

The background features a dark blue gradient with a starry space pattern. Overlaid on this are several technical diagrams, including circular gauges with numerical scales (e.g., 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260) and various circular and curved lines, some with arrows indicating direction. The text is centered in a clean, white, sans-serif font.

TEAM TECHIDEMICS

KEVIN KIMBLE, POWER EQUIPMENT TECHNOLOGY

TODD MANNS, ENGLISH

JULIE ORR, GRAPHIC ARTS

KAREN SHOSKEY, MATHEMATICS



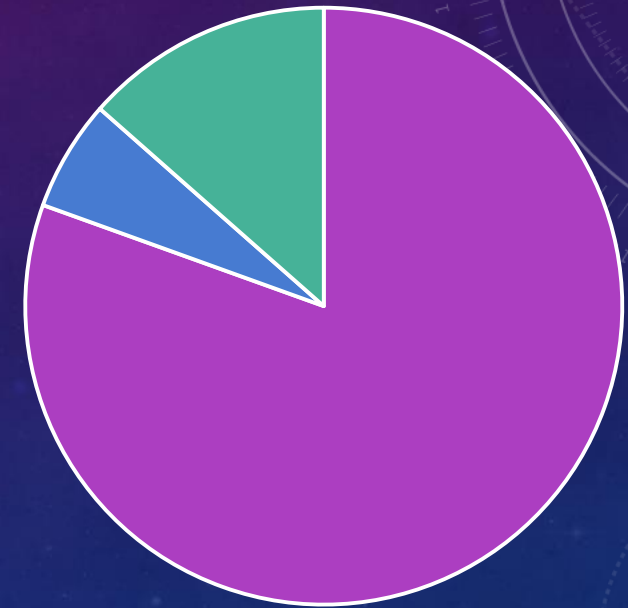
PREP WORK

HOW DID WE GET HERE?

- **Academic Integration 2000**
 - Goal:
 - Make academics meaningful with seamless integration
 - Offer academic credit
 - REAL world application
 - Academic and technical instructor partners
 - Each program selected **either** ELA or Math and were assigned an academic team teacher
 - 3.5 ELA teachers
 - 3.5 Math teachers

PAST RESULTS OF INTEGRATION

WorkKeys Applied Math
2014-2015



Improvement Same Decreased

- 2014-2015 WorkKeys Applied Math
- 80.5% of PET and GAB students demonstrated improvement

A WORK IN PROGRESS

- Our questions about integration:
 - How can we make the integration of academic content more meaningful?
 - What skills do our students need to be successful when they enter the world of work?
 - Technical skills combined with English and Mathematical skills
 - What solution would alleviate enrollment issues that occurred when sections of Graphic Arts had different academics?
 - Keeping existing GAB team (math and tech) together was important

A WORK IN PROGRESS: THE BIG QUESTIONS

Could we integrate ELA into the existing technical/math partnership?

If we integrate both academics what needs to happen?

- Technical & academic instructor buy-in
 - Compatible skill set and personality
- Select two diverse programs for integration pilot
- Collaboration
 - Planning, planning, planning
 - Working Backwards
 - Project Based
 - Multiple per semester
 - Quicker to Integrate
- Laying foundation.....not always combined instruction
- **Building an organized delivery using Weebly Sites and In-House MOODLE**

TECHNICAL STANDARDS & COLLABORATION

		explain how the message applies to a similar situation.							
III.	PROBLEM-SOLVING AND CRITICAL THINKING		Seg	Gap Analysis					Plan of Imp
A.	Solve problems using critical thinking skills (analyze, synthesize, and evaluate) independently and in teams. Solve problems using creativity and innovation.		Seg	4	3	2	1	N	Plan
1.	Employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate). Show Measurement Criteria	9, 3		<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
2.	Employ critical thinking and interpersonal skills to resolve conflicts with staff and/or customers. Show Measurement Criteria	9		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	employee ethical activity
3.	Identify, write and monitor workplace performance goals to guide progress in assigned areas of responsibility and accountability. Show Measurement Criteria	9		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
4.	Conduct technical research to gather information necessary for decision-making. Show Measurement Criteria	9, 12		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
IV.	INFORMATION TECHNOLOGY APPLICATIONS		Seg	Gap Analysis					Plan of Imp

