Grenada School District
Education, Training, Dreams

Communicator

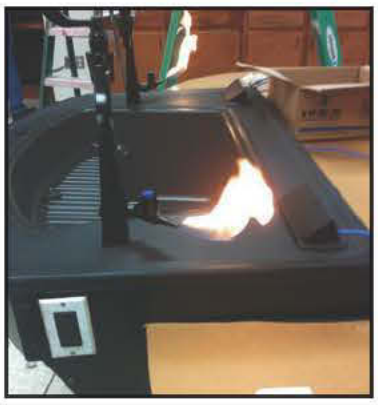
Information for the Grenada School District Community

January 27, 2014

Superintendent's Message
Dr. David Daigneault

State-of-the-Art Science Lab Constructed

Cutting the concrete floor...
A complex trench was built beneath the floor level to provide a delivery method for utilities. The concrete floor was cut and a trough was molded to carry the utilities.



Workstations installed...
Six hydraulic student workstations and a teacher workstation/desk were ready-made lab components installed in the lab.

Lab components added...
Safety protocols have also been followed in adding appropriate appliances in the lab. Vent-a-hood and eye wash and body wash components have been installed.

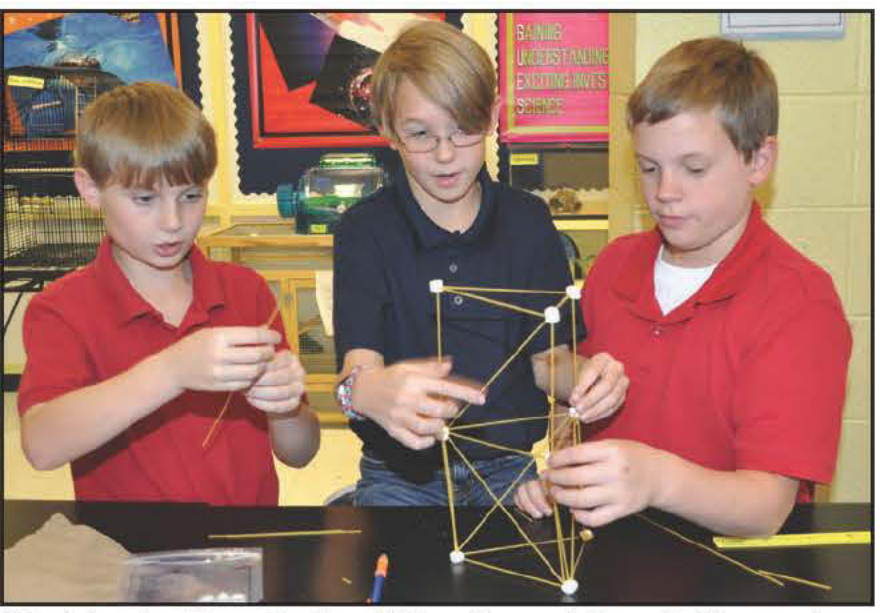
In an effort to provide optimum opportunities for our students, Grenada School District is in the process of completing construction of a new lab for use by GHS science classes. All GHS science teachers will have the opportunity to reserve and utilize the lab for experiments, demonstrations, and hands-on learning. Principal Jerry Williams states, "The faculty and staff of Grenada High School are very proud of the new science lab. The lab will give our students an opportunity to learn about science through hands-on experiences that enrich their learning and improve their thinking skills."

The lab was constructed according to plans defined by the MISSCO company where several components of the lab were purchased. Six hydraulic student workstations and teacher workstation/desk, an ultraviolet goggle cleaner, and hazardous waste chemical storage cabinets were ready-made lab components obtained from MISSCO. The construction of the rest of the lab was devised and built by the GSD Maintenance Department, including cutting the floor concrete to create a delivery method for utilities, building custom cabinets and two storage closets, tiling with a custom design, building body wash and eye wash components, and installing a vent-a-hood. Our skilled Maintenance staff saved the District over $150,000 by creating and building the very complicated components for the lab project.

The student and teacher workstations require water access, drainage, gas, electricity, and data access which necessitated the construction of a complex trench system to be built below the tile level. The Maintenance Department cut the existing concrete floor, dug a 12" deep trench, and constructed a mold to pour a concrete trough to carry all the utility lines to each workstation. All of the cabinetry, shelving, and storage were custom designed and built to the specific requirements. In order to coordinate with the other classrooms on the hallway, a custom tile design was implemented in the lab, also installed by Maintenance. The resulting lab construction project has produced a state-of-the art facility to provide more in-depth learning for our students.

The science lab, housed in the Ninth Grade Building, is almost completed and will be in service during second semester. Thanks to our Maintenance Department for a job well done!

GUES Discovery Lab Participates In NASA Program



(l to r) Landon Perry, Bratton Willoughby, and Gage Golding work together to create a strong structure from spaghetti.

Through participation with the Grenada County 4H and NASA, Discovery Lab students at GUES became engineers as they designed and built spaghetti towers. During the recent unit, Out of this World, students had several opportunities to explore space through the making of rockets, planet models, and towers.

Through a lesson called Spaghetti Anyone, students used the engineering design process to build a structure with uncooked spaghetti noodles to handle the greatest load. They gained firsthand experience with compression and tension forces. Students learned that many forces are at work on towers and gravity. The dead load of the tower pushes down, the ground pushes back up, and small air movements push from the side. A foundation distributes the load into the surrounding ground material and can help balance the sideways wind force. The size of the foundation depends on the strength of the supporting ground. A foundation placed in rock can be smaller than a foundation placed in sand or mud. The students were encouraged to brainstorm all of the ways they could alter the structure and to think about shapes and stability.

Students began the lesson by watching a short clip about NASA engineers and their responsibilities at work. Students then began to brainstorm and draw their designs in teams of three or four students. From there, they used uncooked spaghetti, marshmallows, and tape to construct a free-standing tower.

Discovery Lab Director Melody Shaw, has been a NASA Explorer Schools teacher for the last four years. "There are so many resources made available through the program and any teacher can join by going to the NASA Explorer Schools website," states Shaw.

The lessons were sponsored with the help of local Grenada County 4H Agent Jan Walton. Through her work at the Mississippi State Extension Service, Jan has been able to aid Shaw in finding additional funding for student lessons in the lab.

GHS Students Collect Canned Food for Community

Grenada High School students were recently offered the opportunity to help others. The response was incredible; approximately 1100 canned food items were collected! These items were split equally between the local food pantry and soup kitchen. Thanks to all the students who generously gave for this drive. Pictured with the items collected are (front row, l to r): Perry Clemons, Madison Marbury, Dustin Wright, (back row l to r): Taylor Vance, Dainarria Evans, Kristian Alexander, and Kiandra Kendrick.

GES Kidzeum Grandparents Day Coverage on Page 3