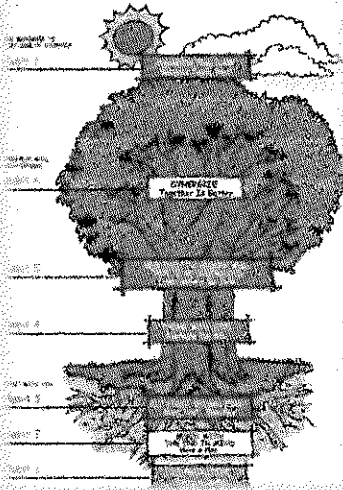


STEM4

VISION:

- We believe in empowering everyone to be goal-setting, self-directed learners
- We believe inspiration comes from critical thinking, collaboration, communication, and creativity
- We believe in helping everyone identify and utilize his or her unique leadership qualities

The 7 Habits

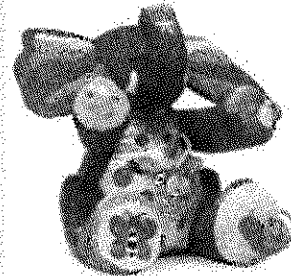


**We will
develop the
responsibility
and self-
direction to
be effective
leaders!**

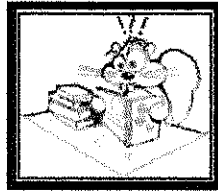
**We will develop
the collaborative
and
communication
skills essential
for working in
teams**



**We will develop
creativity skills
by using
strategies, such
as OFFE and
SCAMPER**



Using thinking that has:
Originality
Fluency
Flexibility
Elaboration

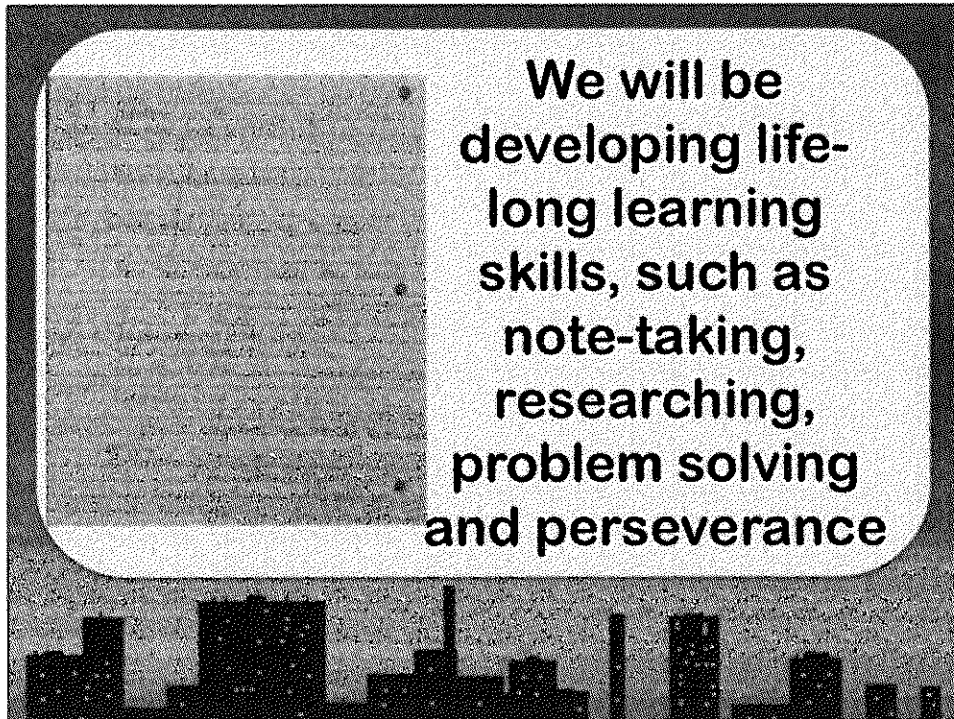


Substitute
Combine
Adapt/Add to
Minimize/Maximize
Put to Other Uses
Eliminate
Reverse/Rearrange