H		Analyze and explain how government agencies promote compliance and improved health, safety and environmental performance in TDL organizations.
1		State the major measures and types of data utilized by government agencies to measure and monitor health, safety and environmental risks and performance.
2		Compare and contrast the various services through which government agencies provide assistance in ensuring compliance and improved performance in an organization.
I		Evaluate current practices and develop a comprehensive plan to improve health, safety, and environmental performance.
1		Identify and describe the most critical performance problems related to health, safety and the environment.
2		Identify opportunities for improvement of performance related to the problems found in an assessment of health, safety and environmental issues.
D		Evaluate and apply written organizational policies, rules and procedures in order to function ethically and effectively within the workplace.
1		Locate appropriate information on organizational policies in handbooks and manuals.
2		Analyze how specific organizational policies and rules, if applied, may influence specific situations in the workplace.
E		Summarize the potential impact technological systems may have on health, safety and environmental risks in order to demonstrate an understanding of the impact a technical system can have in managing compliance.
1		Summarize the major health, safety and environmental risks and potential impacts associated with various technological systems.
2		Compare and contrast various processes for managing health, safety and environmental risks and impacts within an organization.



COMMON CORE STATE STANDARDS INITIATIVE

PREPARING AMERICA'S STUDENTS FOR COLLEGE & CAREER

CCSS English Language Arts

Anchor Standards

Reading: Literature

Reading: Informational Text

Writing

Speaking and Listening

Language

ACADEMIC STANDARDS & COLLABORATION

		Show Measurement Criteria					
B.	Demonstrate mathematics knowledge and skills required to pursue the full range of post-secondary education and career opportunities.	Seg	4	3	2	1	N
1.	Identify whole numbers, decimals, and fractions.	7	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	Demonstrate knowledge of basic arithmetic operations such as addition, subtraction, multiplication, and division.	7	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	Demonstrate use of relational expressions such as equal to, not equal, greater than, less than, etc.	7	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	Apply data and measurements to solve a problem.	7	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	Analyze Mathematical problem statements for missing and/or irrelevant data.	7	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	Construct charts/tables/graphs from functions and data.	7	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	Analyze data when interpreting operational documents.	7	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

COLLABORATION

- Academics fit into existing projects
- Develop Project & Activity List
 - Graphic Arts
 - Technical Process Writing: Project Descriptions in GAB
 - Notepad
 - Business Correspondence
 - Job Estimates
 - Materials, Labor, Profit Margins
 - Customer Communications
 - Book Marks
 - Coloring Books
 - Paper Purchasing
 - Pica & Point
 - Infographic
 - Employability Skills
 - Print Ads
 - Packaging
 - Page Layout
 - UpNorth Logo

FILTERED DEATH

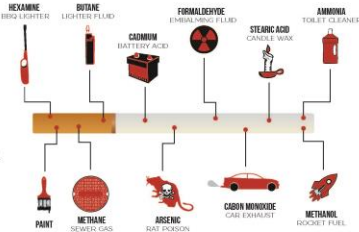
THE TRUTH HURTS



APPROXIMATELY 18% OF HIGH SCHOOL STUDENTS SMOKE CIGARETTES



CIGARETTE SMOKE CONTAINS OVER 4,800 CHEMICALS INCLUDING...



8.6 MILLION PEOPLE LIVE WITH A SERIOUS ILLNESS CAUSED BY SMOKING

SMOKING IS THE CAUSE OF 1 IN 5 DEATHS IN THE U.S. ANNUALLY, OR 1,300 DEATHS EVERY DAY



ABOUT 40% OF ALL CHILDREN ARE REGULARLY EXPOSED TO SECOND-HAND SMOKE AT HOME

EVERY YEAR 16 BILLION PACKS OF CIGARETTES ARE SOLD IN THE UNITED STATES, THAT EQUALS 48 PACKS FOR EVERY MAN, WOMAN AND CHILD.

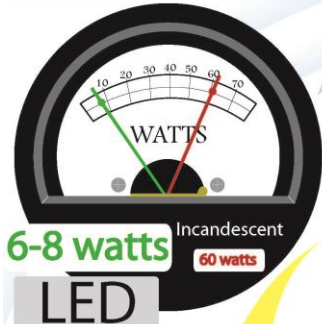
LIFE EXPECTANCY FOR A SMOKER 66 YRS.

LIFE EXPECTANCY FOR A NON-SMOKER 78 YRS.

ON AVERAGE, SMOKERS DIE 13 TO 14 YEARS EARLIER THAN NONSMOKERS.



