



RED CLAY CONSOLIDATED SCHOOL DISTRICT

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Phone: (302) 552-3700

Mervin B. Daugherty, Ed.D
Superintendent

**Administrative Offices
Office of Curriculum and Instruction**

Phone: (302)552-3768

Edward J. McGrath
Supervisor of Science



Date: March 1, 2017
To: Parents of 4th and 5th grade students
Re: Summer Enrichment STEM Program for 4th and 5th grade students.

This summer, Red Clay Consolidated School District will be offering a summer enrichment program for current 4th and 5th grade students. This four day program focuses on STEM: Science, Technology, Engineering, and Mathematics (STEM), and provides students an opportunity to use problem solving skills to develop a unique solution to a design challenge. Participation is on a volunteer basis, and two 4 day sessions will be offered. The objectives for this program are as follows:

- Promote Science and Engineering Practices
- Prepare students for rigorous secondary science and technology coursework using challenging problem-based investigations.
- Engage students, community members, and Red Clay families in public presentation of students' accomplishments and future goals using 21st century technology.

Students may attend either of the sessions or both, and will be able to choose two of seven different challenges for each session. Each challenge will be a 90 minute morning class for five days. Our theme is **Making the World a Better Place**. Every class will be focused on improving life for all people in one way or another through STEM.

Participants will be charged a \$20 non-refundable laboratory fee for each four day program.

| | |
|--------------------------|--|
| <u>Dates of Program:</u> | Starting - July 17 th Ending - July 27 th |
| <u>School Time:</u> | 8:30 – Student Arrival 11:15 – Student Dismissal |
| <u>Program Location:</u> | Conrad Schools of Science |
| <u>Fee:</u> | one session: \$20.00 two sessions: \$40.00 |

The following preferences will be utilized to determine admission into the STEM Summer program. The preferences are shown below in order of their priority, with each one being subordinate in priority to the preference which appears above it in the list:

1. Red Clay student, Red Clay resident
2. Red Clay student, non- Red Clay resident
3. Red Clay resident, non- Red Clay student
4. Non- Red Clay resident, non- Red Clay student

PLEASE TURN THIS PAGE OVER

Every attempt will be made to accommodate students' first choices; however, **every class must be filled with 20 students, so top student choices cannot be guaranteed.** We will have seven classes, many with two teachers per class, so enrollment will be limited to 140 students per session. For each session, each student will be assigned to two classes, of 90 minutes each.

Classes for Elementary STEM Summer Enrichment Program 2017:

Robotics Challenge: Students will program a Lego Mindstorms robot to complete various tasks.

Green Habitat Challenge: Students design and build an energy efficient habitat out of materials of their choosing.

Vehicle Challenge: Students create an alternative energy vehicle (for example, solar powered, wind powered, or magnetic levitation) and race the vehicle.

Bottle Rocket Challenge: Students build a water powered bottle rocket to achieve various goals of height, distance traveled, or time in the air.

Balsawood Structures Challenge: Students will build a bridge, a tower, or some other structure out of balsawood to withstand an environmental stressor (hurricane, storm surge, tornado, or earthquake).

Work with the Wind Challenge: Students will explore ways to use wind energy to solve various tasks. Part of this challenge will involve using wind energy to generate electricity.

Computer Programming Challenge: Students will learn the basics of computer programming and use this skill to develop a final project. Previous computing experience is not necessary, but there will be opportunities for advanced work for students familiar with programming.

Included is a registration form for the STEM Summer Enrichment Program. Please complete this form and **return it to your child's school office no later than Friday March 24 at 3:45 pm.** Please send no money at this time. Students will be accepted based on a first-come first-served basis, and the laboratory fee will be collected at that time. A wait list will be created and maintained as needed.

Meals will not be served in this program. Students will report directly to their classrooms from the busses, and dismissed directly to the busses. You will receive bus information by June 18th. Please contact Edward McGrath at (302) 552-3768 if you have any questions concerning the S³ STEM Summer Scholars Enrichment Program.

