

Hearts and Soles



A question for you...

What do you want to learn or hope to get from this session?



You may have heard this before

“academic excellence can
coexist with delight.”

-finland, the world leader in education

more than just arts and crafts?

- Can art be “educational?” Can engineering, science, math, history, technology...be art full?
- Is it possible to transform what could look like a simple art project into an extraordinary learning experience?
- An extraordinary Common Core and state standards based learning experience?
- One that will work for any grade level?



We've come to believe...

- Learning should be interesting in general!
- Academic excellence **should** coexist with delight.
- Creativity is equal to exposure and opportunity.



Can it really be done?

- Do you think it's possible to teach deep standards-based skills and concepts through anything, through any project?
- How can we build something that could go really deep?
- Something that benefits all grade levels?
 - Able to be simplified (not dumbed down!) for a Kindergartner
 - But also containing projects, skills, activities, and covering concepts that would challenge a high-school senior, and every grade in between?
 - And able to effect test scores positively!
- How?

A tool we use: Common Core & TN Standards (our spreadsheet)

The Basic Set-up

The EXCEL workbook contains the TN state standards and Common Core standards for grades K-12 and it also has the Academic Vocabulary for each subject grade level as well. Notice at the bottom left hand side there are several tabs at the bottom. The standards and vocabulary are color coded as to subject and before each subject there is a tab which contains the related Academic Vocabulary.

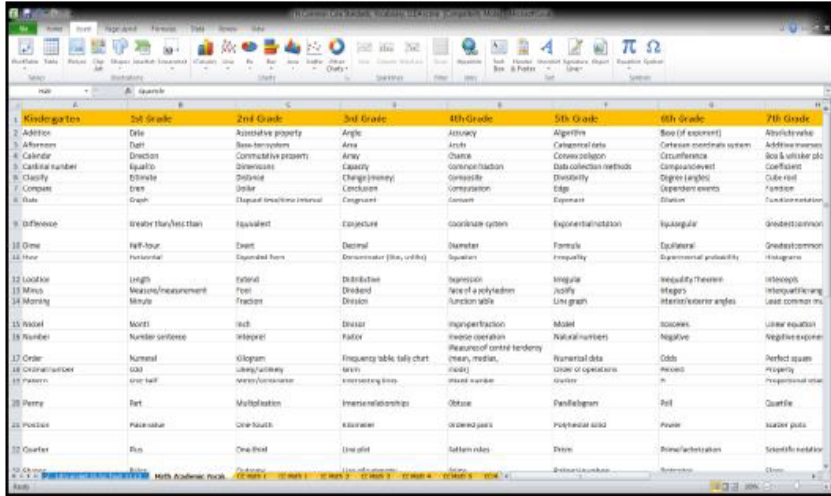
For example:

Blue: English Language Arts (ELA)