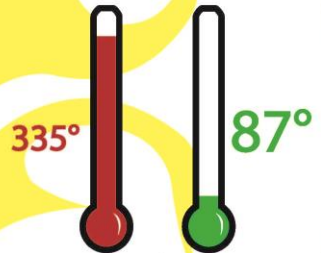
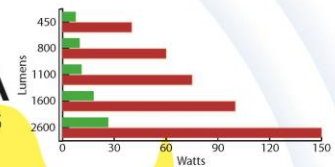
SMOKING IS DIRECTLY RESPONSIBLE FOR APPROXIMATELY 90% OF LUNG CANCER DEATHS



The average household uses 11,698 kilowatt-hours each year

Lumens	LED	Incandescent
450	6-9 Watts	40 Watts
800	8-12 Watts	60 Watts
1100	9-13 Watts	75 Watts
1600	16-20 Watts	100 Watts
2600	25-28 Watts	150 Watts

BRIGHT IDEA TO CHANGING YOUR BULBS

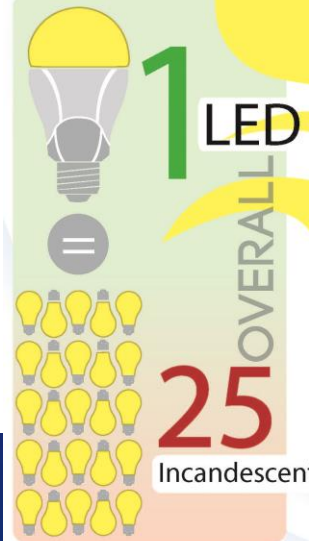


Incandescent bulbs burn 248° hotter than LED. Only 90% of incandescent is heat while 10% is light.

The average life span of..

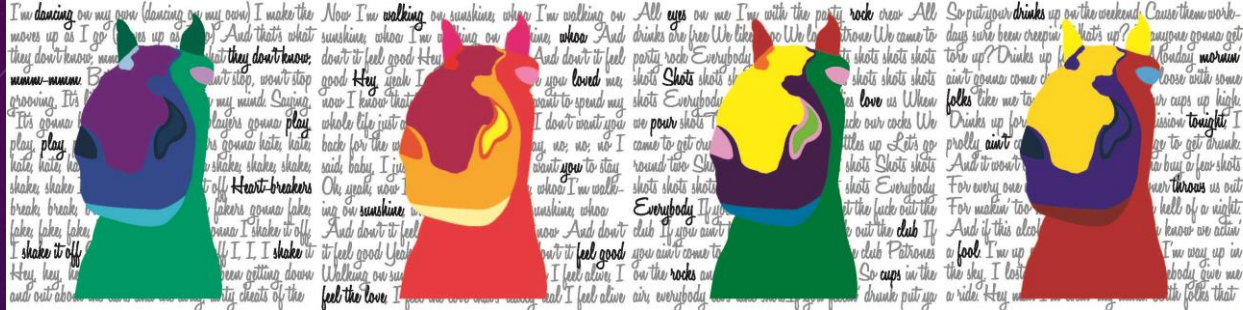
LED 50,000 hours

Incandescent 1,200 hours



Incandescent \$1.49 per bulb

LED \$45 per bulb



Shake It Off - Taylor Swift
Confident
Walking On Sunshine - Katrina & The Waves
Happy
Shots - LMFAO
Overwhelmed
Dank Up - The Last Agressives
Angel Eyes - Love and Theft
Affection
Dirt Road Anthem - Jason Aldean
Satisfaction
Bubbly - Jack Johnson
Bubbly
Follow Me - Uncle Crocker
Sincerely

Valentines Day Sale!



For one day and one day only, you can save up to 45% off retail prices on any item in the store!



Two Pound, Heart Shaped Box of Premium/Gourmex Chocolates

Retail Price	\$45.10
6:00 AM - 8:00 AM	\$20.80
8:00 AM - 1:00 PM	\$31.57
1:00 PM - 10:00 PM	\$36.58

