## **Tech Workshops**

Thursday 2:30 - 4 pm



9/2/2023

Our Hands-On Tech Workshops are designed for teens 12-16. Younger kids may attend if accompanied by an adult. Activities are designed to allow students to apply their knowledge of scientific concepts to design/build/use various technology-based devices and techniques.

Each tech workshop consists of a review of the concepts being applied followed by exploratory learning activities.

- Basic designs are provided as a starting point
- Students are expected to follow the design instructions in order to create a working first build
- Based on initial results and student understanding of concepts, students will explore changes/improvements

### **Topics covered include:**

Electric Motors, Electromagnets, Galvanometers, Programming, Robots, Speakers, Structures

\$36 per workshop

Tech is taught by Kevin Sherman, BSEE
Kevin has worked as electrical and system engineer for

Kevin has worked as electrical and system engineer fo over 40 years at Motorola and General Dynamics



Workshops are held at Kaleidoscope Dance

Math, Science, & Tech

Learning by Doing



# Three great ways for kids to learn STEM\* topics



Registration and payment\*\* required prior to workshop.

\*\*Payments are non-refundable

Small class sizes ensure individualized attention!

\*STEM = Science, Technology, Engineering, Math Arizona ESA (Empowerment Scholarship Account) Approved

#### www.TechniTopics.com

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## **Math Workshops**

Hands-On Math

Wednesday 12:30 - 1:20 pm

Our Hands-On Math Workshops are designed for kids 8-14. Younger kids may attend if accompanied by an adult. Activities are designed to promote mastery of the concept being taught. Each activity progresses naturally to provide challenges for those that are ready for more advanced applications of the concept.

Each math workshop consists of an introduction to the concept followed by exploratory learning activities.

- Manipulatives and measurement tools are used to help students visualize the concepts.
- Data from science activities is often used to illustrate how math concepts might be applied.
- Worksheets are used to record work.

## **Topics covered include:**

Comparisons, Fractions, Geometry, Graphs, Ratios, Sets

**Drop-In:** \$20 per workshop (math or science)

Punch card: \$72 for 4 workshops (math or science)

• Punch cards are good for 60 days

Math is taught by Jennifer Sherman, MA Ed, MS Ed Jennifer has a bachelor's degree and two master's degrees in education. She has been a teacher and principal.

## **Science Workshops**

Wednesday 1:30 – 2:20 pm



Our Hands-On Science Workshops are designed for kids 8-14. Younger kids may attend if accompanied by an adult. Activities are designed to promote a working understanding of the concept being taught. Students are encouraged to explore beyond the requirements of the activity when time allows.

Each science workshop consists of an introduction to the concept followed by exploratory learning activities

- The scientific method steps of "Hypothesis, Test, and Results" are followed for each science activity.
- Activity worksheets are used to record findings.
- Students work in teams of 2 or 3 Teams can be parent/child or student/student

#### **Topics covered include:**

Electricity, Gears, Light, Magnetism, Magnification, Matter, Physics, Simple Machines, Static Electricity

Parents are welcome to participate at no charge

Science taught by Trudy Sherman, Ph.D.

Dr. Sherman has degrees in electrical engineering and computer science. She has been teaching hands-on science in Montessori and charter schools for over 30 years