# Rubric to Assess Math Curricular Competencies

| Curricular Competencies | Criteria | Emerging | Developing | Proficient | Extending |
|---|---|---|---|---|---|
| **Interpret** | Can I understand what the question/problem is asking? | With support, I can understand what the question/ problem is asking. | I can sometimes understand what the question/ problem is asking myself but I sometimes need support. | I can consistently understand what the question/ problem is asking by myself. | I can understand the sophisticated problems and what I need to do. |
| **Model** | When given a word problem or a scenario, can I create a mathematical model (ex. diagram, equation, etc) to represent the situation? | With support, I can create a mathematical model to represent a situation. | I sometimes can create a mathematical model to represent a situation myself but I sometimes need support. | I can consistently create a mathematical model to represent a standard situation by myself. | I can model sophisticated problems. |
| **Solve** | Can I do the math accurately? | With support, I can solve the problem, but I make many errors. | I can sometimes solve the problem but there are often errors and I sometimes need support | I can consistently solve the problem often without errors by myself. | I can solve sophisticated problems that I have not seen before. I can apply my understanding of concepts to solve new problems. |
| **Analyze** | Can I logically explain and justify the process used in arriving at my solution to the problem?<br><br>Can I estimate and use my estimation to check if my final solution is reasonable? | I can't logically explain the process used in arriving at my solution to the problem.<br><br>I can't estimate an answer without technology. I'm not sure if my final answer is reasonable. | I can sometimes logically explain the process used in arriving at my solution to the problem.<br><br>I can sometimes estimate an answer without technology. I sometimes know if my answer is reasonable. | I can consistently and logically explain the process used in arriving at my solution to the problem by myself.<br><br>I can consistently estimate an answer without technology by myself. I always know if my answer is reasonable. | I can analyze sophisticated problems. |

| Communication | Can I clearly show, explain and organize all steps when solving math problems? Is my Math work organized and neat? | My work is unorganized. Often, only the answer is shown without any supporting steps. | My work is often unorganized. Sometimes, only an answer is given without any support. If there is some work shown, it is often missing steps. | My work is always neat and organized. Answers are always fully supported with clear logical steps. | I use the language of mathematics to clearly and accurately communicate my solution. |
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| **Curricular Competencies** | **Criteria** | **Emerging** | **Developing** | **Proficient** | **Extending** |
| **Persistence and Positive Attitude** | Learning math often takes time and persistence. I know this and don't give up easily. | I give up easily. I often shut down when I get frustrated. | I usually give up when I don't get it. Sometimes I will ask for help or try again, but I often get frustrated and move on. | I always ask for help if I don't understand and I try again until I get it. Sometimes I get frustrated, but usually I find a way to work through it. | When I get stuck or have difficulty understanding, I use the resources I need and patiently take the time I need and persevere to learn. |
| **Reflect on your learning** | What do I know? What do I still need to work on? What resources do I need to learn? How do I learn best? | I am unaware of how I am doing in Math. I don't reflect on my learning. I do not complete the HDID. I do not learn from my mistakes. | I am somewhat reflective. I often complete the HDID, although maybe with not a lot of thought. I sometimes learn from my mistakes. | I know what my strengths and weaknesses are. I always complete the HDID in a detailed, thoughtful way. I usually learn from my mistakes. | I can clearly explain what my strengths and weaknesses are. I always complete the HDID in a detailed, thoughtful way. I always learn from my mistakes. |