

## GWC Essential Questions & Understandings

Essential Questions	Enduring Understandings	Examples in Action
Who are computer scientists?	<ul style="list-style-type: none"> <li>→ GWC girls are computer scientists.</li> <li>→ Computer scientists come from all different backgrounds. Diversity is important in CS because a diverse set of voices and perspectives improve us as people, as well as the products we create.</li> <li>→ Daily, computer scientists use computational thinking and collaboration to solve dynamic problems.</li> </ul>	<ul style="list-style-type: none"> <li>→ Girls complete the sentence, "I am a computer scientist because..."</li> <li>→ Girls associate the term "computer scientists" with positive terms.</li> <li>→ Girls can provide details around what it means to be a computer scientist day-to-day, based on their own experience, interactions with professional coders, and role models featured in our curriculum.</li> </ul>
What is computer science?	<ul style="list-style-type: none"> <li>→ Computer science is the study of solving problems using computational thinking.</li> <li>→ Computer science is more than building programs - "doing" computer science requires problem solving.</li> </ul>	<ul style="list-style-type: none"> <li>→ Girls say that computers are not inherently smart, and that the real problem solving comes from humans thinking creatively.</li> <li>→ Girls create a plan for their program before trying to code it.</li> </ul>
How and why do we use computer science to solve problems?	<ul style="list-style-type: none"> <li>→ Computer scientists evaluate the tools at their disposal and choose the best one based on their current needs.</li> <li>→ Automating tasks with a computer allows humans to do more creative and adaptive thinking.</li> </ul>	<ul style="list-style-type: none"> <li>→ Girls explain why they chose a particular programming language, based on the problem they are solving.</li> <li>→ Girls identify tasks in their day-to-day lives they can automate with a program/script.</li> </ul>
In what ways can computer science impact your community and society at large?	<ul style="list-style-type: none"> <li>→ CS and technology will not improve the world on its own. We need people who are committed to positive change to use CS as a tool to make an impact.</li> <li>→ Girls have the power to effect change in their community and the world.</li> </ul>	<ul style="list-style-type: none"> <li>→ Girls name one positive and one negative example of technology impacting the world.</li> <li>→ Girls identify ways that they could use CS and technology to impact their community in their lifetimes.</li> </ul>