


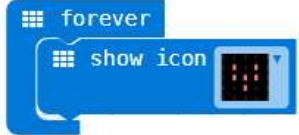




Video walkthrough: <http://explorecuriosity.org/Explore/ArticleId/6340/basic-heartbeat-animation-walkthrough.aspx>

Goal: To create a simulation of a beating heart.

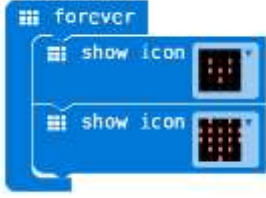

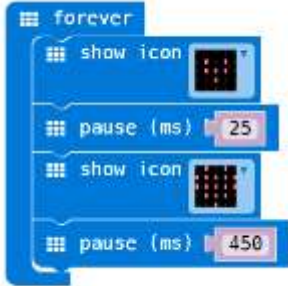
Instructions	Blocks
<p>Get onto the internet and go to: https://makecode.microbit.org/</p>	
<p>You will see two blocks in the working area when you start a new project.</p> <p>Delete the <i>on start</i> block. You can do this by right-clicking and choosing the <i>Delete Block</i> option or by dragging the block to the left over the menu where a trashcan will appear.</p>	
<p>Under <i>Basic</i>, click and drag a <i>show icon</i> block inside of the <i>forever</i> block.</p>	
<p>Tip: A block will be “grayed out” until you place it in such a way that it can function.</p>	
<p>The <i>show icon</i> block defaults to an image of a big heart. If you click on the small downward arrow beside the heart, you will see all of the pre-made icons you can use.</p>	
<p>Select the <i>small heart</i> (top row).</p>	



Living Space

Minds-On 1: Heartbeat Simulation



<p>Under <i>Basic</i>, click and drag another <i>show icon</i> block beneath the first <i>show icon</i> block. It already has the big heart, which is what you want.</p> <p>You should now see on the simulator micro:bit that the image switches between the little heart and the big heart.</p>	
<p>To make this more like a real heartbeat, you can incorporate <i>pause</i> blocks. Under <i>Basic</i>, select a <i>pause</i> block.</p>	
<p>Place a <i>pause</i> block after each heart icon. This will cause the hearts to remain displayed for a specific amount of time measured in milliseconds (ms).</p> <p>Think about the sound of a heart beat (lub dub) and adjust the <i>pause</i> block values accordingly.</p>	
<p>Did you know? 1000 milliseconds = 1 second</p>	
<p>Your final simulation should look something like this.</p>	
<p>To upload the code to the micro:bit, see the instructions for Saving and Uploading</p>	





Video walkthrough: <http://explorecuriocity.org/Explore/ArticleId/6338/uploading-from-microbit-to-google-chrome.aspx>

Goal: To save and upload from a micro:bit (Google Chrome)

Saving and Uploading to Google Chrome	
<p>Plug the micro:bit in to your computer's USB port using the micro USB cable that came with the micro:bit. The micro:bit should show up as a USB storage device, much in the same way as a flash drive.</p>	
<p>Below the working area you will see a space beside the <i>save</i> icon where you can name your project.</p> <p>After you have given your project a name, click on the <i>save</i> button. This will save your program to your <i>Downloads</i> folder.</p>	
<p>Below the <i>Download</i> button you should see the name of your file.</p> <p>Click on the pull down arrow beside the file name.</p>	
<p>From the menu, select <i>Show in folder</i>. This will take you to your <i>Downloads</i> folder.</p>	
<p>Select the file you wish to upload onto the micro:bit and drag it into the micro:bit folder on the left side.</p>	
<p>As the program is copied onto the micro:bit, you will see that the light on the back of the micro:bit is flashing. This means that the program is in the process of being uploaded onto the micro:bit.</p>	
<p>Once the lights are no longer flashing, your program should be running on your micro:bit.</p> <p>Note: You need to go through this saving and uploading process every time you make changes or make a new micro:bit program.</p>	





Video walkthrough: <http://explorecuriocity.org/Explore/ArticleId/6339/uploading-from-microbit-to-microsoft-edge.aspx>

Goal: To save and upload from a micro:bit (Microsoft Edge)

Saving and Uploading to Microsoft Edge	
<p>Plug the micro:bit in to your computer's USB port using the micro USB cable that came with the micro:bit. The micro:bit should show up as a USB storage device, much in the same way as a flash drive.</p>	
<p>Below the working area you will see a space beside the save icon where you can name your project.</p> <p>After you have given your project a name, click on the <i>save</i> button. This will save your program to your <i>Downloads</i> folder.</p>	
<p>If the box that says "What do you want to do with [file name]?" pops up, click on <i>Save</i> then click on <i>Open folder</i>. This will take you to your <i>Downloads</i> folder.</p>	
<p>Select the file (program) you wish to upload onto the micro:bit and drag it into the micro:bit folder on the left side.</p>	
<p>As the program is copied onto the micro:bit, you will see that the light on the back of the micro:bit is flashing. This means that the program is in the process of being uploaded onto the micro:bit.</p>	
<p>Once the lights are no longer flashing, your program should be running on your micro:bit.</p> <p>Note: You need to go through this saving and uploading process every time you make changes or make a new micro:bit program.</p>	