	Kindergarten	1st grade	2nd Grade	3rd grade	4th grade	5th grade	6th Grade	7th Grade
1	Alphabet	Blend	Abbreviation	Abbreviation	Allusion	Allusion	Empty	Interaction with
2	Author	Capitalization	Adjective	Adverb	Analogy	Comparison	Foreign phrase	Paraphrase
3	Substantive	Character	Pronoun	Antonym	Audience (as listener)	Conjunctions	Genre	Stylistic
4	Beginning	Setting	Structure	Appositive	Author's purpose	Figurative language	Hyperbole	Semantic change
5	Ending	Consonant	Etymology	Case	Capital	Metaphor	Imagery	Connotation
6	Consonant	Vowel sound	Flora	Effect	Compare	Idiom	Inference	Denotation
7	Vowel	Consonant	Metaphor	Contrast	Contract	Implied	Minimization/maximization	Metonymy
8	Drawing	Illustrate	Falsify	Double negative	Class	Writing mode	High	Stress
9	Fairy tale	Sequence	Fable	Eulogatory	Drawing conclusions	Interjections	Multiple meanings	Structure
10	Letter	Prefix	Discussion	Fan	Fable	Introductory paragraph	Personification	Onomatopoeia
11	Letter sound/relationship	Discussion (e.g., comma)	Main idea	Interrogative	Genre	Main idea	Simile	Sound
12	Picture book	Question (wh-)	Message	Multiple-meaning words	Metonymy	Metaphor	Rhetoric	Repetition
13	Question	Repeating	Opinion	Organization	Making inferences	Chronotopos	Propaganda	Foreign phrase
14	Story	Statement	Powert	Organization	Making inferences	Chronotopos	Propaganda	Internal rhyme
15	Song	Metaphor	Metaphor	Metaphor	Metaphor	Metaphor	Metaphor	Very
16	Print	Syllable	Editor	Possessive	Possessive	Metaphor	Personification	Metaphor
17	Retail	Vocabulary	Public	Punctuation (comma)	Outline	Point of view	Personification	Personification
18	Rhyme	Media (e.g., book, video)	Author's purpose	Interrogative	Thesaurus	Possessive nouns	Proposition	Taboo
19	Sentence	Plot, illustration	Table of contents	Interact	Prompt	Punctuation	Prompt	Time
20	Speech	Summary	Glossary	Atlas	Proofread	Punctuation marks (comma, semicolon)	Synonym	Inference
21	Title	Information	Singular	Encyclopedia	Question/operation	semi colon	Text features	Interpoint
22	Upper case (capital)	Mean	Plural	Run-on sentence	Run-on sentence	Reference source	Text statement	Spillage
23	Lower case	Verb	Plot	Sequential	Sentence fragment	(parentheses, dashes, newspapers)	Stress/unstressed	Assonance
24	Word	Compound word	Punctuation (e.g., comma, semicolon, etc.)	Singular	Single	Single	syllables	Consonance
25	Pencil		Base (root) word	Metaphor	Metaphor/verb agreement	Single	Stress	Assonance
26	Question mark		Prefix	Character	Yes-or-no/questional words	Citation	Stress	Onomatopoeia
27	Exclamation mark		Suffix	Setting	Setting	Superlative	Double negative	Double negative
28	Read		Suffix	Summary	Topic sentence	Theme		
29				Reporting details	Verb tense	Visual image		
30				Synonym				

The first tab is the Academic Vocabulary then when you scroll [using the arrows in the bottom left hand corner of Excel] it goes to the K English Language Arts Standards, 1st Grade, etc. all the way through 12th Grade ELA.

Just keep scrolling along the bottom and you will come to **Orange**: Mathematics and the format is the same. First the Mathematics Academic Vocabulary then the K-12th grade mathematics standards, each in their own tabs.



As you continue to scroll you will find **Science**, **Visual Arts**, **Social Studies**, **Health Education**, **Physical Education**, **Computer Technology**, **ELL Standards**, a group of **Black or Grey Tabs** that have the Academic Vocabulary for ELA, Math, Science, & Social Studies all in the same tab, for the grade level marked, and finally, the ELDA Skills sheets for the 5 levels.

We use the core subject standards of Science related subjects, Math, and Reading Language Arts in our lesson plans. For high school students you can use any of the higher Math courses, Science related courses and English courses.

How could/does this help?

- How could it help instructors who are given groups of multiple grade levels of students?
- How could it help inexperienced instructors know what their students need?
- How might it be useful for experienced instructors who are working with a new grade level?
- ...

What's in the Unit?



