

STEM Practices

SCIENCE	ENGINEERING	TECHNOLOGY	MATHEMATICS
Ask questions	Define problems	Become aware of the web of technological systems on which society depend	Make sense of problems and persevere in solving them
Develop and use models	Develop and use models	Learn how to use new technologies as they become available	Model with mathematics
Plan and carry out investigations	Plan and carry out investigations	Recognize the role that technology plays in the advancement of science and engineering	Use appropriate tools strategically
Analyze and interpret data	Analyze and interpret data	Make informed decisions about technology given its relationship to society and the environment	Attend to precision
Use mathematics and computational thinking	Use mathematics and computational thinking	Construct viable arguments and critique the reasoning of others	Reason abstractly and quantitatively
Construct explanations	Design solutions	Look for and express regularity in repeated reasoning	Look for and make use of structure
Engage in argument from evidence	Engage in argument from evidence	Derived from the <i>Framework for K-12 Science Education</i>	Construct viable arguments and critique the reasoning of others
Obtain, evaluate, and communicate information	Obtain, evaluate, and communicate information	Practices of Science & Engineering in <i>Next Generation Science Standards</i>	Look for and express regularity in repeated reasoning
Practices of Science & Engineering in <i>Next Generation Science Standards</i>	Practices of Science & Engineering in <i>Next Generation Science Standards</i>	Mathematical Practices from the <i>Common Core State Standards in Mathematics</i>	Mathematical Practices from the <i>Common Core State Standards in Mathematics</i>