



Phenomenon: If a proton is the size of a pea, then how big is the atom?

Student Name: _____ Date: _____

| Items | Exemplary (4 Points) | Proficient (3 Points) | Approaching Proficient (2 Points) | Beginning (1 Point) |
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| Community/Learning Environment | INTEGRITY & RESPECT <ul style="list-style-type: none"> Models and encourages honesty and integrity in self and others Advocates for respect and fairness in all situations | INTEGRITY & RESPECT <ul style="list-style-type: none"> Consistently models honesty and integrity Consistently treats self and others with respect and fairness Consistently respects their environment and materials Consistently sets and cleans up work space | INTEGRITY AND RESPECT <ul style="list-style-type: none"> Inconsistently models honesty and integrity Inconsistently treats self and others with respect and fairness Inconsistently respects their environment and materials | INTEGRITY AND RESPECT <ul style="list-style-type: none"> Rarely models honesty and integrity Rarely treats self and others with respect and fairness Rarely respects their environment and materials |
| Community/Learning Environment | INCLUSION & EQUITY <ul style="list-style-type: none"> Seeks opportunities to support peers Advocates for the diversity of others' experiences, identities, opinions, ideas, and approaches to learning | INCLUSION & EQUITY <ul style="list-style-type: none"> Consistently supports peers Consistently shows respect for the diversity of others' experiences, identities, opinions, ideas, and approaches to learning | INCLUSION AND EQUITY <ul style="list-style-type: none"> Inconsistently supports peers Inconsistently shows respect for the diversity of others' experiences, identities, opinions, ideas, and approaches to learning | INCLUSION AND EQUITY <ul style="list-style-type: none"> Rarely supports peers Rarely shows respect for the diversity of others' experiences, identities, opinions, ideas, and approaches to learning |
| Community/Learning Environment | ENGAGEMENT <ul style="list-style-type: none"> Brings intellectual curiosity and zest for learning Exhibits leadership skills by contributing, and encouraging other students to participate and learn Understands learning happens best in the community, shows up every day, and contributes to the community | ENGAGEMENT <ul style="list-style-type: none"> Consistently demonstrates an interest in learning Consistently collaborates effectively Consistently attends classes on time | ENGAGEMENT <ul style="list-style-type: none"> Inconsistently demonstrates an interest in learning Inconsistently collaborates effectively Inconsistently attends classes on time | ENGAGEMENT <ul style="list-style-type: none"> Rarely demonstrates an interest in learning Rarely contributes to a positive learning environment Rarely collaborates effectively Rarely attends classes on time |

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| Learning Process | <p>GROWTH MINDSET</p> <ul style="list-style-type: none"> • Embraces mistakes and failures and uses them as opportunities for learning • Asks thoughtful questions to deepen and/or broaden understanding • Invites challenges, risks, and feedback | <p>GROWTH MINDSET</p> <ul style="list-style-type: none"> • Consistently views mistakes and failures as opportunities for learning • Consistently accepts challenges, takes risks and acts on feedback | <p>GROWTH MINDSET</p> <ul style="list-style-type: none"> • Inconsistently views mistakes and failures as opportunities for learning • Inconsistently accepts challenges, takes risks and acts on feedback | <p>GROWTH MINDSET</p> <ul style="list-style-type: none"> • Rarely views mistakes and failures as opportunities for learning • Rarely accepts challenges, takes risks and acts on feedback |
| Learning Process | <p>TENACITY</p> <ul style="list-style-type: none"> • Perseveres through challenges and encourages others to do the same • Conscientiously completes all assigned work and submits on time • Seeks other opportunities to apply understanding • Clarifies the process of completing assignments with team members | <p>TENACITY</p> <ul style="list-style-type: none"> • Consistently uses effort on a pathway to mastery • Consistently perseveres through challenges • Consistently completes assigned work conscientiously and submits on time | <p>TENACITY</p> <ul style="list-style-type: none"> • Inconsistently uses effort on a pathway to mastery • Inconsistently perseveres through challenges • Inconsistently completes assigned work conscientiously and submits on time • Inconsistently reads instructions before beginning a tasks and asks clarifying questions | <p>TENACITY</p> <ul style="list-style-type: none"> • Rarely uses effort on a pathway to mastery • Rarely perseveres through challenges • Rarely completes assigned work conscientiously and submits on time • Rarely reads instructions before beginning a tasks and asks clarifying questions |
| Learning Process | <p>RESOURCEFULNESS</p> <ul style="list-style-type: none"> • Independently seeks out new and uses a variety of resources to solve problems • Independently uses and models organizational systems • Independently plans for short and long term tasks | <p>RESOURCEFULNESS</p> <ul style="list-style-type: none"> • Consistently demonstrates the ability to use appropriate resources to solve problems whenever needed • Consistently uses a satisfactory organizational system • Consistently self-regulates, needing little to no redirection from teacher • Consistently uses class time effectively • Consistently reads instructions before beginning a tasks and asks clarifying questions • Consistently takes responsibility for learning how to use equipment properly | <p>RESOURCEFULNESS</p> <ul style="list-style-type: none"> • Inconsistently demonstrates the ability to use appropriate resources to solve problems whenever needed • Inconsistently uses a satisfactory organizational system • Inconsistently self-regulates, needing little to no redirection from teacher • Inconsistently uses class time effectively | <p>RESOURCEFULNESS</p> <ul style="list-style-type: none"> • Rarely demonstrates the ability to use appropriate resources to solve problems whenever needed • Rarely uses a satisfactory organizational system • Rarely self-regulates, needing little to no redirection from teacher • Rarely uses class time effectively |