Heart & Sole Activating Prior Knowledge



- Read an appropriate picture book such as *A Pair of Red Clogs* by Masako Matsuno, *Pete the Cat: I Love My White Shoes* by James Dean, *The 12 Dancing Princesses* or *Cinderella*)
- Class Brainstorm activity

A Mile in My Shoes

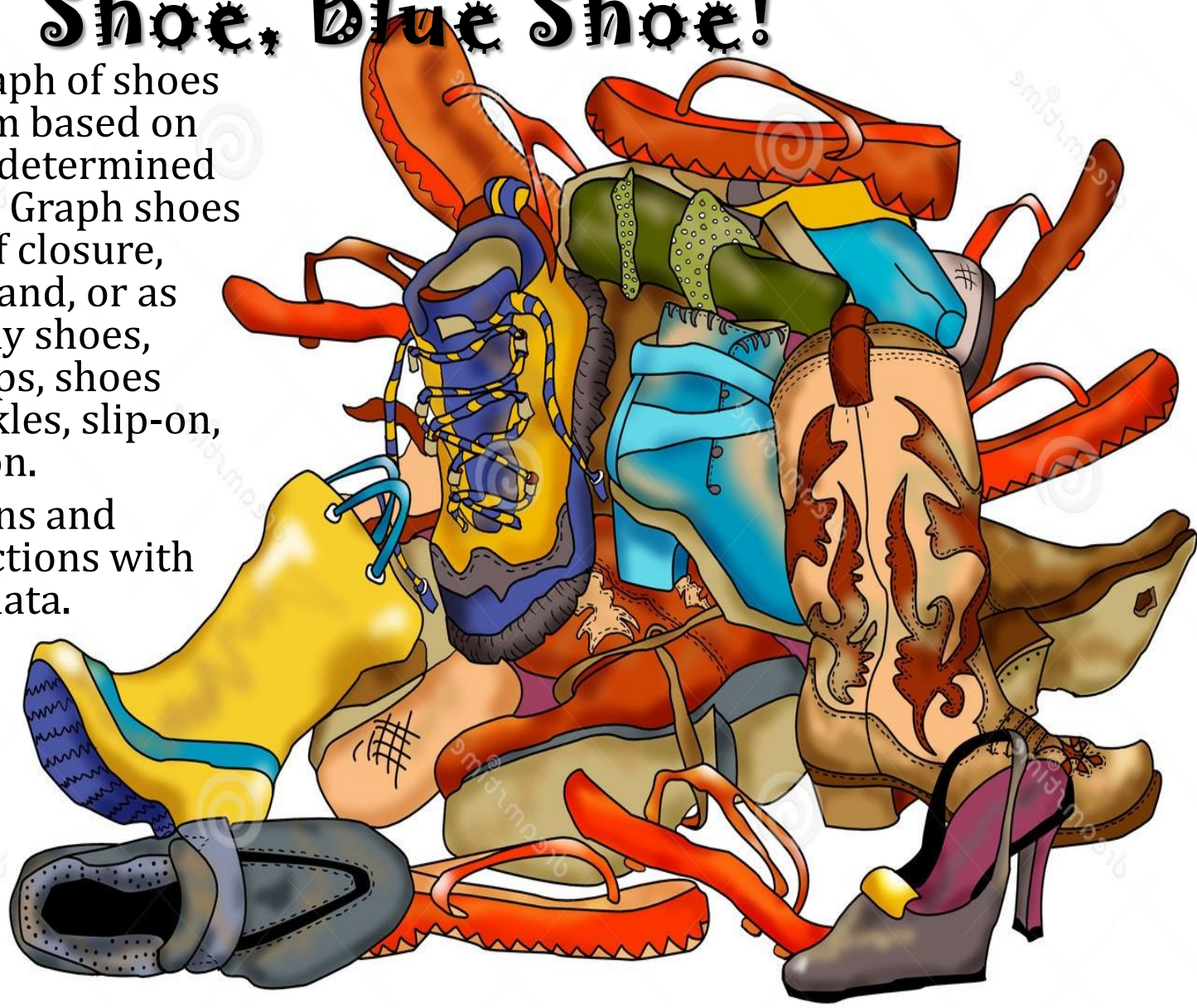
“Never judge a person until you’ve walked a mile in their shoes.”

