# Leadership, Engagement, Collaboration, Innovation

Engaging, action-driven challenges and interactive activities within each project motivate students to explore and experience Science, Technology, Engineering, Art, and Mathematics like never before.





Student-Centered













# **Mission Statement**

Regency Park Elementary School, in partnership with students, parents, and community, will strive to achieve excellence in STEAM Education by preparing all students to take their place in the diverse and changing world of the 21st century. The school will provide a safe and stimulating environment that will promote and support critical thinking and project based learning. Regency Park Elementary School will seek to achieve excellence in education by providing state of the art, data driven, student centered, and project based learning in conjunction with the Pennsylvania Common Core Standards.

Curricular

# Regency Park Elementary School STEAM Lab

#### **Common Core Standards**

Science	Technology	Engineering	Art	Mathematics
Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.	Compare and contrast the information gained from experiments, simulations, video or multimedia sources with that gained from reading a text on the same topic.	Analyze proportional relationships and use them to model and solve real-world and mathematical problems.	Recognize, know, and demonstrate a variety of appropriate arts elements and principles to produce review and rise original works in the arts.	Solve problems involving measurement and estimation of temperature, liquid volume, mass or length.





## **STEAM Projects**

## Getting it Just Right!

Students will observe the differences in light level during summer and winter.

#### Baggie Mittens

Rummer and Winter

Students will determine how long would it take for a person's hand to get cold wearing different kinds of mittens.

#### Magnet Finder

Students will design and build a mobile robot for pinpointing the location of a hidden magnet.

# Students will record what happens to

the temperature as different amounts of warm water and cold water are mixed together.

#### Newton's first faw

Students will investigate the effect of varying the friction on the velocity of the cart.

## Arts and Bots

Students will combine craft materials and robotic components to build and animate their own robotic creation.

#### Newton's Second Law

Students will use a computerinterfaced Motion Detector to determine acceleration.

#### Acidity Jester

Students will build a sensory-controlled robot to be used determine the acidity of a liquid.

Regency Park's STEAM lab will provide our students with the opportunity to explore science and math concepts above and beyond what is available in the classroom. These additional projects will enrich our students and reinforce key concepts, promote mastery learning of standards, and improve students' overall performance in these key areas. The STEAM Lab will consist of valuable hands-on manipulatives and interactive resources that will promote students to explore math, art, and science concepts.