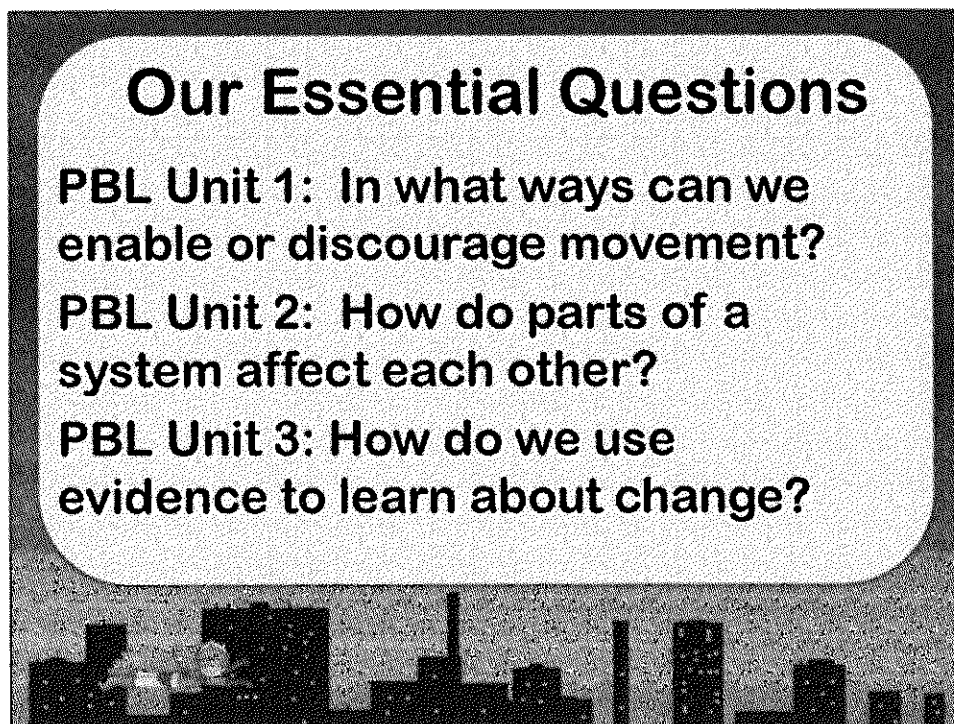
We will develop
critical thinking
and self-
evaluation skills
to solve
problems and
challenges
effectively

How are you doing?

- 4 - Mastery
 - I have 100% confidence in my skills in this area. I could explain and teach it to someone else. I definitely need challenge!
- 3 - Skilled
 - I am 80-90% confident in my skills. I'm pretty comfortable with it and am ready for some more challenging work.
- 2 - Developing
 - I am comfortable with some of the basic ideas in this area. I definitely need more practice to feel more confident.
- 1 - Beginning
 - I am not understanding this very well and need a lot of support. Please reteach it, maybe in a different way.



We will be developing life-long learning skills, such as note-taking, researching, problem solving and perseverance



Our Essential Questions

PBL Unit 1: In what ways can we enable or discourage movement?

PBL Unit 2: How do parts of a system affect each other?

PBL Unit 3: How do we use evidence to learn about change?

PBL Unit 1: In what ways can we enable or discourage movement?

Includes:

- **Heat and Thermal Energy**
- **Electricity**
- **Map Skills**
- **Pioneers and Settlers introduction**
- **Ohio's Geography and Regions**
- **Ohio History of Canals, Railroads, Roads**
- **Doodle4Google Competition**

PBL Unit 2: How do parts of a system affect each other?