- Read introductory story, about perspective & perception ex. *Mutt Dog*.
- Discuss perception and perspective
- Spark conversation about how it can be tough to walk without shoes through activities.
- Discuss the effects of not having shoes on children around the world.



One Shoe, Two Shoes, Red Shoe, Blue Shoe!

- Create a bar graph of shoes in the classroom based on characteristics determined by students, ex. Graph shoes by color, type of closure, and style, by brand, or as work shoes, play shoes, sandals, flip flops, shoes with laces, buckles, slip-on, Velcro, and so on.
- Make predictions and compare predictions with actual sample data.



Stretch! Writing Warm-Ups



- Just as you would stretch before you go running, students need to warm up before they start writing.
- Sentence Mix-Up Game!

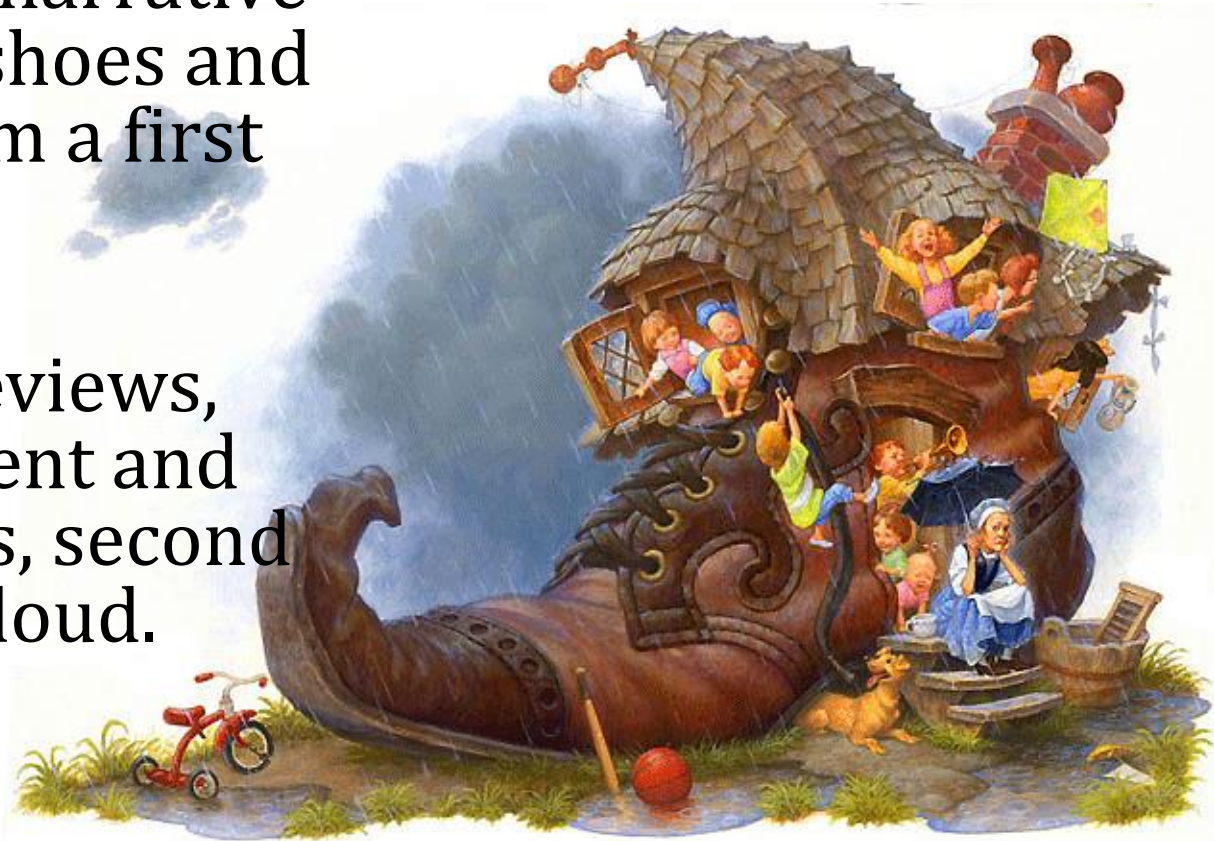
What's in a Sole?