One Dozen Roses in a Crystal Vase

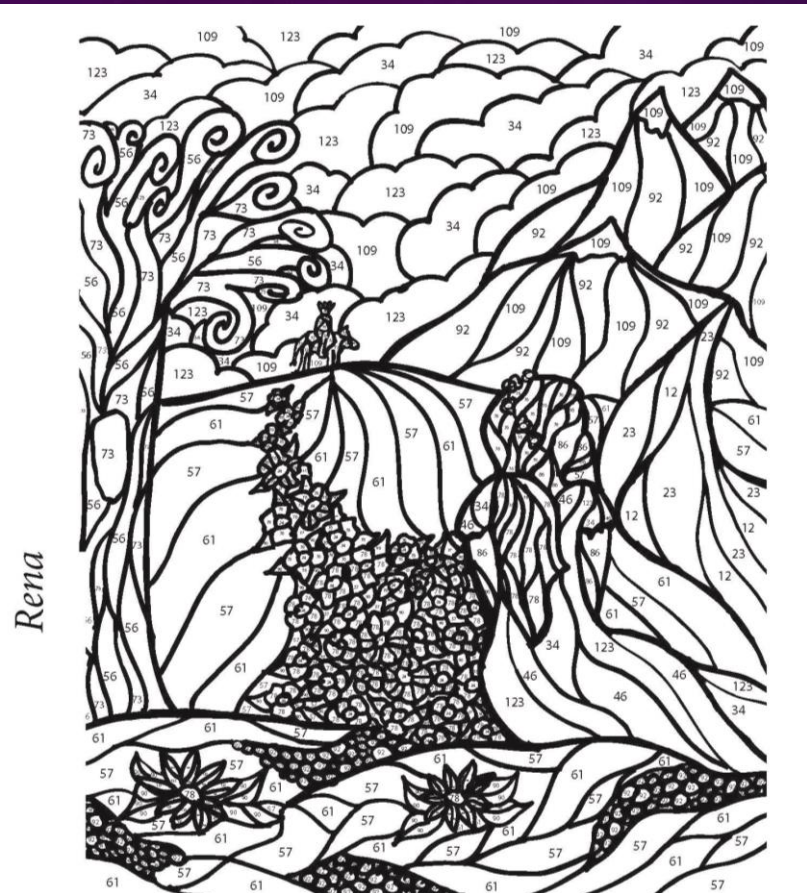
Retail Price	\$59.49
6:00 AM - 8:00 AM	\$32.72
8:00 AM - 1:00 PM	\$41.64
1:00 PM - 10:00 PM	\$47.58

Diamond Stud Earrings (1/4) Carat

Retail Price	\$439.50
6:00 AM - 8:00 AM	\$241.72
8:00 AM - 1:00 PM	\$307.65
1:00 PM - 10:00 PM	\$351.60

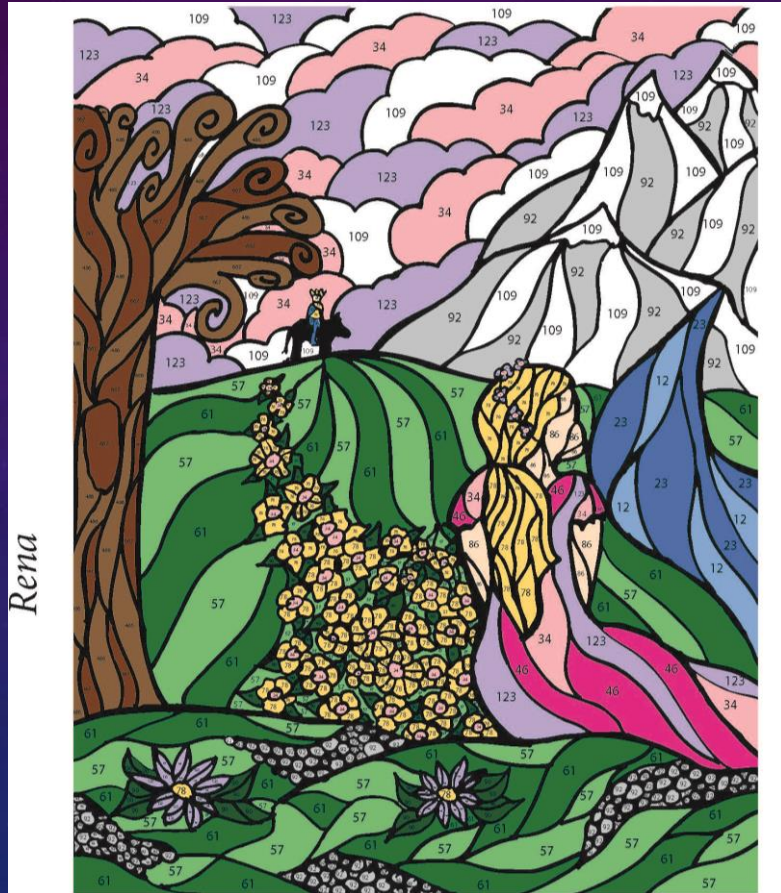
Posh rewards early bird shoppers so get up early if you want to save the most on your last minute Valentines Day gifts for that special someone.

