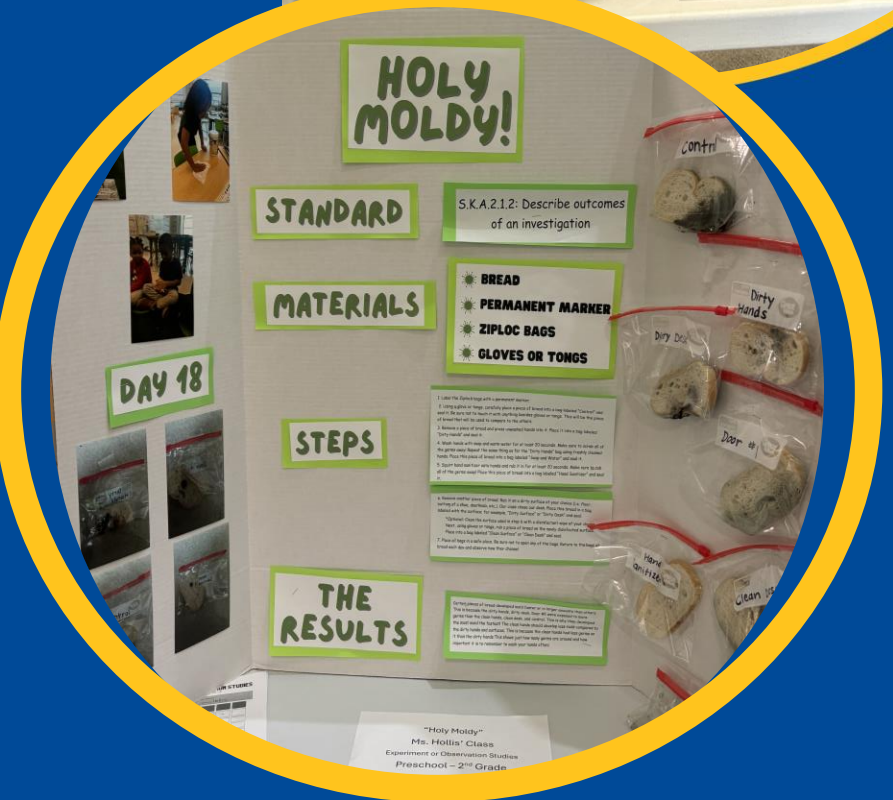

SLPS STEM Fair

October 3, 2024

Kathryn Noelle – Coordinator of STEM

SAINT LOUIS PUBLIC SCHOOLS

3rd Grade Reading

Growth and Proficiency

3rd Grade Math

Growth and Proficiency

College and Career Readiness

High School Students Prepared for Workforce and Post-Secondary Employment

Culture and Climate

Student Wellbeing

Student Success Goals

SAINT LOUIS PUBLIC SCHOOLS

SLPS Strategic Values

Highly Effective Educators and Leaders

Authentic Family and Community Partnership

Equitable and Multiple Sources of Data

Joyful and Engaged Students

Personalized Supports and Innovative Pathways

College and Career Ready Critical Thinkers

Values Across Our Student Goals

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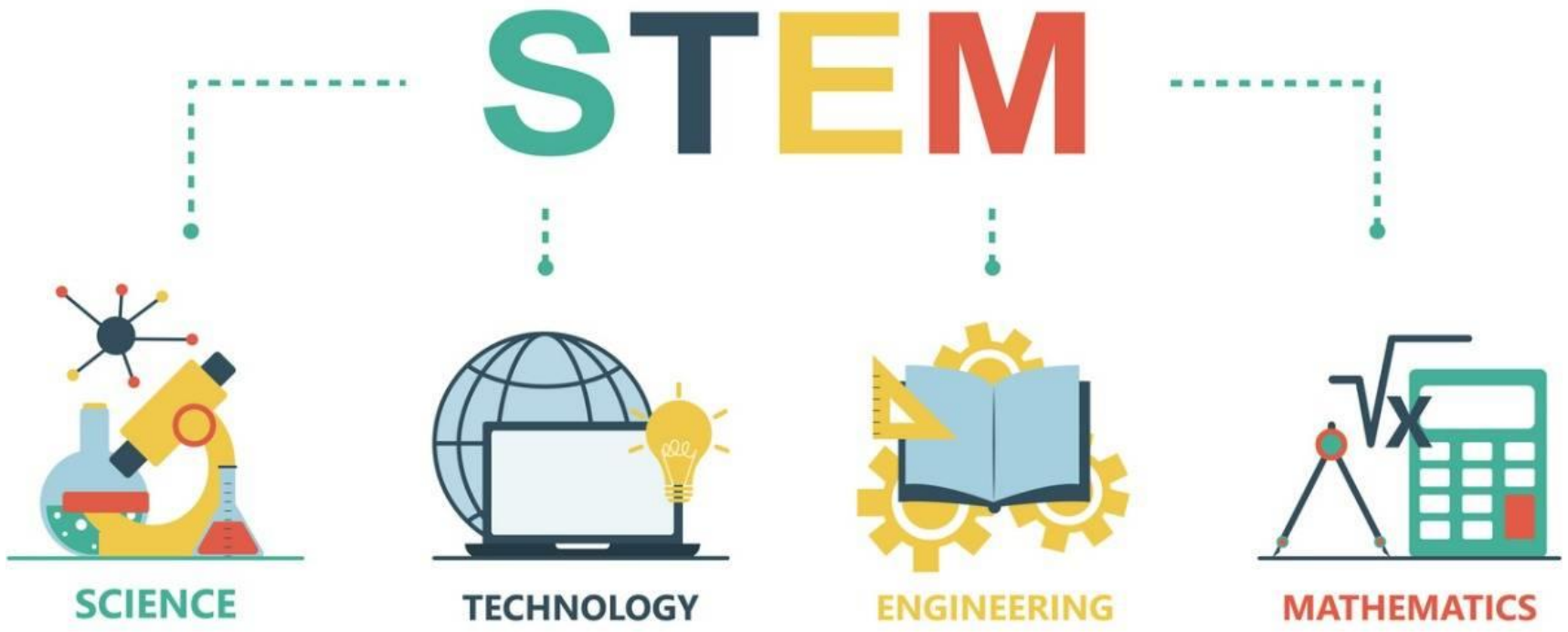
WHAT IS STEM?

STEM



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SLPS STEM FAIR

Overview

- Building STEM fairs are December of 2024
- Teachers & students will begin projects October 2024
- Families are encouraged to complete projects outside of school to submit to their child's building level STEM fair
  - Due to the structure of the regional fair, families cannot submit a group project. One project can be submitted per child.
- Top scoring projects from each school will be submitted to The Academy of Science St. Louis Science Fair in March of 2025
- Be on the lookout for information in regard to dates and deadlines from your child's teacher.

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CHOOSE YOUR PROJECT

Project Categories/Divisions

Maker Division - Engineering/Invention (PK-12)	Maker Division - Model (PK-12)	Experiment or Observation Study (PK-12)	Science Research (KG-12)
Using the Engineering Design Method, identify a common problem and create an invention to solve it. Alternatively, students can explore coding and computer science to solve a problem using a coding program on their iPads or robots.	Research and recreate a model, such as a model of the solar system, a solar-powered oven, or a volcano. Students can also explore coding and computer science and present a coding program using their iPads.	Explore scientific ideas through experiments. Apply the Engineering Design Method to conduct and refine your experiment.	Students will ask a specific scientific question and research the history and significance of the scientific inquiry. The paper can be a maximum of 5 pages. More details can be found on the rubric.