- Have students examine a variety of shoes and envision what the owner would look like, such as their appearance, actions, etc.
- Relate this to a story you read as a group. What assumptions were made about the characters in the book related to their footwear, ex. Cinderella?
- Have students write down assumptions they make when looking at footwear and begin to write a narrative.



There Was an Old Woman, Who Sold Me Her Shoe!

- Students practice group brainstorming
- Then, writing a narrative about a pair of shoes and their owner from a first or third-person perspective.
- Conduct peer reviews, editing for content and clarity, revisions, second drafts, & read-aloud.



That's No Brain Cloud! It's Raining Ideas!



- Use graphic organizer
- Practice narrowing down ideas
- Craft an introduction that captures reader attention
- Work on story tense, tone, dialogue, word choice, etc.

5 Things To Think About When Writing and Editing

1. The importance of clarity.
2. Less is More-“...when in doubt, leave it out!”
3. Show, Not Tell
4. Vivid writing and dynamic word choice
5. Avoid sounding too stuffy!



Function Over Form?



- Although the human foot has remained unchanged for thousands of years, what people have worn on their feet shows incredible diversity.
- What is a shoe?
- What is its function?

Or, Form Over Function?

- What happens when fashion and footwear mingle?
- What are shoes traditionally made for and made from?



Information is Beautiful

- Important events connect to each other and progress.
- Students comprehend why history is important to the present and point out the cause and effect relationship between historical events.
- Students mark out the moments in shoe history using one of several methods to timeline events and learn to present complex information quickly and clearly.



Pair 'em Up!

- Student timeline sheet
- As the history of heels discussion is conducted students read along, listen for information, and fill in the missing details on their own student timeline sheets.



A History of the Elevated Foot

(goes all the way through "The High Heel Prevails")

- The high heel of today bears the imprint of its complex 500-year evolution.
- Influences as varied as politics to pavement have contributed to the enduring success of elevating shoes.
- Students travel through time to learn who wore the highest heels and when! (And are sometimes surprised to learn, it was often men!)

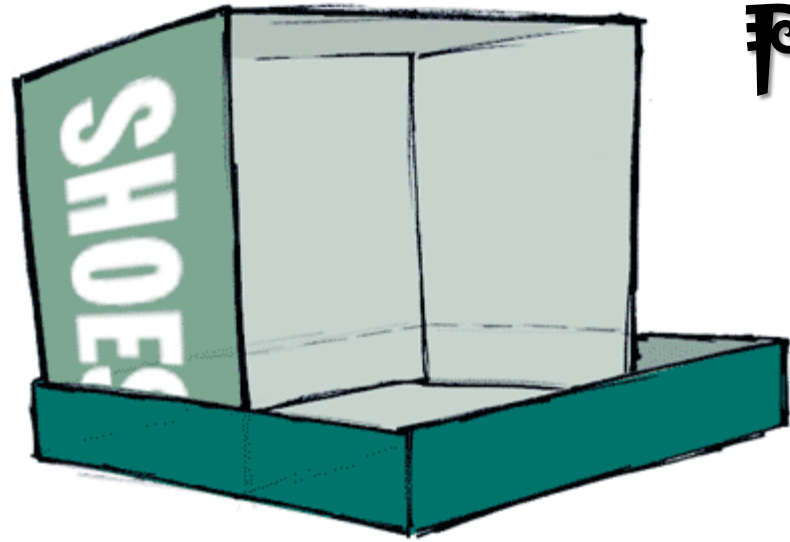


Walk Like a Venetian!



Students give their favorite shoes a boost (and experience life like a Venetian) with a pair of classic tin can stilts, aka. chopines.

