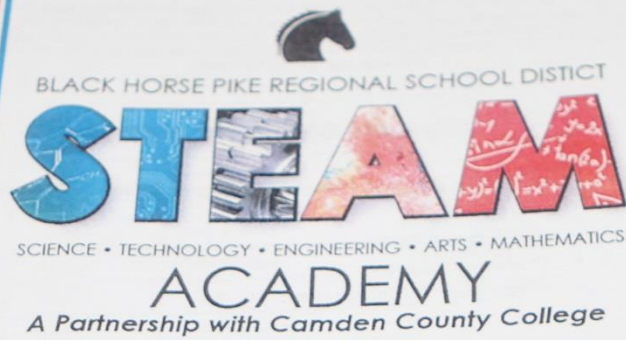


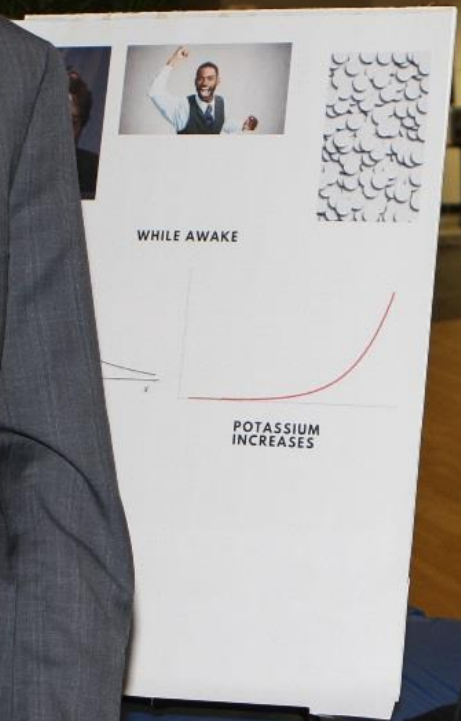


presents

SENIOR CAPSTONE PRESENTATIONS

Wednesday, January 24, 2018

Camden County College, Blackwood, New Jersey



Uriah Miller
Under Clerk
Anesthesia Recovery





SEPTEMBER STUDY BUDDY CALENDAR

SUN	MON	TUES	WED	THU	FRI
	1 Study Buddy at 1	2 Study Buddy at 2	3 Study Buddy at 3	4 Study Buddy at 4	5 Study Buddy at 5
6 Study Buddy at 6	7 Study Buddy at 7	8 Study Buddy at 8	9 Study Buddy at 9	10 Study Buddy at 10	11 Study Buddy at 11
12 Study Buddy at 12	13 Study Buddy at 13	14 Study Buddy at 14	15 Study Buddy at 15	16 Study Buddy at 16	17 Study Buddy at 17
18 Study Buddy at 18	19 Study Buddy at 19	20 Study Buddy at 20	21 Study Buddy at 21	22 Study Buddy at 22	23 Study Buddy at 23
24 Study Buddy at 24	25 Study Buddy at 25	26 Study Buddy at 26	27 Study Buddy at 27	28 Study Buddy at 28	29 Study Buddy at 29
30 Study Buddy at 30	31 Study Buddy at 31				

Timber Creek Regional High School
Study Buddy Website

Study Buddy
School Studying Network

How does STUDY BUDDY work?

- A school would buy a \$200 subscription to the app and they will be able to give a student. This will allow them to use their own personalized network.
- Each student will have an account connected to their school email.
- Students will be able to communicate through the app to schedule appointments.

Subscribe

Lauren Smith
Timber Creek
Study Buddy

STUDY BUDDY
SCHOOL STUDYING NETWORK

#STUDYTIME

STUDY BUDDY
#TUTORSQUAD
SCHOOL STUDYING NETWORK




STEAM
...
HUH?

Alize Thompson
STEAM...Huh?



WHAT IN THE WORLD STEAM?



SCIENCE
Science is knowledge about the natural world that is based on facts learned through experiments and observation.



TECHNOLOGY
Technology is a field of knowledge having to do with the practical applications of science and industry, or the inventions and methods of solving problems that are produced through research in these areas.



ENGINEERING
Engineers solve problems using chemistry, physics, and math to figure out the best way to create new things or to improve a product.



ART
Art is an activity that involves the use of imagination and skill to create something that is aesthetically pleasing or expressive.