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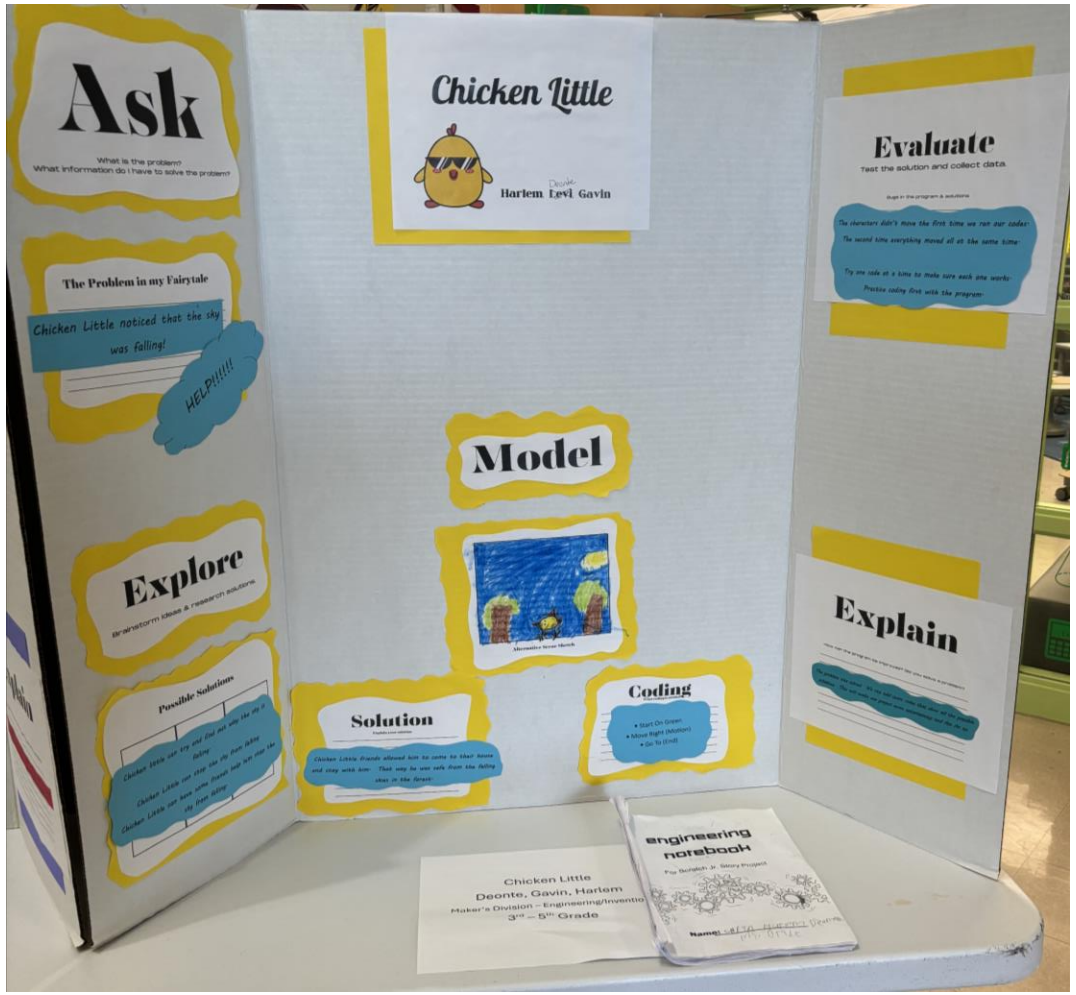
Maker Division – Engineering/Invention



- Using the Engineering Design Method, identify a common problem and create an invention to solve it.
- Alternatively, students can explore coding and computer science to solve a problem using a coding program on their iPads or robots.