Out of the Box Math Skill Practice



Play math games to practice key math skills (addition, subtraction, multiplication and division)

- Get 20!
- 15!
- Slapdash

Running, It Does a Body Good

- Determine the importance (or not) of specialized footwear while running.
- Learn about the ancient Greeks and their lack of gear vs. the Romans and their fashionable wear.
- Calculate the speed of the first marathoner.

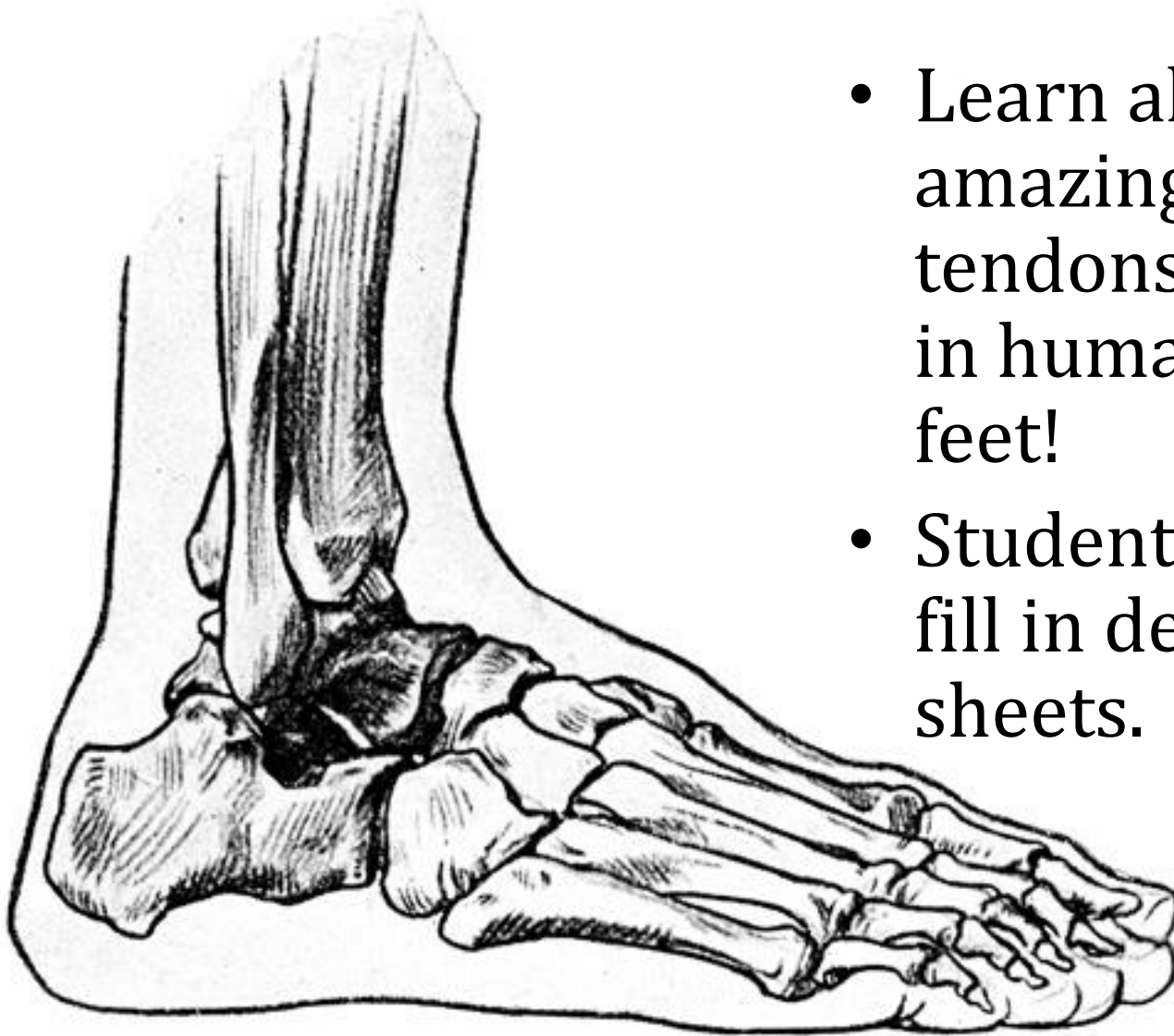


Cobbling Something Together: Shoe Engineers



- Learn the challenge of making something “average.”
- Differentiate between shoe design and shoe fabrication.
- Discover that modern shoe design is a very detailed application of podiatry, the study of human feet, and biomechanics, the study of the human body in motion.

What's to protect?



