# AT HOME STEAM PROJECTS

Leib Elementary School, Dover, PA

As part of our STEM program, we have an optional at home component. Students are given a monthly challenge and then work at home over the month to complete the challenge. We display the work of all students in the library of our school, and then monthly winners are acknowledged.



## **At Home STEAM Project Competition!**

During our STEAM lessons at school, we are focusing on the design process. The design process is used by engineers, scientists, architects and artists, just to name a few! The design process is a great way to approach problem solving!

For this the month of March, our at home STEAM challenge is music related. March is Music in Our Schools month! What better way to celebrate than with a music themed STEAM challenge?!

The Problem: Create an instrument from materials around your house. Make sure your instrument fits inside of a 1 ft cube.

Share your Solution: Deliver your work to the library on the morning of March 23. If you bring it to school before March 23, please deliver your work to the art room! Don't forget to label it with your name!

Awards will be given to winners in each grade level, but most of all, we will get the chance to see each other's creativity as we problem solve to complete the task.

If you have any questions or concerns, please feel free to contact us using the information below.

Sincerely,

Mr. Murphy-Grade 4 Teacher (jmurphy@doversd.org)
Mr. Judy-Grade 5 Teacher (jjudy@doversd.org)
Mrs. Stormes-Art Teacher (nstormes@doversd.org)

Brainstorming!

Identify PROblem

Design

Tes+ & Evalua+e

\_ShaRe SOLU+ior

BRains+ORM

BUiLd

Retest & Evaluate

(as many times as



Some Cool YouTube Videos to Help with Your

https://youtu.be/y3d20pnWzhE https://youtu.be/3-xKZKxXuu0

#### **At Home STEAM Project Competition!**



**What is STEAM?** STEAM is an acronym for Science, Technology, Engineering, Art and Mathematics. It is an integrated approach that encourages students to think about real-world problems and solutions. This year, we are looking to build our STEAM program here at Leib to involve more students. One way we will be doing this is through a building-wide monthly at-home STEAM project!

This is completely optional! The only rules are to solve the challenge, be creative and have fun! Bring your completed project in by the assigned due date. We will be displaying our projects throughout the building for everyone to see. If your project is too large to bring to school, you may take a picture of it and turn that in.

Awards will be given to winners in each grade level, but most of all, we will get the chance to see each other's creativity as we problem solve to complete the task.

January and February at home STEAM Challenge: "Can You Build a Snowflake-Shaped Recycled Materials Bird Feeder?" To participate in this home challenge, you need to create a bird feeder in the shape of a snowflake using recycled materials. We will be hanging the bird feeders in our courtyard and students will be able to observe what types of birds they attract! Projects are due February 20.

If you have any questions or concerns, please feel free to contact any of us using the information below.





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For the month of October, our STEAM Challenge is "Can You Build a Pumpkin with Found Materials?" To participate in this home challenge, you need to create a pumpkin using found materials around your house. You can use any materials you would like! Just be creative and have fun! The due date for the October challenge is Friday, October 27.

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#### **November at Home STEAM Project Competition!**



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For the month of November, our STEAM Challenge is "Can You Build a Bridge Out of Wrapped Candy?" To participate in this home challenge, you need to create a bridge using wrapped candy (a great way to use up any extra Halloween candy!). Remember, just be creative and have fun! The due date for the November challenge is Friday, November 17.

Grades K-3: You just need to create a bridge in your most creative design.

Grades 4-6: Along with being creative with your bridge design, you need to build it strong enough to hold a full can of soda.

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Mrs. Stormes-Art Teacher (nstormes@doversd.org)



## **December at Home STEAM Project Competition!**

For the month of December, our STEAM Challenge is "Build a Gingerbread Man Trap." To participate in this home challenge, you need to create a unique trap for a gingerbread man and write a brief explanation of your trap. Be creative and have fun! The due date for the December challenge is Friday, December 15.

Participation is optional. Our goal is to share our creativity with each other through problem solving!

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