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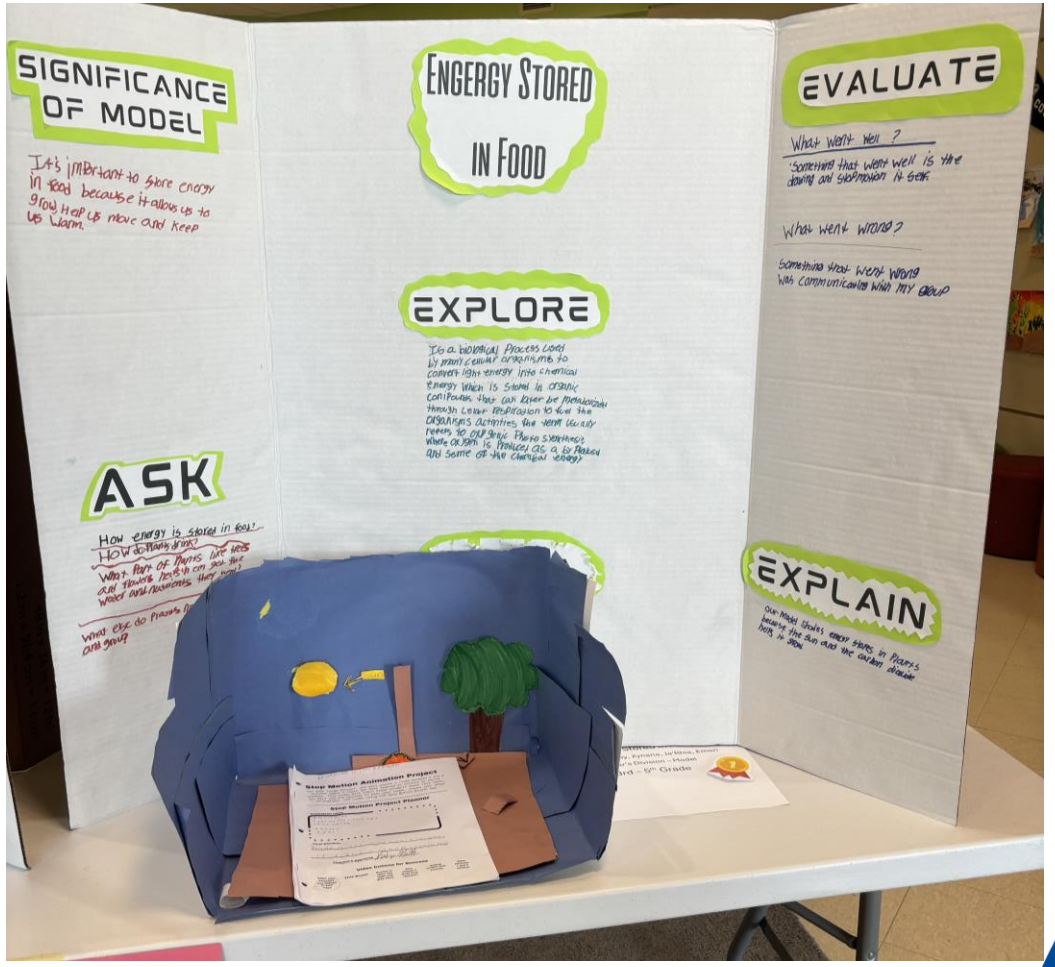
Maker Division - Model

- Research and recreate a model. (Example a model of the human body, solar system, a solar-powered oven, or a volcano.)
- Students can explore coding and computer science and model a coding program using their devices. (Example: code a program to model how a circuit works, or what is an algorithm)