Includes:

- **Constitution, Citizen Rights and Responsibilities**
- **Branches of Government**
- **Entrepreneurship and economics**
- **Ecosystems and effect of changes on organisms**
- **Fast and slow changes to ecosystems**
- **Invention Convention**
- **Ohio Inventors**
- **Early Ohio Native Americans**

PBL Unit 3: How do we use evidence to learn about change?

Includes:

- **Ohio's part in: Colonization, Westward Expansion, Northwest Ordinance, War of 1812, Civil War, Underground Railroad**
- **Economic Development of the US and Ohio**
- **Immigration and Cultural Groups**
- **Landforms and Fast/Slow Changes to the Surface of the Earth**
- **Fossil Record and Comparing/Contrasting Organisms**

Capstones

PBL Unit 1: Movement Mania Interactive

Exploratorium – Hands-on exhibits for you to explore.

PBL Unit 2: Entrepreneurship fundraising project and Wildlife Sponsorship SharkTank Videos – YOU are the sharks! Which Ohio native species will we sponsor?

PBL Unit 3: STEM4 Natural History Museum at the STEM Gala– Earthquakes, caves, volcanoes, fossils, geologic timeline, ancient and modern species, Google Map virtual field trip, and more!

Some Examples of Planned Community Speakers

- **Improvisation Workshop – Russ Stich from Something Dada at the Beck Center**
- **First Energy Safety Presentation Naturalist from CanalWay – Native Ohioans and Canals**
- **Naturalist from West Creek – Changes to site over time**
- **Natural History Museum – Ancient Teeth Paleontology activity**
- **Careers in STEM: Electrical Engineer, Landscape Engineer, Civil Engineer**
- **Invention Convention Kick-off Assembly**
- **Beekeeper**
- **Local Entrepreneurs and (hopefully) Junior Achievement**

We hope that you will sponsor and support the Pleasant Valley Triathlon

Every dollar from the Gift Basket Raffle and the Triathlon will go directly to the students!

STEM4 is committed to using these funds to bring in high quality, relevant programming, such as programs from the Lake Erie Nature and Science Center and the Natural History Museum

Master Schedule

9:20-10:00 Encore

• Red: White: Blue:

10:00-11:50 Math and Science Block

11:50-12:25 P.I.E. Groupings

• GATE meets with Mrs. Bowman Tuesday and Thursday

12:30-1:00 Recess

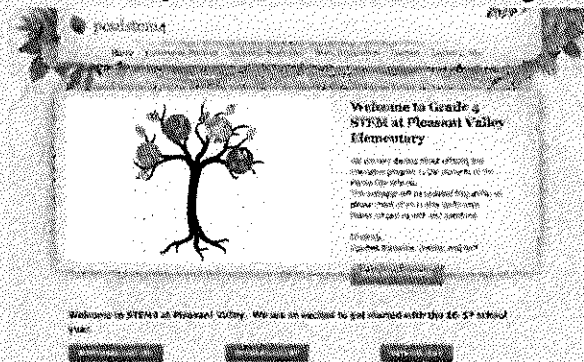
1:00-1:30 Lunch

1:30-3:15 ELA and Social Studies Block

3:25 Dismissal

Homework

Listed at pcsdstem4.weebly.com



Behavior Plan

- **Clip-It Chart**, where students earn classroom “dollars” based on their position at the end of each day.
- **Classroom “Checking Account”** where students will keep track of, save, and spend their earned “dollars” on classroom privileges (also addresses Social Studies standards for Economics)
- **Collecting “Compliments”** from other adults. Whenever we get one, we add a letter to our chart. When the word is complete, we earn a class treat or special event

Behavior Plan

- **Students will earn Bling** on their clip for days that end on 7, or even on Coach Detmar! Special awards and recognition is given for every group of 15 Blings earned.
- **Students will be able to nominate students** for recognition in using excellent learning and collaboration choices.

