![D:\Users\plbiddle\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\4VHFCBC8\MM900223770[1].gif]()![D:\Users\plbiddle\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\44DGXQMG\MC900054812[1].wmf]()The Mathematics Learner Profile

|  |  |
| --- | --- |
| Attribute |  |
| Inquirers | Inquirers look for patterns. Inquirers write proofs to illuminate the patterns they have discovered. Inquirers discover mathematical patterns and relationships to deepen their understanding and ownership of the ideas and concepts being studied. |
| Knowledgeable | Math is the global and multi-disciplinary language. For example, science expresses itself through math. Our understanding of math continues to evolve and deepen as our ability to explore ideas of greater complexity continues to develop. |
| Thinkers | Higher level mathematics is dedicated to complex multi-step problems. Students are required to think critically in order to evaluate their solutions and problem solving approaches. |
| Communicators | Students must use appropriate math language because math has its own language. Communicating in this language requires an understanding of it set of rules, symbols, notation, syntax etc. Math has multiple modes of communication (graphical, algebraic and examples) that need to be mutually reinforcing and consistent. |
| Principled | Students are expected to take responsibility for their own work and problem solving. Math is very unforgiving – if a student tries to pretend to work at or understand the subject, their lack of knowledge will be found out by the independent assessments. |
| Open-minded | Students explore and discover multiple methods of solving problems. Students understand that there are different perspectives that can be equally effective in visualizing, setting up, or solving problems. |
| Caring | Better students learn better by teaching peers and owning their peers’ progress. Attaching real world emotions and morals to math problems by relating the mathematical concept to problems that have real human impact increases a student’s appreciation for the role that math can play in improving the world in which they live. |
| Risk-takers | Risk takers speak in class despite the possibility of being incorrect. Risk takers attack unfamiliar problems because they know they are good at math when they can solve them. |
| Balanced | Balanced students manage their time in and out of the class. One way of maintaining balance is through finding the quick, simple ways to solve problems. A good understanding of math and its elegance can streamline problem solving and make students more effective and efficient. |
| Reflective | Reflecting involves considering where assumptions are made that can lead to truth or error. Being able to reflect on your own work and how you are approaching a problem and how to correct an inferior method can lead to penetrating insights. |