HIT THE BOOKS

What's the Issue? AN APP

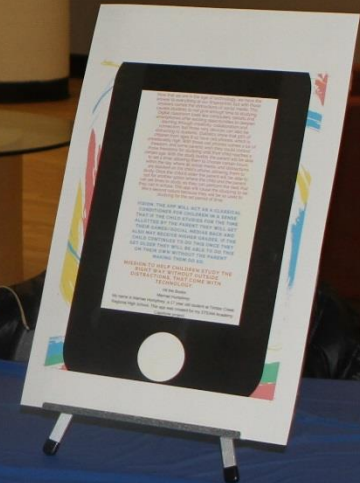
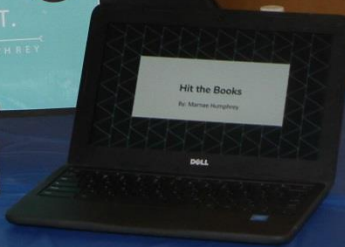
There are so many distractions of social media on cell phones, laptops, tablets, and other forms of technology. It is normal for young children to have cell phones and they don't know when to block out the distraction.

How to Solve This.

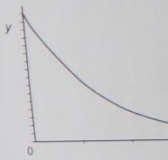
Parents will be able to set a timer on this app for time designated to studying for a subject. When the timer is set social media will be blocked and the student will not receive notifications. Once the child reaches a responsible age the parent will be able to give the child access to controlling the timer.



Marnae Humphrey
Tombler Creek
Hit the Books



Marnae Humphrey
HIT THE BOOKS
How Does This Apply To STEAM?



CALCIUM AND MAGNESIUM DECREASE

New
50TH ANNIVERSARY
WALL OF FAME DIS
COMIN
SOO



AN ENERGY-EFFICIENT WINDOW

EST 2017

USING CHEAP MATERIALS



Bubble Wrap +
Window = Low
Electricity Bill



Bubble Wrap

AS AN INSULATOR

Bubble Wrap surprisingly makes a very good insulation material, mostly due to the air trapped inside the bubbles.

Since air is very slow to react to temperature changes, it prevents the cold drafts coming in and warm air escaping through the window. A normal window has an R-Value (measure of thermal resistance: higher the value, the better the insulation) of around 0.8. With bubble wrap, a window's R-Value is around 2, cutting the heat loss in half.



USING BUBBLE WRAP

WILL HELP YOU
SAVE MONEY ON
HEAT BILLS

only about a
cents per foot!

CUTS HEAT
LOSS IN HALF
FOR A LOW
PRICE

THE FACTS!

FOR LARK HURLEY

Average home loses up to 30% of its heat through air leaks around the window

ABOUT THE WINTER, THE HEATING BILL IS \$100 A MONTH.

SO YOU'RE LOSING ABOUT 30% OF YOUR HEAT ON ESCAPED HEAT

The Product

- the insulating material is rolled into a cylinder-like structure
- it is covered with a fabric for aesthetic reasons
- this can be attached to the interior sides of windows, where there are small cracks that heat can escape through
- heat will no longer be able to escape as easily, lowering an electricity bill and increasing a home's efficiency





Smart Light

IDEA

The idea is to create a warning system that will allow drivers to know when a light is about to turn red. This will help prevent accidents and save lives.



Ashley Giordano

Student

Smart Light



Light Aspects

A typical light cycle is 120 seconds long, from a green light to a red light.



The cost of a traffic light ranges from \$250,000 to \$500,000 of taxpayers money. So not all traffic lights would have to be replaced, it would be an LED light that can be attached to each of the lights.

My inspiration for this idea is because one of my friends was in an accident that almost took her life, because the driver that hit her ran a red light.





New
50th ANNIVERSARY
WALL OF FAME DISPLAY
COMING

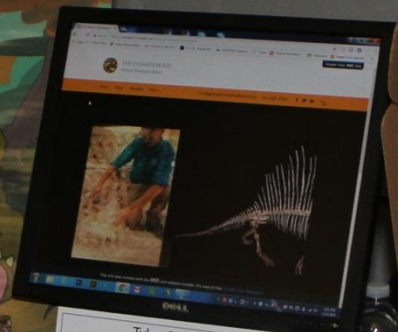
HANDI-MEE

PROBLEM: THE
The student council
members, however, were
not planning on
getting together until
the end of the year.
The student council
members, however, were
not planning on
getting together until
the end of the year.

VIEW

All that will remain the secret
until the end of the year. The
student council members, however,
were not planning on getting
together until the end of the year.

