## **Application**

## First 30 Applications will receive a place in the camp. .

Full Name (prin	nt)
Address	
City, State, ZIP	
County	Phone
T-Shirt Size	Grade 2013-2014
Transportation	needed Yes No
Emergency	
Contact	
Emergency	
Phone	
Relationship to	
Student	
Food allergies	or restrictions (i.e, vegetariar
sensitivities, or c	

Medical Conditions/Allergies

List people and relationship that are allowed to pick up the child from camp if transportation is not used by student



#### GEAR UP PROMISE NEIGHBORHOOD

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## GEAR UP Summer Forensics Science Camp.

June 23-27, 2014 9:00-2:30 a.m. HCTC Technical Campus-Devert Owens Building



GEAR UP Promise Neighborhood In conjunction with *Texas Instruments* presents a FREE Summer Forensics Science Camp for 8<sup>th</sup> and 9th Grade Students from Knott and Leslie Counties. Enroll now Space is limited to 30

Tracy S. Counts, Service Coordinator 606-438-4333 tracy\_counts@berea.edu

## **CSI-Hazard**

# Science plays an important part of catching criminals

GEAR UP Promise Neighborhood in conjunction with Texas Instruments, Knott County School District, Leslie County School District, Berea College Partners for Education , and the Challenger Learning Center of Kentucky have combined their talents to provide a unique opportunity using technology and hands on learning to learn about Forensic Science.

Students will meet the following objectives for learning (and fun).

- Students will analyze data to determine what type of evidence is found at crime scenes
- 2. Utilize math and science to solve real world problems,
- 3. Learn how math and science can help in other careers.
- Understand and demonstrate to the principles of velocity, density, speed, distance, wavelength and light to solve crimes.

#### **Students will:**

- Have access to free transportation from Knott County Central or Leslie County High School
- Have free lunch and snack each day
- A cumulative activity field trip to learn more about forensic science programs on June 27, 2014
- Have access to technology from Texas Instruments



### **Case File Scenarios**

*Hit and Run*- Students will learn about displacement, acceleration, and velocity to determine patterns of measurement

*Life in the Fast Lane:* Students will look at friction and use it to determine the speed of a vehicle from the distance of its skid.

*Flipping Coins:* Students will explore to concept of density and use it to distinguish between pennies minted in different years.

The Ink is Still Wet: -Students will use colorimetry to indentify inks as unique mixtures of pigments

**Drug Test:-**Students will attempt to indentify an unknown drig as they explore the differences between chemical and physical properties. <u>No actual drugs will</u> <u>be used for this activity</u>

**No Dumping:-**Students will investigate the importance of soils and other trace evidence in connecting victims, crime scenes, and suspects.

A *killer cup of coffee:-*Students will use colorimentry to calculate the concentration of an unknown solution by measuring how it absorbs a specific wavelength of light



#### Case File Scenarios Continued

**Dropped at the Scene:-**Students will investigate blood splatter analysis. <u>No</u> actual blood will be used in this scenario

*Ashes to Ashes:* Students will learn that evaporation rate is a characteristic property of a liquid. Based on this fact, they will identify the solution and the likely accelerant in a case of arson

*Tracks of a Killer:-*Students will analyze the relationship between shoe size, stride length, and height and then use that information to identify a killer.

**Bouncing Back:-**Students will be using the motion sensor as a sonar detector, through air to locate and identify a missing object in a box.

*Name that Tune:* Students will analyze sound waves to calculate the frequency or pitch of a musical note.

*Hot Air, Cold Body:* Students will use Newton's Law of Cooling to determine time of death at a crime scene.