Name: *MP 1 - Assessment Rubric*

G&T STEM Lab *- **S**cience, **T**echnology, **E**ngineering, & **M**athematics* ***Cubelets Unit***

Logical/Scientific Social Emotional Skills

	Beginning	Developing	Accomplished	Exemplary
Spatial Awareness	This students is still learning this/these skills and working towards the developing level of achievement.	With guidance, student: -can understand charts, maps, diagrams, drawings and models. Can manipulate simple puzzles.	Student: -creates 2D and 3D objects of differing shapes and sizes. -understands symbol systems and symbolic designs.	Student: -creates 2D and 3D objects of differing shapes and sizes and can move between different representations. -uses various methods of solving problems with dealing with 2D and 3D objects. - can see relationships between two or more objects.
Academic Problem Solving	This students is still learning this/these skills and working towards the developing level of achievement.	With guidance, student: -chooses a problem-solving skill appropriate to a particular problem. -begins to understand how to use logic to discern steps towards a goal.	Student: -chooses a problem-solving skill appropriate to a particular problem. -begins to understand how to use logic to discern steps towards a goal. -begins to recognize/find problems and identify the elements that impact the solution.	Student: -can recognize problems, break down the elements and assess the value of collecting additional data. -creates a hypothesis and tests it. -chooses a problem-solving skill appropriate to a particular problem. -begins to understand how to use logic to discern steps towards a goal. -is able to change course when additional facts or challenges obviate a previously decided upon course of action. -can evaluate the success of the chosen solution.
Integration of Knowledge and Personal Skills	This students is still learning this/these skills and working towards the developing level of achievement.	Student: -recognizes overlap in differing content areas and applies academic skills. -can explain in his/her own words how he/she arrived at a particular solution.	Student: -recognizes overlap in differing content areas and applies academic skills. -can explain in his/her own words how he/she arrived at a particular solution. -works at an accelerated pace in academic content areas.	Student: -recognizes overlap in differing content areas and applies academic skills using prior knowledge and experience. -can explain in his/her own words how he/she arrived at a particular solution. -works at an accelerated pace in academic content areas. -is able to work independently on projects and complex assignments.

Responsibility for Independent Learning

Beginning	Developing	Accomplished	Exemplary
• Demonstrates limited initiative or self-motivation. • Demonstrates limited curiosity. • Demonstrates limited ability to manage time effectively. • Demonstrates limited planning ability.	• Demonstrates some initiative and self-motivation. • Demonstrates some curiosity. • Demonstrates some ability to manage time effectively. • Demonstrates some planning ability.	• Demonstrates initiative and self-motivation. • Demonstrates curiosity. • Demonstrates ability to manage time effectively. • Demonstrates planning ability.	• Demonstrates exceptional initiative and self-motivation. • Demonstrates exceptional curiosity. • Demonstrates exceptional ability to manage time. • Demonstrates exceptional planning ability.

Cubelets Rubric

Novice	Apprentice	Artisan	Master
-Stacks in vertical towers & long snakes. -Stacks in non-linear shapes. -Stacks in patterns. -Rotates Cubelets to attach them correctly. -Notices and cares when Battery is turned on/off.	-Identifies 3-5 Cubelets by name. -With support from an adult, builds with at least one SENSE, one ACT, and Battery (or more). -Actively tries to makes robot ACT, but does not always accurately locate SENSE Cubelet. -Does not explain how each block contributes to the robot, but has a general idea about how the robot ACTS altogether. -Rotates Cubelets to change the robot's behavior. -Reorganizes the order of Cubelets to change the robot's behavior.	-Identifies 5-8 Cubelets by name. -Without prompting, builds with at least one SENSE, on ACT and a Battery (or more). -Builds specific robots the student has seen before. -Can explain what each Cubelet does within a 3-and 4-block robot construction. -Always activates the SENSE Cubelet accurately and purposefully. -Beginning to plan robots before building them.	-Actively seeks robot challenges. -Designs and builds robots in all three dimensions. -Beginning to invent robot challenges. -Regularly plans robots before building them. -Uses more than one SENSE Cubelet. -Intentionally includes THINK Cubelets.

Parent Signature: _____

Comments:

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