- Learn all about the amazing ligaments, tendons, and bones in human legs and feet!
- Students listen and fill in details on their sheets.

Put Your Best Foot Forward & Foot Race [sheets]

Can students correctly label each part of the diagram, using the words from the Word Bank before the time runs out?



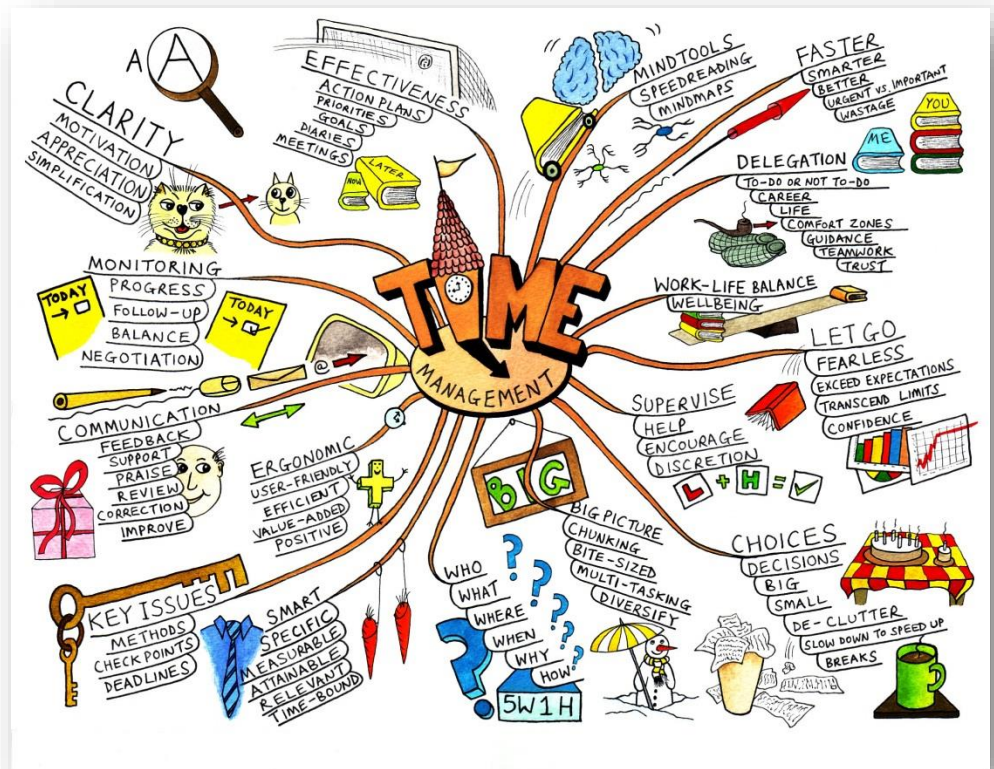
Shoe Fabrication

- Begin the initial step in shoe fabrication-making a last!
- Learn the importance of the last in the final comfort of your foot and how the experienced designer is guided by six key measurements.
- Create their own last by tracing, measuring, and building.
- Calculate classroom data on foot size based on student plans to



What's In Your Mind?

- Walk students through the thought and design process.
- Creating a shoe is creating a sculpture with a purpose.
- Create a Mind Map.



