STEAM PRACTICES

SCIENCE
- Observing and asking questions
- Developing and using models
- Planning and carrying out investigations
- Constructing explanations

TECHNOLOGY
- Become aware of the web of technological systems on which society depends.
- Learn how to use new technologies as they become available
- Recognize the role that technology plays in the advancement of science and engineering
- Making informed decisions

ENGINEERING
- Defining problems
- Planning and carrying out investigations with the iterative process.
- Designing solutions
- Obtaining evaluating and communicating information.

ARTS
- Designing products
- Creating presentations
- Exploring multiple content areas simultaneously
- Connecting and communicating information

MATH
- Making sense of problems and persevere in solving them
- Modeling with mathematics
- Looking for patterns and using tools strategically
- Attending to precision

WE ARE A MAGNET STEAM SCHOOL

Magnet schools provide a unique or specialized curriculum or pedagogy. A theme-based magnet approach promotes many of the factors associated with effective schools research including:

- a diverse population
- innovation in program practices
- improved teaching and learning
- greater student engagement
- increased parent and community involvement

Palo Verde’s magnet focus is STEAM (Science, Technology, Engineering, Arts and Math). STEAM programs provide new access to science and math for students who may not have shown enthusiasm for those subjects and engages all students in developing creative abilities.

SPOT THE STEAM PRACTICES!

Mr. Farlee represented our Mechanical Drafting Program at Mansfeld’s STEM Night. He demonstrated how to create engineering designs and how 3D printers work. All of the participants had a blast!

The Mechanical Drafting Program at Palo Verde High Magnet is designed to prepare students to apply technical skills, via computer assisted design and drafting, to create two-dimensional and three-dimensional designs. Students use Building Information Models (BIM) throughout the program. The program includes instruction in specification interpretation, dimensioning techniques, drafting calculations, material estimation, technical communications, and computer applications. In addition to the occupation-related skills, students completing this program will develop advanced critical thinking, applied academics, interpersonal relations, life management, and business, economic, and leadership skills required for the 21st century workplace. Student participants have the opportunity for Industry Certification as a Certified SolidWorks Associate, or Certified SolidWorks Professional.
MAGNET STUDENTS
MAKE IT HAPPEN!

There are over 300 magnet students at Palo Verde. They come from all parts of Tucson, drawn to our STEAM theme. Magnet students are involved in campus clubs and sports, and are active in the community. Many of them were recognized for their hard work and effort at our Academic Awards, Honors, and Student of the Quarter Night.

A LESSON IN SUSTAINABILITY

All of Mr. Ruhf’s STEM classes received a lesson in sustainability from our very own, Ms. O’Dell. Ms. O’Dell brought in two of her chickens and worked with the students on the importance of eating healthy, saving money, and reducing our impact on our earth.

ENGAGING STUDENTS IN THE IMPORTANCE OF TREES
Tree Campus K-12

Palo Verde High Magnet School has the unique opportunity to participate in the K-12 Tree Campus Pilot Program! We have teamed up with the Department of Forestry and Fire Management, and The Arbor Day Foundation to bring this program to our campus. Tree Campus K–12 inspires the next generation of tree stewards through experiences that bring the benefits of trees to life both inside and outside the classroom. This program fosters positive connections between youth and the trees in their community and cultivates within its participants a lifelong respect for trees on a global scale.

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