COLOR BY NUMBER STORY BOOK



Rena

668	1032	18	951	23	63	896	23 = Blue
-582	-971	x27	-859	x29	+46	-806	12 = Light Blue
24 $\overline{1872}$	627 $\overline{7524}$	58 $\overline{1334}$	169 $\overline{7774}$	53	69	1315	46 = Pink
			-19	+54	-1258		92 = Grey
							86 = Tan (skin color)
							57 = Light Green
							61 = Medium Green
							667 = Brown
							486 = Light Brown
							109 = White
							123 = Lavender
							34 = Light Pink
							90 = Dark Green
							78 = Yellow



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Rena lived a girl named Rena. Rena was no ordinary girl. As a child she was abandoned by her parents to a desolate, but majestic place without any recollection of her past. This place contained vibrant pastel clouds resembling bouncy marshmallows that rolled over the hills and patches of striking, vivacious flora. It also had the most striking twisted trees in all the lands where she encountered the most dignified fairies. These were no mundane fairies; they cared for Rena as if she were their own. There wonderful magic taught Rena much of her knowledge. As a child she was told silly stories by the fairies of a princess who was birthed out of wed lock and cast off by her parents. In the story it was said that the parents of the child were the kingqueen and the young girl, she was neglected to avoid the pain of the village ever learning of the rulers careless mistake. Rena became quite fond of this story. She used to believe it resembled her own life. Whenever she questioned the fairies on the truth of the story they claimed, "It's just a story", but Rena knew it wasn't just a story. Rena would stare up at the clouds and contemplate her thoughts; she hoped one day she would find her real parents. She wished she could leave the valley to explore the village and castle where she was determined she belonged. Even though she wished, she trusted the fairies. They were her only hope of survival, for many only wonder what lie beyond the mountains. Along with the good stories the fairies would tell of a horrific fatheaded troll that lived in the peak of the west mountain. This story frightened Rena but she knew if she were to ever find her true birth parents she would have to pass through these mountains; besides, as the fairies said, "it's just a story". Rena told the fairies of her plan to embark on a journey to the kingdom. They did not want her to go, but they knew holding her back would only force her to rebel. So the fairies let her go and one afternoon she embarked on her vital venture. She walked for hours until she finally reached the mountains. The mountains had blustery winds that were so chaotic that she could hardly see the path to the kingdom. While walking up the north side of the mountain she veered off the path and ended up on the west side. She kept walking even though she was fearful for her life. The foul troll could be living in any of the ice caves and she could hardly see her feet right beneath her. As she continued to walk she heard a loud clanking noise and began to look around. From behind she saw a large man's shape. She stood still till it was so close behind her she could hear its steady breathing. She was scared, but she was not a coward. She turned around abruptly and saw a dashing man with eyes the colors the Pacific Ocean and a chiseled chin like a newly axed log. He asked her a question but she was so focused on his looks and that she neglected to speak back. She asked where he lived and his name. "I'm Liam and I live in the Nash village near the castle," he responded. "Rena wondered if he could lead her to the kingdom. She asked and he said, "Yes, I'm on my way back there now!" Rena was delighted because she was lost and did not know how to find her way back to the path. On their travel she shared all the stories and knowledge the fairies had told her. He was enthralled with the stories and could not comprehend that she had lived in the valley for so long. When Rena shared the abandoned Princess story, Liam thought it resembled a tale his father had told him as a boy. When they reached the outside of the kingdom they bid their goodbyes. Rena walked into the village and fell in love. She felt enlightened; she had finally found the atmosphere she belonged in. Rena visited the castle and saw the king and queen; they were shocked when they saw her. Rena questioned their reaction because they acted as if they knew her. The King and Queen invited Rena to the ball that was taking place that night. Rena was excited; she had never been to an extravagant ball. Rena was offered to stay in one of the guest rooms and was given the gift of a red drop waist ball gown. That night Rena attended the ball and saw Liam there, but he looked strikingly odd; he was wearing a crown, as if he were royal. The king and queen summoned Rena to come to the front of the ballroom for an important announcement. The rulers announced their daughter, the princess, had returned and she was to be the next ruler of the kingdom. What Rena didn't know was that Liam was actually about to be her arranged husband from the near kingdom of Nash. Rena was shocked at first. She ran to the guest room she was staying and packed all her belongings. She left the castle and traveled back to The Valley of Mystical Emerald Hills. When she arrived back at the peaceful valley she told the fairies of her journey and how their tale was true. She stayed in the Valley for a few days pondering her future. She was confused and worried. What if she could not love a man she knew little of and rule a kingdom. One day, while contemplating this, she saw a man on a horse wearing a crown rise from over the hills. She knew it had to be Liam. He came and convinced her he would love her till the end of time and told her that she should come home. She could not bear the thought of leaving the fairies and asked if she could bring them along. "Of course", Liam responded. So they ventured back toward the castle where they were to be married and live happily ever after.