Respectfully,



Edward J. McGrath
Science Supervisor
Red Clay Consolidated School District

Elementary STEM Summer Enrichment 2017

Making the World a Better Place

Program Selection

In the blanks below, indicate your choice of program by ranking each from 1 (most preferred) to 5 (least preferred). Every attempt will be made to provide students with their top choices; however, **every class must be filled with 20 students, so top student choices cannot be guaranteed.**

_____ Robotics Challenge: Students will program a Lego Mindstorms robot to complete various tasks.

_____ Green Habitat Challenge: Students design and build an energy efficient habitat out of materials of their choosing.

_____ Vehicle Challenge: Students create an alternative energy vehicle (for example, solar powered, wind powered, or magnetic levitation) and race the vehicle.

_____ Bottle Rocket Challenge: Students build a water powered bottle rocket to achieve various goals of height, distance traveled, or time in the air.

_____ Balsawood Structures Challenge: Students will build a bridge, a tower, or some other structure out of balsawood to withstand an environmental stressor (hurricane, storm surge, tornado, or earthquake).

_____ Work with the Wind Challenge: Students will explore ways to use wind energy to solve various tasks. Part of this challenge will involve using wind energy to generate electricity.

_____ Computer Programming Challenge: Students will learn the basics of computer programming and use this skill to develop a final project. Previous computing experience is not necessary, but there will be opportunities for advanced work for students familiar with programming.

Please return this form along with the Registration/Transportation Form to the main office of your school no later than Friday March 24, 2017 at 3:45 pm.

OFFICE USE ONLY

Date received: _____

Time received: _____

**RED CLAY SCHOOL DISTRICT
Summer 2017
STEM Summer Enrichment Program/Grades 4-5:**

The Elementary STEM Summer Enrichment program will run from July 17-July 27. Each student will participate in one or two programs of four (4) days duration. Each program will consist of two classes per day, 90 minutes per class. The theme of the STEM Summer Enrichment program is **Making the World a Better Place**. Every class will enable students to create ways to make our global home a better place to live.

Please completely fill-in and sign the section below. Please return this form along with the Program Selection Form to the main office of your school no later than Friday March 24, 2017 at 3:45 pm.

Student name: _____ **Current grade:** _____

School attending this year: _____ **Home phone:** _____

Parent/Guardian name: _____ **Work phone:** _____

Address: _____ **Mobile phone:** _____

email: _____

Transportation

Please check one:

_____ My child will not be using bus transportation provided by the Red Clay Consolidated School District. I will be responsible for my child's arrival to and departure from the STEM Summer Scholars program at Conrad Schools of Science each day.

_____ My child will be using bus transportation provided by the Red Clay Consolidated School District. Please assign arrival and departure buses based on the address(es) listed below:

Address for pickup/arrival to Conrad Conrad

Address for drop-off/departure from Conrad

_____ *(Please check if drop-off location is a day care provider)*

(note: if pick-up or drop-off location is the same as home address, please write "home" in the appropriate blank)

DETAILS ABOUT PROGRAM

- The Elementary STEM Summer Enrichment program will be held at Conrad Schools of Science, 201 Jackson Avenue, Wilmington, DE 19804.
- Students may elect one or two programs of four days duration.

Program 1: July 17-July 20

Program 2: July 24-July 27

- Program times: 8:30-11:15. Participants will be enrolled in two classes of 90 minutes each. We will not be serving breakfast or lunch. On Thursday of each week, families are invited to visit the classes from 10:00 until program dismissal.
- **Participants will pay a non-refundable laboratory fee for each program. Fee schedule is indicated below. This fee will be collected when students are invited to the program.**
- Bus transportation will be provided according to a special transportation schedule.

PLEASE CHECK WHICH PROGRAMS YOU WISH TO ATTEND: (check all that apply)

_____ Program 1 (July 17-July 20)

_____ Program 2 (July 24-July 27)

| |
|---------------------------------|
| Fee schedule: |
| One program: \$20.00 |
| Two programs: \$40.00 |

I agree to allow my child to participate in the Elementary STEM Summer Enrichment program during the dates indicated above. I understand that students will be placed in the program on a first come/first served basis, and that students must be invited to the program in order to be guaranteed a spot. I agree that if chosen, I will pay a \$20.00 laboratory fee for each week of attendance. I realize that although every attempt will be made to provide students with their top choices, **every class must be filled with 20 students, so top student choices cannot be guaranteed.**

(Parent/Guardian signature)

(date)