Sketchy

- Students look for fabrics, memories, textures, colors, objects or people who inspire them to create their shoe.
- They learn what a prototype is.
- And consider form, fit, function, manufacturability, and viability while designing their shoe.
- Portfolios of designs, ideas, inspirations, layouts, colors, etc. are kept.



Creating 3D Models

Students build life-size (they had to be able to wear them) 3D models of their shoe designs using multiple materials, but with ONLY duct tape showing.



Tips: What We've Discovered through the Process! (and plan to tweak in the future)

- Crawl before you walk, walk before you run...
- Have the students copy their own shoe, yep, the one on their foot, before ever designing a new and unique one.
- This will give them a MUCH clearer idea of what is possible and what tape can do (and they can do) before they move towards building their own unique design (with more confidence.)

Try It on For Size!

It's time to build your own shoe (or two!) and create something great!

“Creativity is intelligence having fun!”
-Albert Einstein





TOPS Presents

Sole

Search

*Calling all cobblers to share your passion
for fashion!*

Selling Soles

For their final product students were asked to put together a "tech pack" like professional designers. A storyboard layout of their shoe that shows each component of the upper and what it is made of.

They needed to create sketches of different perspectives of their final shoe. Ex. what does the sole look like? The back. The top?



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A 'Tech Pack'?

The "tech pack" included full color technical drawings (from multiple perspectives if possible), color swatches, materials listing, measurements, purpose, and layouts, individual pricing, manufacturing cost estimates, measurements for components, etc. The technical pack is what the "factory" would require before they would produce a prototype or "pullover" based on students' shoe design.

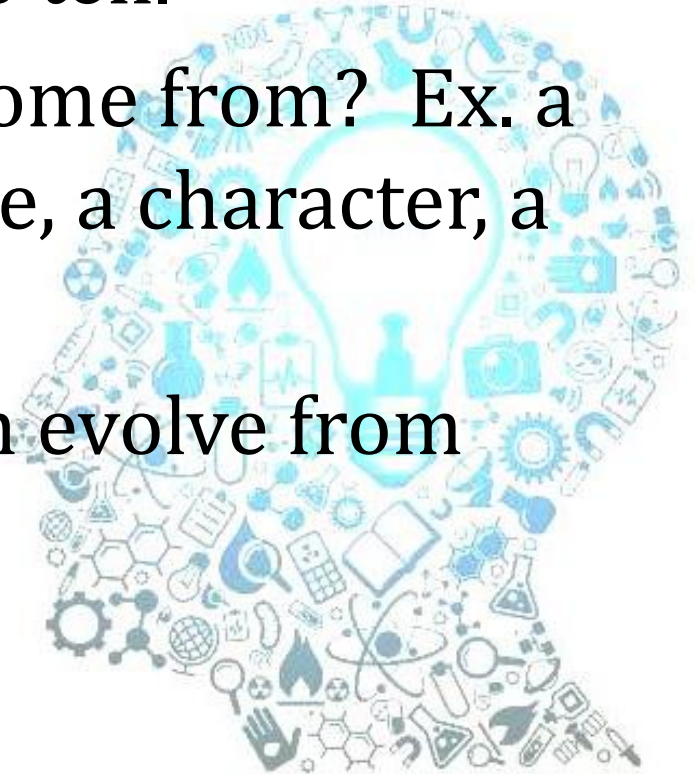


Vivid Inspiration

Also, students were asked include their inspirations and tell the story of their shoe and what story they want it to tell.

Where did their inspiration come from? Ex. a fabric, a favorite car, an athlete, a character, a season?

How and why did their design evolve from their original idea?





These beautiful shoe designs were made by our students and staff.



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A Very Common Question

- This is nice and all, but can stuff like this really affect test scores?
 - What do you think is the answer to raising test scores?
 - Might projects like this help your students?
 - Is there only one answer?

