

# STEM Fair Information Booklet

## Guidelines

1. The project should begin with a question that includes an engineering challenge. For example, "How can I make a structure out of index cards to support my stuffed animal?"
2. You may work alone or with an engineering team of up to four people.
2. The size of your project may not exceed 4 ft. wide by 3 ft. tall.
3. All projects must be durable and safe. Your project must be able to stand by itself. Bring your display board and engineering project to the fair no later than **15 to 30 minutes before the Fair starts. (DO NOT bring your board in the morning!)**
4. Posters or papers explaining the project should be neat.
5. No harmful chemicals, live animals, explosives, dangerous substances, disease causing organisms, microbes or fungus (living or dead), expensive items, or drugs may be used.
6. The student may keep a diary, journal, or laboratory record book in which observations are recorded.
7. Pictures or drawings may be taken or made during all stages of the challenge and should be placed on the display board with captions.
8. The student should complete projects with parent assistance, not vice versa.

## Timeline for STEM Challenge

Completed by **January 26<sup>th</sup>** or earlier:

1. ASK your STEM question
2. IMAGINE how you'll engineer a solution
3. Hand the blue interest form in to your homeroom teacher.

Completed by **February 17<sup>th</sup>** or earlier:

4. PLAN your steps to solve the challenge
5. Gather materials
6. CREATE your engineering design
7. Test and record results
8. IMPROVE your design, retest, and record new results
9. Draw conclusions

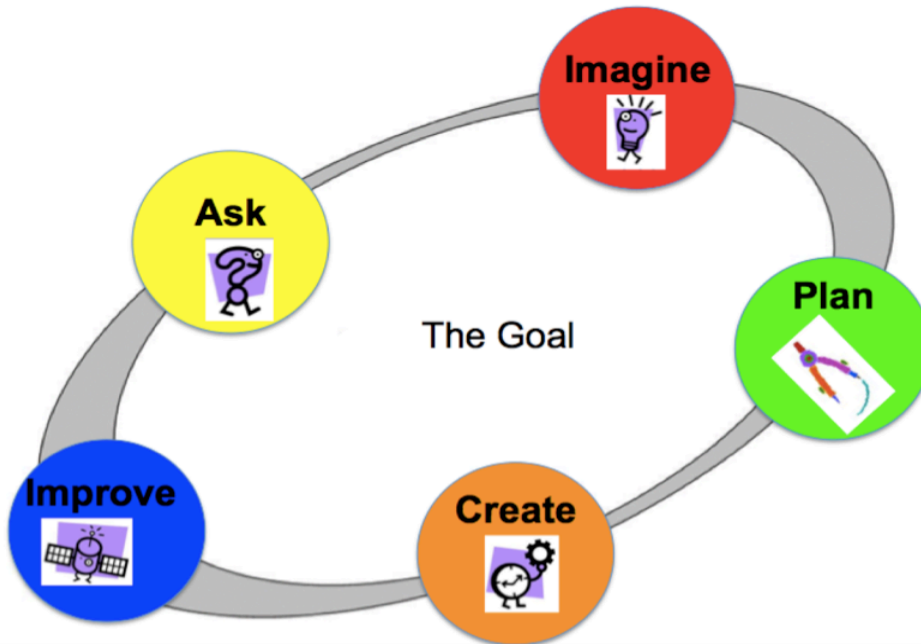
Completed by **March 10<sup>th</sup>** or earlier:

10. Explain your well-designed investigation in a typed format.
11. Complete display board (using color, neat pictures) BE CREATIVE

On **March 16<sup>th</sup>**: STEM Project Due! Please bring your display board to school before the STEM Fair during the evening of March 16<sup>th</sup>.

# Engineering Design Process

## Engineering Design Process



# STEM Project Display Board

## Solutions

## Plans

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

## Materials

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

## STEM Challenge (Title)

The question that asks what you wanted to find out

## Research

What did others do?

Name(s)  
Grade Level

Results & Data

## Conclusion

I found out that \_\_\_\_\_

**\*\*\* All STEM Challenge Projects must be completed and brought to the cafeteria no later than 5:30 PM on March 16<sup>th</sup>, 2017. \*\*\***