*What is STEM education?

STEM Education is both the *mastery* and *integration* of Science, Technology, Engineering and Mathematics for all PK-12 students. It incorporates scientific inquiry and technological design through student-focused, project based curricula to develop skills of communication, teamwork/collaboration, creativity/innovation, critical thinking, and problem solving.

What is science?

SEE: http://www.ohiosci.org/Whatisscience.PDF and
http://www.ohiosci.org/WhatisScienceOJS106(4)130-135.pdf

Science is a systematic method of continuing investigation, based on observation, hypothesis testing, measurement, experimentation and theory building, which leads to more adequate explanations of natural phenomena, explanations that are open to further testing, revision, and falsification, and while not "believed in" through faith may be accepted or rejected on the basis of evidence.

What are technology and engineering?

SEE http://www.ohiosci.org/WhatareSciTechEng.pdf

Technology modifies the natural world through innovative processes, systems, structures and devices to extend human abilities. Engineering is design under constraint that develops and applies technology to satisfy human needs and wants. Technology and engineering, coupled with knowledge and methods derived from science and mathematics, create social and environmental value and economic wealth to improve the quality of life. These short definitions of technology and engineering provide a framework to understand the interdependent relationship between science, technology, engineering and mathematics.

*Adopted by The Ohio Academy of Science.