Rena

INFOMERCIALS

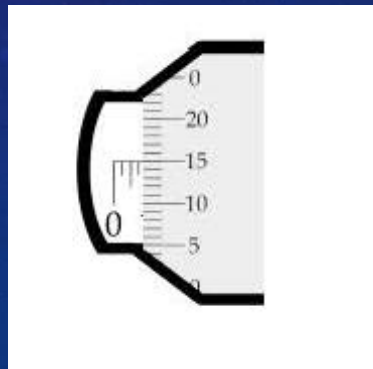


COLLABORATION

- Develop Project & Activity List
 - Power Equipment Technology
 - Micrometers
 - Parts Look Up
 - Job Estimates
 - Business Plan
 - Electrical
 - Excel Skills
 - Business Calculations & Correspondence
 - Mark Up
 - Discounts
 - Sales Tax
 - Loan Interest
 - Expense Reports
 - Payroll
 - Point of Sale Customer Service
 - Customer Contact
 - Presentations
 - Research
 - Block Letter (OSHA)
 - OSHA Case Summary



Nominal Size Range (in)		Standard Limits			Standard Limits			Standard Limits			Standard Limits		
Over	To	Clearanc	Hole H9	Shaft e8	Clearanc	Hole H9	Shaft d8	Clearanc	Hole H10	Shaft c9	Clearanc	Hole H11	Shaft
0	0,12	0.6 2.2	+1.0 -0	-0.6 -1.2	1.0 2.6	+1.0 0	-1.0 -1.6	2.5 5.1	+1.6 0	-2.5 -3.5	4.0 8.1	+2.5 0	-4.0 -5.6
0,12	0,24	0.8 2.7	+1.2 -0	-0.8 -1.5	1.2 3.1	+1.2 0	-1.2 -1.9	2.8 5.8	+1.8 0	-2.8 -4.0	4.5 9.0	+3.0 0	-4.5 -6.0
0,24	0,4	1.0 3.3	+1.4 -0	-1.0 -1.9	1.6 3.9	+1.4 0	-1.6 -2.5	3.0 6.6	+2.2 0	-3.0 -4.4	5.0 10.7	+3.5 0	-5.0 -7.2
0,4	0,71	1.2 3.8	+1.6 -0	-1.2 -2.2	2.0 4.6	+1.6 0	-2.0 -3.0	3.5 7.9	+2.8 0	-3.5 -5.1	6.0 12.8	+4.0 -0	-6.0 -8.8
0,71	1,19	1.6 4.8	+2.0 -0	-1.6 -2.8	2.5 5.7	+2.0 0	-2.5 -3.7	4.5 10.0	+3.5 0	-4.5 -6.5	7.0 15.5	+5.0 0	-7.0 -10.5
1,19	1,97	2.0 6.1	+2.5 -0	-2.0 -3.6	3.0 7.1	+2.5 0	-3.0 -4.6	5.0 11.5	+4.0 0	-5.0 -7.5	8.0 18.0	+6.0 0	-8.0 -12.0
1,97	3,15	2.5 7.3	+3.0 -0	-2.5 -4.3	4.0 8.8	+3.0 0	-4.0 -5.8	6.0 13.5	+4.5 0	-6.0 -9.0	9.0 20.5	+7.0 0	-9.0 -13.5
3,15	4,73	3.0 8.7	+3.5 -0	-3.0 -5.2	5.0 10.7	+3.5 0	-5.0 -7.2	7.0 15.5	+5.0 0	-7.0 -10.5	10.0 24.0	+9.0 0	-10.0 -15.0
4,73	7,09	3.5 10.0	+4.0 -0	-3.5 -6.0	6.0 12.5	+4.0 0	-6.0 -8.5	8.0 18.0	+6.0 0	-8.0 -12.0	12.0 28.0	+10.0 0	-12.0 -18.0
7,09	9,85	4.0 11.3	+4.5 0	-4.0 -6.8	7.0 14.7	+4.5 0	-7.0 -9.5	10.0 21.7	+7.0 0	-10.0 -14.0	15.0 35.7	+12.0 0	-15.0 -21.0
9,85	12,41	5.0 13.0	+5.0 0	-5.0 -8.0	8.0 16.0	+5.0 0	-8.0 -11.0	12.0 25.0	+8.0 0	-10.0 -15.0	18.0 43.0	+15.0 0	-18.0 -27.0
12,41	15,75	6.0 15.5	+6.0 0	-6.0 -9.5	10.0 19.0	+6.0 0	-9.0 -12.5	15.0 30.0	+10.0 0	-12.0 -18.0	24.0 54.0	+20.0 0	-24.0 -36.0
15,75	19,69	8.0 18.0	+6.0 0	-8.0 -12.0	12.0 24.0	+8.0 0	-12.0 -16.0	18.0 36.0	+12.0 0	-16.0 -24.0	30.0 66.0	+30.0 0	-36.0 -54.0
19,69	30,09	10.0 23.0	+8.0 0	-10.0 -15.0	15.0 30.0	+10.0 0	-15.0 -20.0	22.0 44.0	+15.0 0	-20.0 -28.0	36.0 78.0	+45.0 0	-54.0 -81.0
30,09	41,49	12.0 28.0	+10.0 0	-12.0 -18.0	18.0 36.0	+12.0 0	-18.0 -24.0	27.0 54.0	+20.0 0	-28.0 -38.0	45.0 90.0	+60.0 0	-72.0 -108.0
41,49	56,19	16.0 36.0	+12.0 0	-16.0 -24.0	24.0 48.0	+16.0 0	-24.0 -32.0	36.0 72.0	+25.0 0	-32.0 -43.0	60.0 120.0	+90.0 0	-108.0 -162.0
56,19	76,39	20.0 46.0	+16.0 0	-20.0 -30.0	30.0 60.0	+20.0 0	-30.0 -40.0	45.0 90.0	+30.0 0	-40.0 -53.0	75.0 150.0	+120.0 0	-150.0 -225.0
76,39	100,9	25.0 57.0	+20.0 0	-25.0 -37.0	37.0 74.0	+25.0 0	-37.0 -50.0	55.0 110.0	+40.0 0	-50.0 -67.0	110.0 220.0	+150.0 0	-180.0 -270.0



