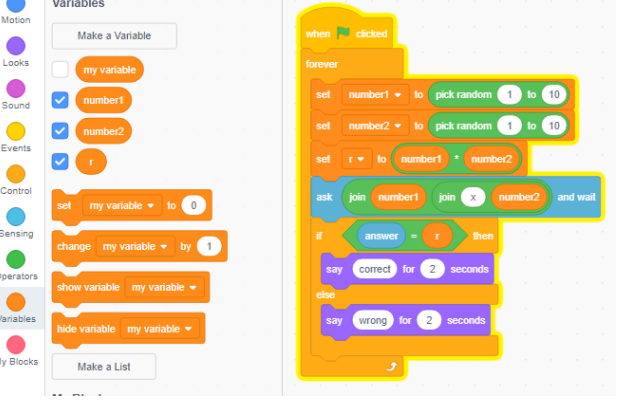
How to create a maths quiz on scratch

		<p>First go to the <u>control</u> section and select the green flag.</p> <p>After that select the <i>forever</i> piece of code</p>
<p>Variables</p> <p>Make a Variable</p> <p><input type="checkbox"/> my variable</p>		<p>Go to <u>Variables</u> and click on Make a variable</p>
<p>Variables</p> <p>Make a Variable</p> <p><input type="checkbox"/> my variable</p> <p><input checked="" type="checkbox"/> number 1</p> <p><input checked="" type="checkbox"/> number 2</p> <p><input checked="" type="checkbox"/> r</p>		<p>You are going to create three variables :</p> <p>Number 1</p> <p>Number 2</p> <p>R (which stands for result)</p>
		<p>Then select 3 set my variables to pieces of code and place in the <i>forever</i> section.</p>
		<p>Clicking on the arrow next to <i>my variable</i> you will see the options:</p> <p>Number 1</p> <p>Number 2</p> <p>And r</p> <p>Set them in the positions shown here</p>

		<p>Next go to <u>operators</u>. You are now going to programme what each variable can do. In this case it will be to pick a random number from 1 to 10 although you can change the 10 to a maximum of 12 but no higher.</p> <p>Do this for variable <i>Number 1</i> and <i>number 2</i>.</p>
		<p>Here I've set this to 12 on both. This is code to tell the sprite to pick random numbers up to 12. We want this for the times tables up to 12.</p>
		<p>After that, go to <u>operators</u> and select the green = icon. (Make sure it is the one with the rounded edges.</p>
		<p>Then go back to the <u>variables</u> tab and place in <i>number 1</i> and <i>number 2</i> in the correct spaces. This means that the sprite will now randomly select two numbers to multiply together. Place this into the space with 0 in it.</p>

		<p>From sensing select the ask and wait code. Go to operators and select two join pieces of code. (they will have the words apple and banana on them)</p>
		<p>Join the two join pieces of code so that you have three spaces which say apple , apple, banana. Insert this green code into the blue ask code as seen in the following diagram.</p>
		<p>Once this is done return to the variables tab and insert number 1 and number 2 into the spaces shown in the blue ask and wait piece of code. In the middle section place an X . This piece of code generates your multiplication sum.</p>
		<p>From the controls panel select the , if then, else code. Go to operators (green) and select the = code (you want the one with =50 on it). Collect the blue answer code from sensing and finally gather the 'r' variable code from variables.</p>

 <pre> when clicked forever set number1 to pick random 1 to 10 set number2 to pick random 1 to 10 set r to number1 + number2 ask join number1 join x number2 and wait </pre> <pre> if answer = r then else </pre>	<p>Place answer and r into the green = 50 code and carefully place in the space between if and then .</p>
 <pre> when clicked forever set number1 to pick random 1 to 10 set number2 to pick random 1 to 10 set r to number1 * number2 ask join number1 join x number2 and wait if answer = r then else </pre> <pre> say Hello! for 2 seconds say Hello! for 2 seconds </pre>	<p>You are now going to code what happens when the answer to the maths question is given. Go to looks and select two say hello for 2 seconds. On the first one put something positive for when the answer is correct. On the second piece of code write something to say that they didn't get it right.</p>

	<p>Place these two pieces of code into the if else block as shown in the diagram.</p>
	<p>You are all set up and ready to go but finally you need to hide the variables you have made from the main screen. To do this you need to go to variables and click on the blue ticks next to number 1 number 2 and r as you do this you will notice that the icons on the main screen have now disappeared.</p>
	
<p>Finally, enlarge the main screen and you are ready for an amazing maths quiz. If you manage to complete all of these steps, do you remember how to add code to include a greeting from your sprite? The blocks are flexible so you are able to slot in extra code easily. Good luck.</p>	