Th
S
Introduct
"Excavation
character bi
"Excavation-S
Writing Box
"Excavation-Site
"Create-your-own
Reading Box
Picture Book "Be
Squad" Bookma
Mathematics P



Tyler Savage
Tinder Cross
The Excavation Site

New
50th ANNIVERSARY
WALL OF FAME DISPLAY
COMING
SOON



HANDI-MEDS

THE PROBLEM:
As we age, our bodies become more reliant on medication. However, with falling joints, untwisting the medication caps gets harder every day. Simply forgetting to take medication also becomes a struggle, as memory begins to deteriorate.

THE SOLUTION:
A hands-free, easy device that will get medication to people on time

SO HOW DOES THIS WORK?



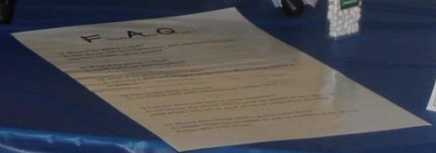
Amazon's Echo Dot
The Echo dot is equipped with an alarm function. When the alarm goes off, it can be turned off with either a vocal command or the press of a button.

+



Automatic Dispenser
The automatic dispenser will release medication with a wave of a hand. It also will lock up after medication is distributed, and will not reopen until the next dose, preventing accidental overdoses.

OVERVIEW
Triggered by an alarm, Handi-Meds will release the correct amount of pills for each patient at the same time each day. Handi-Meds will also have an audio component, announcing, "pill time!" when the medication has been released. This is meant for daily medication, that is not harmful to miss, but still should be taken with regularity.



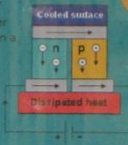


THE PELTIER EFFECT

a temperature difference created by applying a voltage between two electrodes connected to a sample of semiconductor material. Can transfer heat from one medium to another on a small scale.

$$\dot{Q} = (\Pi_A - \Pi_B)I$$

where Π_A and Π_B are the Peltier coefficients of conductors A and B, and I is the electric current (from A to B). The total heat generated is not determined by the Peltier effect alone, as it may also be influenced by Joule heating and thermal gradient effects.



THERMO-ELECTRIC COOLING



BENEFITS OF THERMO-ELECTRIC COOLING

- no moving parts
- no noise
- flexible size
- can be made passive
- can be used in various environments
- long life of over 100,000 hours

The Cool Clip

AND THE POWER OF THERMO-ELECTRIC COOLING



LET'S FACE IT, THE DESERT IS HOT

93° F

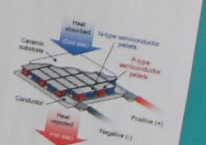
Heat illness, a serious epidemic, affects more than 1000 soldiers yearly, and in some cases, proves fatal. Soldiers carry at least 60 pounds of gear daily, making heat exhaustion a big problem.

WHAT'S INSIDE?

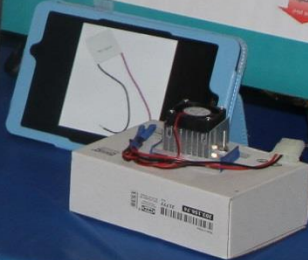
Pulse points indicate spots of the body where blood vessels migrate close to the skin. When something cold comes in contact with these spots, the energy is sent through the bloodstream. The Cool Clip targets these areas, in order to rapidly reduce heat exhaustion on the field.

THERMO-ELECTRIC COOL CLIP

The Cool clip can be attached to the back of any jacket or shirt. The electric cooler uses battery power to cool the wearer at the base of the neck. The back "hot" side absorbs heat from its cold counterpart, and an a small fan prevents from overheating.



Courtney LeMasney
Timber Creek
Cool Clip





6-0 TENNIS APPLICATION

The new way of practicing tennis.

WHAT IS 6-0?



- Improve simple mechanics like forehand
- Accessible side by side coaching
- Record your stats
- Connect with other players

HOW DOES 6-0 WORK?

- Clear side by side video clips of you compared with a professional.
- Motion tracking to perfect movement
- Videos of detailed coaching
- Social Networking to connect with other players

6-0 APPLICATION



STEPS TO TAKE

Side by Side Coaching

1. Upload or Record a video of one specific tennis mechanic coaching videos
2. Choose the matching tennis mechanic from a selection of the coaching video
3. Crop the video with the cut tools so the movement is in sync with the coaching video
4. Watch and compare the side by side videos

New
50TH ANNIVERSARY
WALL OF FAME DISPLAY
COMING
SOON



Karen Louie
Tennis Coach
6-0

