PET WORKS



Estimate

Name _____ Date _____ Session _____

Type or Code # _____ Serial # _____

Brand of unit _____ Model # _____ Serial # _____

Leakdown% _____ Intake _____ Exhaust _____ Dipstick _____

Ignition Present _____

Manufacturer	Part Number	Description	Price	Quantity	Total Cost
Honda	1234568		\$ 20.30	3	\$ 60.90
			\$ 14.00	1	\$ 14.00
			\$ 33.53	1	\$ 33.53
			\$ 630.00	1	\$ 630.00
			\$ 52.88	3	\$ 158.63
			\$ -		\$ -
			\$ -		\$ -
			\$ -		\$ -
			\$ -		\$ -
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			\$ -		\$ -

Shop Charge		\$ 15.00
Parts Total		\$ 897.06
Tax @ 6%		\$ 53.82
Subtotal		\$ 965.89
Labor	6.5 hrs @ \$65/hour	\$ 422.50
Estimate Total	\$ 1,388.39	\$ 1,249.55 to \$ 1,527.23



WHAT ARE THE ADVANTAGES TO HAVING BOTH ACADEMIC AREAS INTEGRATED INTO YOUR PROGRAM?

- Academic teachers cover multiple technical standards
 - Excel
 - Communication
 - Data Analysis
- Real world application
 - Advisory Committees
 - What students will face when they enter the world of work
- Increased enrollment
- Student buy in is high
 - Few behavior issues
- Some students have their first real success in math and/or English

STUDENT TESTIMONIALS

- “Math has never been a strong subject for me up until my junior year with Mrs. Shoskey as a math teacher at CTC. The math she teaches is so helpful and is related to what I want to do. **I have finally been able to say I have been successful in math.**” Rhiannon Hayes, PET
- “Rather than being pushed through a cookie-cutter math or English curriculum, we learned what mattered to our careers. I can’t say it enough: **academic coursework at the Career-Tech Center is personal, crucial and absolutely invaluable.**” Samantha Kaufman, GAB
- “Graphic WORKS incorporated essential curriculum into class projects. By combining all three subjects into client and class design projects **it helped me learn in a new academic style.** It was different because it centered on graphic design as opposed to high school classes...”
Koree Bemiss, GAB

