1. **What is STEM Education?**

    STEM education is an approach to teaching and learning that integrates the content and skills of science, technology, engineering, and mathematics. STEM Standards of Practice guide STEM instruction by defining the combination of behaviors, integrated with STEM content, which are expected of a proficient STEM student. These behaviors include engagement in inquiry, logical reasoning, collaboration, and investigation. The goal of STEM education is to prepare students for post-secondary study and the 21st century workforce.

2. **What is a STEM proficient student?**

    STEM proficient students are able to answer complex questions, investigate global issues, and develop solutions for challenges and real world problems while applying the rigor of science, technology, engineering, and mathematics content in a seamless fashion. STEM proficient students are logical thinkers, effective communicators and are technologically, scientifically, and mathematically literate.

3. **Which students should develop STEM proficiency?**

    STEM education is for all students. The Maryland State Department of Education Office of STEM Initiatives is focused on strengthening science, technology, engineering, and mathematics education. STEM Standards of Practice and the associated framework documents are designed to increase the proficiency of all students in STEM and grow the number of students who are well prepared for post-secondary study and careers in science, technology, engineering, or mathematics.

4. **How does STEM Education connect to content?**

    The foundation of STEM education is in content. The required content for STEM education is found in content standards. How teachers should deal with that content in the learning environment is found in the Maryland State STEM Standards of Practice.

5. **What is a STEM centric unit or lesson?**

    A STEM centric unit or lesson incorporates the STEM Standards of Practice and reflects the definition of STEM education.

6. **How can schools implement the STEM Standards of Practice?**

    Implementation of the STEM Standards of Practice could occur through projects/themes that span multiple disciplines or through appropriate content-based infusion.

7. **Which teachers are responsible for implementing the STEM Standards of Practice?**

   The Maryland State STEM Standards of Practice cross all grade levels and disciplines. Instruction in STEM education is a shared responsibility within a school. Therefore, all classroom teachers, supporting teaching staff, and special area teachers (e.g.: special education, gifted and talented, enrichment programs, afterschool programs, summer programs) can use the Maryland State STEM Standards of Practice and Frameworks to engage students in STEM activities and tasks that develop STEM proficiency.

8. **Where does STEM education fit in the school day?**

   STEM education complements the continuum of content instruction that would occur during a school day. STEM education does not disrupt, displace, or add on to curricular pacing. As a result, STEM education should be a seamless fit into content instruction.

9. **There are no standardized tests for STEM. Why should schools focus on implementing STEM education when there is no accountability for it?**

   While there is not an official STEM standardize test, STEM aligns with concepts that are tested. Therefore, if your school is practicing exemplary STEM education then students will be exposed to skills and concepts that will be tested.