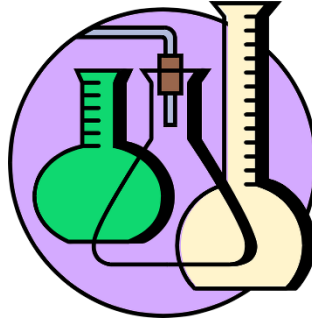


# IMPACT- STEAM Standards & Key Concepts

## Science:

### Key Concepts-

- ✓ Supporting an argument
- ✓ Making observations
- ✓ Representing data
- ✓ Revealing patterns
- ✓ Developing a model
- ✓ Supporting evidence
- ✓ Measure & graph
- ✓ Plan & Conduct
- ✓ Obtain & Combine information
- ✓ Compare & Contrast



**Technology:** Standards retrieved from <https://www.iste.org/standards/for-students>

**1a** Students articulate and set personal learning goals

**1c** Students use technology to seek feedback

**3a** Students plan and employ effective research strategies

**3b** Students evaluate the accuracy, perspective, credibility and relevance of information

**3d** Students build knowledge by actively exploring real-world issues and problems

**4a** Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems

**4c** Students develop, test and refine prototypes

**5d** Students understand how automation works and use algorithmic

thinking to develop a sequence of steps to create and test

automated solutions

**6b** Students create original works

**7a** Students use digital tools to connect with learners from a variety of backgrounds and cultures

**7c** Students contribute constructively to project teams

**7d** Students explore local and global issues and use collaborative technologies to work with others to investigate solutions



## Engineering:

**5.ETS1.A** Define a simple problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time or cost.

**5.ETS1.B** Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

**5.ETS1.C** Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

## Arts: Studio Habits of Mind/ National Core Standards

**VA:Cr1.1.5** Combine ideas to generate an innovative idea for art-making

**VA:Cr2.1.5** Experiment and develop skills in multiple techniques and approaches

**VA:Re.8.1.5** Interpret art by analyzing characteristics of form and structure, contextual information, subject matter, visual elements, and use of media

**VA:Cr3.1.5** Create artists statements

**VA:Cn.10.1.5** Apply formal and conceptual vocabularies

**VA:Re.9.1.5** Recognize differences in criteria used to evaluate work

**VA:Re.7.2.5** Identify and analyze cultural associations suggested by visual imagery

**VA:Cn11.1.5** Identify how art is used to inform or change beliefs, values, or behaviors of an individual or society



## Math:

Key Concepts-

- ✓ Read, write, and identify
- ✓ Compare
- ✓ Evaluate & interpret
- ✓ Understand
- ✓ Estimate
- ✓ Justify
- ✓ Extend
- ✓ Investigate, generate, translate & identify
- ✓ Classify
- ✓ Analyze
- ✓ Define
- ✓ Convert
- ✓ Solve
- ✓ Create
- ✓ Represent data

