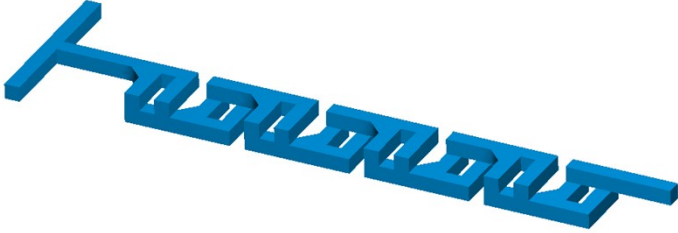


Instructions: Please answer the questions to the best of your knowledge without using notes/aids. Once you are finished, please rate in the right margin your confidence in your answer with 1 being least confident and 5 being most confident.

Questions	Confidence in Answer (1, least to 5, most)
<p>1. How does fluid move and mix at the microscale in comparison to the macroscale?</p>	
<p>2. Here is an image of a 3d microfluidic mixer. How does it increase mixing efficiency?</p> 	
<p>3. Using the 3d image of the microfluidic mixer, please draw the individual layers needed to create this device.</p>	
<p>4. How are liquid droplets created in microfluidics?</p>	

Instructions: Please answer the questions to the best of your knowledge without using notes/aids. Once you are finished, please rate in the right margin your confidence in your answer with 1 being least confident and 5 being most confident.

<b>Questions</b>	<b>Confidence in Answer (1, least to 5, most)</b>
5. Can you draw a top view and cross section of a structure likely to create droplets?	
6. What is a microfluidic valve and how is it controlled?	
7. Can you draw a top view and cross section of a microfluidic valve using 2 fluidic channels? (Multiple layers are ok)	
8. How do air bubbles affect the operation of a microfluidic?	

Instructions: Please answer the questions to the best of your knowledge without using notes/aids. Once you are finished, please rate in the right margin your confidence in your answer with 1 being least confident and 5 being most confident.

<b>Questions</b>	<b>Confidence in Answer (1, least to 5, most)</b>
9. What are tolerances and why are they important in manufacturing microfluidics?	
10. What did you learn in this activity?	