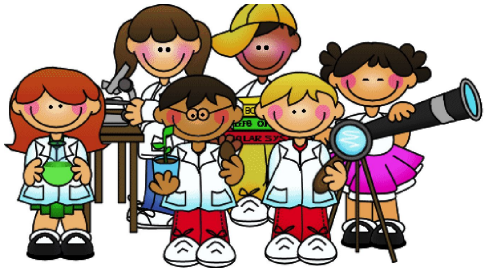

Calling All Murwood Students!

The 2018 Science Fair is Thursday, March 8th (6-7:30 p.m.)

Students in Transitional Kindergarten through 4th grade are highly encouraged to participate.
Students in 5th grade are all participating!!

Fill out your project proposal and turn it in to your teacher by Feb. 21st!

Projects Specifications:

TK: A simple scientific collection or model, a scientific observation or demonstration, or a problem solving experiment can be worked on.

K-3: A simple scientific collection or model, a scientific observation or demonstration, a problem solving experiment, or the STEM problem can be worked on.

Grade 4-5: a problem solving experiment or the STEM problem can be worked on.

Free Science Fair display boards, **supplied by the Murwood PTA,** will be distributed the week of Feb. 20th. In addition, if you need any materials or supplies, (if I have them) you may check them out from the science lab. We will be having workshops at lunch and after school (until 3:30) to allow students to begin their STEM problem or ask questions/get help. **Click on the link to read about the STEM problems and access the entry form.**

We want the projects to be an enjoyable learning experience for all participants. Give yourself plenty of time to work on the project. It will be interesting and educational if you do a little bit at a time.

Please refer to our website to get detailed information such as:

Project and Display Ideas

Definitions and Safety Rules

Do's and Don'ts and Frequently Asked Questions

Go to www.walnutcreeksd.org/murwood ; click on the Program tab, then Science. You will see all your choices on the left. If you prefer a paper copy, please stop by the office.

**** Details and description of STEM and the STEM problems are on the other side of this flyer.**

If you have any questions, please contact Erin Sicotte, the Murwood Science Specialist at esicotte@walnutcreeksd.org.

What is STEM?

STEM stands for Science, Technology, Engineering and Mathematics. The essence of STEM is problem based learning. Children are presented with a problem and design something that solves the problem. In the process, they apply science knowledge and math skills. They use technology to research, design, test and present their ideas.

The process has 5 parts: Investigate, Brainstorm, Plan, Build and Test and Present. Each design problem begins with a challenge. This is presented to the students along with the criteria, which is the list that students use to determine that a solution is successful. The Constraints specify limitations on materials and time. *The Materials needed will be provided to students upon completion of the proposal form and participation in the STEM workshops offered at lunch recess time or after school.*

Students will investigate materials and brainstorm as a group in the lunch recess/after school sessions with Mrs. Sicotte. They can work on the STEM problem at school, but will need to complete the presentation board at home. The presentation board should include photos and information about the process leading up to the testing. There will be a flyer attached to the presentation board which gives a lay-out for the board and questions to be answered.

STEM

Kindergarten and 1st STEM

Challenge: Design and build a windsock that will fly in the wind.
Must be attached to a stick (like a pole) Must stay together for 20 sec in wind
May only use materials from the ones provided

2nd and 3rd STEM

Challenge: Design and build a kite to fly.
Must hold together on its own May only use materials provided
Must stay within budget of 25c science bucks

4th and 5th STEM

Challenge: Design and build a parachute to safely land a cargo load.
Must hold together when landing
Must still be attached to the cargo load when landed
Must stay within a budget of $5.00 Science Bucks
Must use only materials provided