3-2-1

- Three questions you have about our process
- Two things you've learned
- One idea you can use now

FOR MORE INFORMATION

TBAISD Career-Tech Center



Home

Team Techidemics

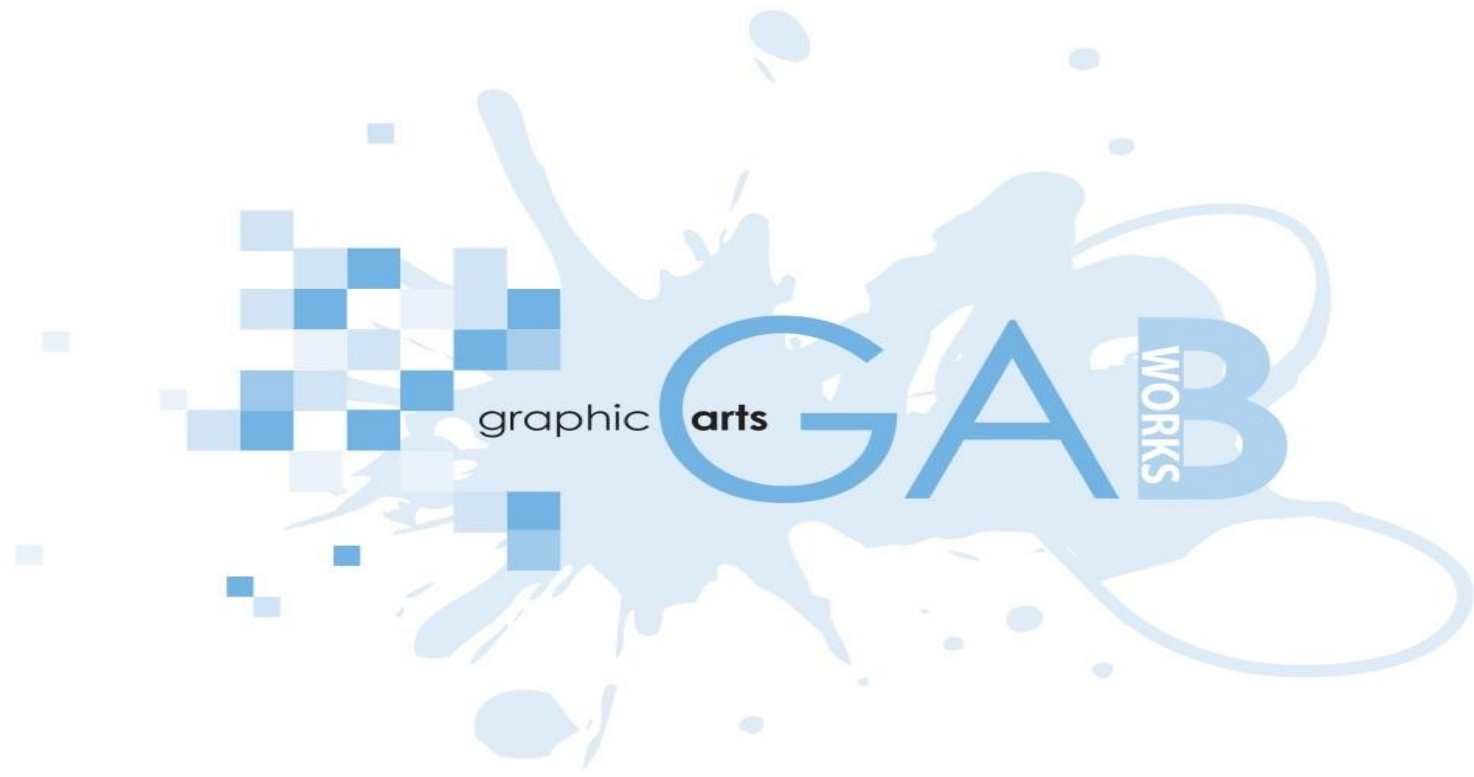
Numbers By Design

For The Love Of Reading

Contact Information

The **Traverse Bay Area Career-Tech Center** is a secondary career and technical education school serving nineteen high schools and 1,100 students in the five-county Grand Traverse area. Students are educated in twenty-one occupational areas utilizing the latest technology and state-of-the-art equipment. Training is provided for immediate job placement, preparation for college, or military service.

<http://tbaisdctc.weebly.com>



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