STEM Curriculum

Mrs. Wirth

WHAT IS STEM

SCIENCE	TECHNOLOGY	ENGINEERING	MATH
biology	digital modeling	civil engineering	algebra
ecology	3D printing	electronics	geometry
astronomy	mobile technology	electrical engineering	statistics
physics	computer programming	mechanical engineering	data science
chemistry	web development	chemical engineering	calculus
computer science	game development	robotics	

Why STEM?

- STEM education creates critical thinkers, increases science literacy, and enables the next generation of innovators.
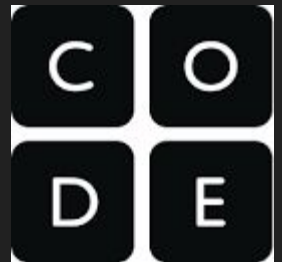
How Do We Spend Our Time?

- STEM activities involve hands-on learning and putting our problem solving skills and creativity to the test. **LEGO Education** curriculum is a school favorite! Grades PreK-8.
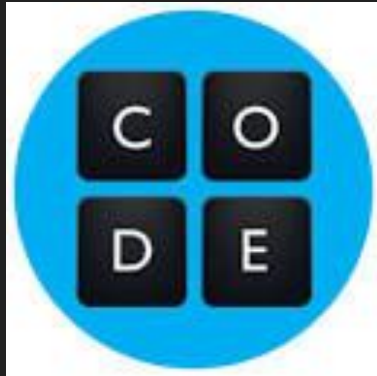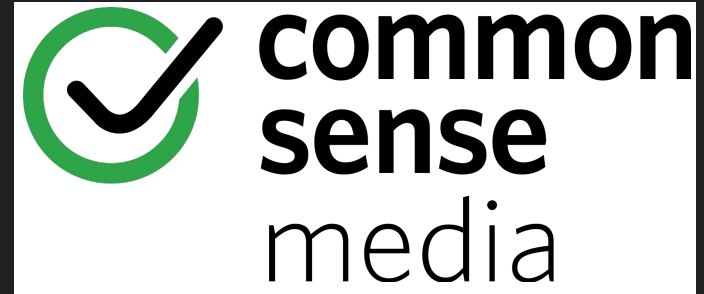
Science

- Align with current classroom standards to enhance the overall learning experience
  - Example: Make and play with oobleck to complement 2nd grade lessons on matter

Computer Science

- Computer Science through Code.org advances problem solving skills, persistence, creativity, collaboration, and community.

  - CS Fundamentals for grades K-5
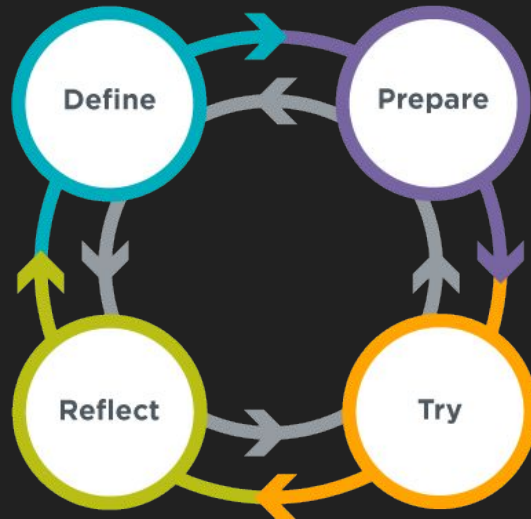 - CS Discoveries for grades 6-8

Technology

Technology

- Students build their confidence in creating and analyzing **Docs, Spreadsheets, Slides**, managing files & developing professional email composure in Grades 4-8
- Digital Citizenship & Digital Etiquette
- Keyboarding with TypingPal

Engineering

- Challenges, challenges, and more challenges!

Engineering & The Problem Solving Process

- Define
  - What problem are you trying to solve?
  - What are your constraints?
  - What does success look like?
- Prepare
  - Brainstorm / research possible solutions
  - Compare pros and cons
  - Make a plan
- Try
  - Put your plan into action
- Reflect
  - How do your results compare to the goals you set while defining the problem?
  - What can you learn from this or do better next time?
  - What new problems have you discovered?

Code.org

Math

- Incorporating understanding and basic use of rulers and units of measurement for lower elementary
- Reinforcing classroom lessons as needed
- Creating and interpreting charts and graphs
- NextGen Personal Finance middle school unit

QUESTIONS?

START