

STEMFest

Girl Scout Junior Robotics Badges

Begin in Symmes Hall of Science at the top of the Mountain

Requirement	Description or Activity to Complete	Name of Station or Activity	Location and Time	Check-Off - Check-off when you have completed the activity
Showcasing Robots: Robotics competition and robotics Teams	Learn about a robotics team	Meet EnTech 281 First Robotics Team	Hipp Auditorium 10:30am, 11:00am, 11:30am, 12:00pm, 1:00pm, or 1:30pm	
Showcasing Robots: See robots in action	Talk to someone who uses robots in their daily lives	BMW Manufacturing	Symmes Hall of Science Lab 2	
Algorithm	Following an algorithm	Top of Symmes Hall of Science – See next page for more information	Start at Symmes Hall of Science near the solar panel doors on second floor - See next page	
Designing Robots: Plan your robot	Global problem solving robots - What robots did you observe and where would you like to see one in the future? What problems could they solve?	Biomimicry - Touch tank	Harrison Hall of Natural Science Marine Lab	



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Algorithm Walk to the barn (Starting at Symmes Hall of Science)

- Exit top stairs of Symmes Hall of Science
- Follow path to Observatory
- Stop at RMSC sign
- Turn 90° right and continue down stairs
- Follow orange/ green arrow path down the hill
- Stop at road
- Look both ways
- Proceed across the road and down the wooden stairs
- Stop at Butterfly Garden sign
- Turn 90° right and proceed down stairs
- Stop at bottom of stairs
- Turn left 90°
- Proceed with edge of road on left
- Follow orange arrow
- Proceed across double white crosswalk markings
- Harrison Hall will be on your right
- Stop at yellow curb and turn 75° left
- Follow path to enter Living History Farm
- Proceed straight along the gravel drive to the large barn
- Stop at large barn

Questions to ponder down on the Living History Farm

- How do robots move?
- How could robots help down on the farm?
- Down on the Farm Simple Machines
 - Pick up a worksheet and search the Living History Farm for simple machines.

Harrison Hall of Natural Science activities

Ecology Lab: Observe animals throughout the ecology lab.

Notice their ways of movement and adaptations they have. Identify properties or characteristics that we could mimic with robots. This is called biomimicry. Examples: tree frogs, anoles, cockroaches