Communications

- Homework planner every day
- Website: pcsdstem4.weebly.com
- Remind text messaging: see flyer
- Twitter: @DetmarSTEM
- Google Classroom Parent account
- Emailed monthly newsletter
- Possibly Class Dojo and Digital Portfolio coming soon – Always finding new ways... keep your eyes open 😊
- Email: detmarj@parmacityschools.org

Monitoring Progress

- Major tests/project grades will require parent signatures
- Check the homework folder on Fridays for graded work. Flyers and information will come home Wednesdays and Fridays.
- Use the Home Access gradebook through the district website
- Watch the homework planner for daily behavior score and assignments

Homework

- Homework is an essential part of our learning.
- The students do not just turn it in. Each assignment is discussed as part of our learning process every day. If your learner does not have it, he/she is not prepared for class. We take the time to correct misconceptions and confusion.
- We will “flip” some content by having the students read or watch a video beforehand in preparation for a future day’s experience.

Homework

- Math: Selected problems from day’s lesson
- Reading: Quarterly Book Project
- Spelling: Menu of choices completed in spelling notebook by test day (usually a multiple choice quiz). At least one full week to complete.
- Science and Social Studies: Completion of newspaper/workbook activities not finished in class, if needed. Studying of study guides and notes taken during class for quizzes and tests.
- Optional Home Connection Projects for extra credit

Homework

All tests will need to be signed by parents to acknowledge notification of grade. Students are expected to revisit questions and use the opportunity to correct them. Partial credit may be given for documentation of corrections. Details will come soon.

There will be a \$5 fine from the student's class checkbook for each missing assignment/signed document on the day that it is due.

Students will earn Friday Funday activities every 2 weeks if everything is turned in on time. Emergency Passes may be used for assignments, but not for required parent signatures on tests/project grades.

Data Binders

- Every student at PV will be setting goals and tracking his/her own progress in grade-selected specific areas. STEM4's are:
 - Growth in MAP assessments in math and reading
 - Math: fact fluency, problem solving self-evaluations
 - Reading: fluency measurements, test scores in vocabulary and comprehension
 - Behavior
 - Success at independent station goals



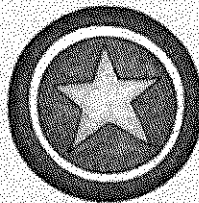
Can You See the Leader in Me?

We are committed to using the 7 Habits to build independent, effective leaders, who are growing toward being successful adults.

Students will be given many opportunities to be recognized by the teachers and other students for their use of the 7 Habits.

Habit 1: Be Proactive

- I am responsible for what I choose to say, do, or act**
- I am prepared for success**
- I do not blame others for my mistakes**



Habit 2: Begin with the End in Mind



- I set goals for myself.
- I have a plan for how I will accomplish my goals.
- I think about what I want to be when I grow up and how I will get there.

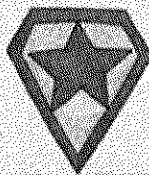
Habit 3: Put First Things First

- I do my work before I play.
- I know what my responsibilities are, and I do them based on what is most important.
- I practice self-control.



Habit 4: Think Win-Win

- I want everyone to be a success.
- I don't have to put others down to get what I want.
- When there is a conflict, I look for solutions that will make everyone feel good.



Habit 5: Seek First to Understand, Then to be Understood

- I am a good, respectful listener.
- I try to understand other peoples' points of view especially when it is different from mine.
- I comfortable sharing my opinions and ideas.





Habit 6: Synergize

- I know that everyone is good at something.
- Everyone needs to get better at something.
- I believe that we can all learn something from each other.
- I know that working in groups help to create better ideas than what one person can do alone.
- I support my classmates with encouraging and positive attitudes

Habit 7: Sharpen the Saw

- I take care of my body and health with the right kinds of food and getting enough exercise and sleep
- I have fun learning about things that interest me
- I don't overschedule myself so that I don't get anything done well

**Thank you very much for coming
tonight!**

**I am looking forward to an exciting and
stimulating school year!**