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| Academic Mastery | <p>KNOWLEDGE and UNDERSTANDING</p> <ul style="list-style-type: none"> Independently seeks for deeper and broader understanding to argue and defend properties of matter Independently recognize the application of specific properties of matter in real world applications | <p>KNOWLEDGE AND UNDERSTANDING</p> <ul style="list-style-type: none"> Consistently understands the general properties of matter (ex. density, solubility, malleability) Consistently understands that the physical world is made up of atoms and molecules Consistently understands that energy causes particles to move and interact physically or chemically Consistently understands that molecules can undergo physical and chemical changes Consistently understands that natural resources can refined into synthetic materials | <p>KNOWLEDGE AND UNDERSTANDING</p> <ul style="list-style-type: none"> Inconsistently understands the general properties of matter (ex. density, solubility, malleability) Inconsistently understands that the physical world is made up of atoms and molecules Inconsistently understands that energy causes particles to move and interact physically or chemically Inconsistently understands that molecules can undergo physical and chemical changes Inconsistently understands that natural resources can refined into synthetic materials | <p>KNOWLEDGE AND UNDERSTANDING</p> <ul style="list-style-type: none"> Rarely understands the general properties of matter (ex. density, solubility, malleability) Rarely understands that the physical world is made up of atoms and molecules Rarely understands that energy causes particles to move and interact physically or chemically Rarely understands that molecules can undergo physical and chemical changes Rarely understands that natural resources can refined into synthetic materials |
| Academic Mastery | <p>HIGHER ORDER THINKING</p> <ul style="list-style-type: none"> Independently uses the laws and properties of matter to plan and execute development of original products Excels in analysis, synthesis, and critical expression | <p>HIGHER ORDER THINKING</p> <ul style="list-style-type: none"> Consistently able to analyze and interpret data Consistently able to establish cause and effect relationships Consistently able to evaluate properties of matter Consistently able to create analogies for how matter is used in the physical world Consistently connects properties of matter to current scientific discoveries and to real world situations | <p>HIGHER ORDER THINKING</p> <ul style="list-style-type: none"> Inconsistently able to analyze and interpret data Inconsistently able to establish cause and effect relationships Inconsistently able to evaluate properties of matter Inconsistently able to create analogies for how matter is used in the physical world Inconsistently connects properties of matter to current scientific discoveries and to real world situations | <p>HIGHER ORDER THINKING</p> <ul style="list-style-type: none"> Rarely able to analyze and interpret data Rarely able to establish cause and effect relationships Rarely able to evaluate properties of matter Rarely able to create analogies for how matter is used in the physical world Rarely connects properties of matter to current scientific discoveries and to real world situations |

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| <p>Academic Mastery</p> | <p>PRACTICAL SKILLS</p> <ul style="list-style-type: none"> • Models methods of scientific inquiry and communication that leads others to higher order thinking and real world applications • Excels in analysis, synthesis, and critical expression | <p>PRACTICAL SKILLS</p> <ul style="list-style-type: none"> • Consistently develops models using scale and proportion • Consistently obtains and evaluates information from multiple resources • Consistently communicates findings • Consistently plans and conducts investigations • Consistently designs, constructs and tests devices | <p>PRACTICAL SKILLS</p> <ul style="list-style-type: none"> • Inconsistently develops models using scale and proportion • Inconsistently obtains and evaluation information from multiple resources • Inconsistently communicates findings • Inconsistently plans and conducts investigations • Inconsistently designs, constructs and tests devices | <p>PRACTICAL SKILLS</p> <ul style="list-style-type: none"> • Rarely develops models using scale and proportion • Rarely obtains and evaluation information from multiple resources • Rarely communicates findings • Rarely plans and conducts investigations • Rarely designs, constructs and tests devices |
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