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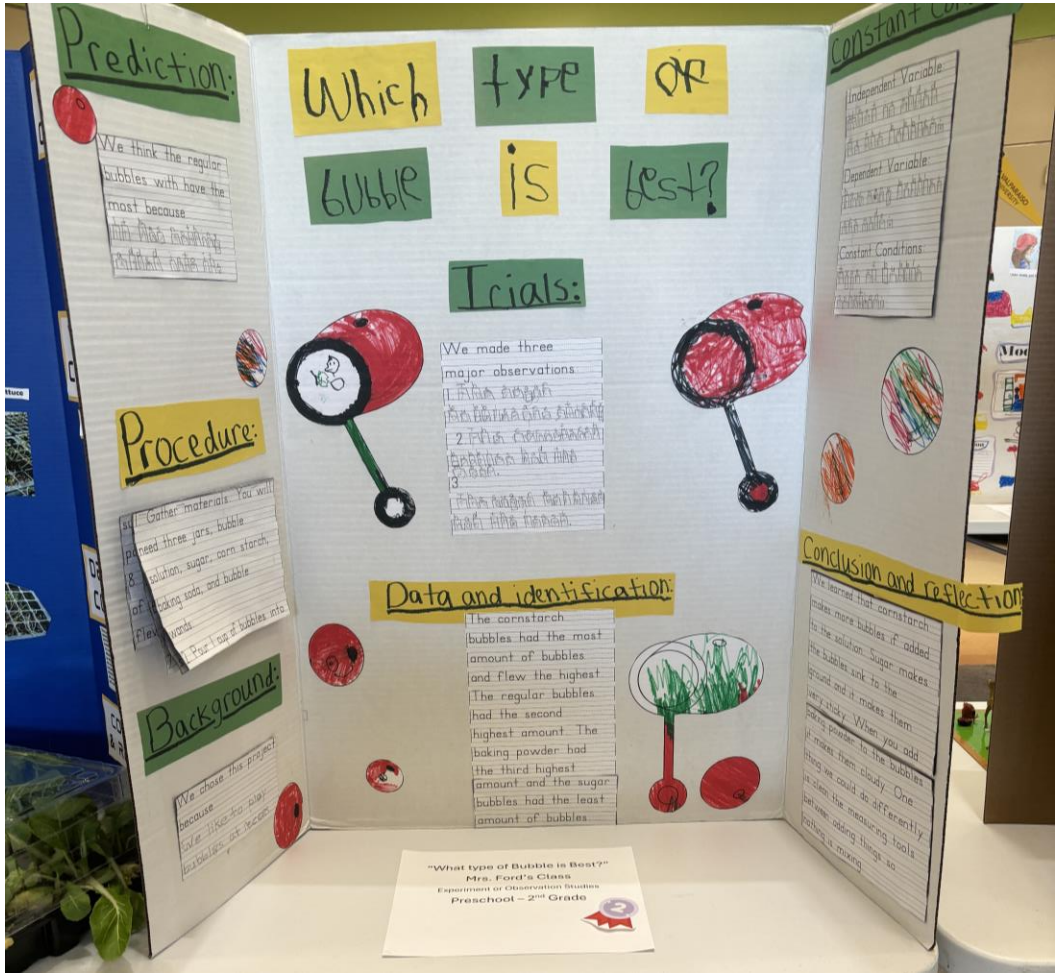
Experiment or Observation Study



- Explore scientific ideas through experiments.
- Apply the **Engineering Design Method** to conduct and refine your experiment.

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Science Research

Students will ask a specific scientific question and research the history and significance of the scientific inquiry. The paper can be a maximum of 5 pages. More details can be found on the rubric.

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THE ACADEMY OF SCIENCE ST. LOUIS SCIENCE FAIR

Regional Science Fair

- Top scoring projects from each building advanced on to The Academy of Science St. Louis Science Fair
- Students will have time to refine their projects before submission in March of 2025.
- Projects are submitted through the building level facilitator
- Winners are announced in May of 2025
- This fair has great scholarship opportunities for students!

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PARENT SUPPORT

How to Support Your Child

- Choose a project that is right for you and your student
  - Look over project descriptions and rubrics before choosing a project
  - Explore your child's interests
  - Ensure the topic is manageable
- Create a Timeline
  - Once you know the school's STEM fair, create a timeline with deadlines
- Guide the research and provide resources
  - Visit the local library
  - Teach how to find credible sources online
- Supervise experiments
  - Safety forms are required for all projects.
- Encourage independent thinking
  - Guide your child, but let them take the lead and do the work independently
- Review the display board
  - Help in creating the display board
  - Practice presenting project before the STEM fair

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NEXT STEPS

What Comes Next?

- Be on the lookout for communication from your child's school about building level STEM fairs.
  - Application process
  - Dates and deadlines
- Look over the rubrics and project descriptions and begin planning your project
- Start researching and gathering materials

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Questions?

Questions?

SLPS.org