Hundreds of FREE events for adults and kids! • **azscitech.com**

ARIZONA SCITECH festival®

JANUARY - APRIL 2020

PROGRAM HIGHLIGHTS

#AZSCITECH

What is the Arizona SciTech Festival?

The Arizona SciTech Festival is Arizona's BIGGEST celebration of STEM (Science, Technology, Engineering and Math) held annually during the spring season. Over 800 organizations have partnered to showcase the science all around us with hundreds of events statewide! Join us on an exciting adventure to explore the science and technology occurring through arts, education, engineering and innovation – all in your backyard!

FOR EXCITING STEM EVENTS VISIT

PARA MÁS INFORMASION SOBRE EVENTOS EMOCIONANTES DE STEM VISITE

AZSCITECH.COM

Arizona school districts neither endorse nor sponsor the organizations or activities represented in this document. The distribution of this material is provided as a community service.

Hi STEM Friends!

I'm Nova, I love all things Science, Technology, Engineering, and Mathematics. My favorite subject is entomology, the study of bugs because that's my favorite treat! I'm here to share some fun ways that you can make a mess, create something cool, and see things you've never seen before in your own community. Join me as we explore the wonders of the Arizona SciTech Festival, a celebration of all things STEM!

SPECIAL INVITATION

Join us for the Festival Kickoff Event and celebrate the start of the season with an official ribbon cutting at Connect2STEM hosted by UofA College of Medicine and Cox!

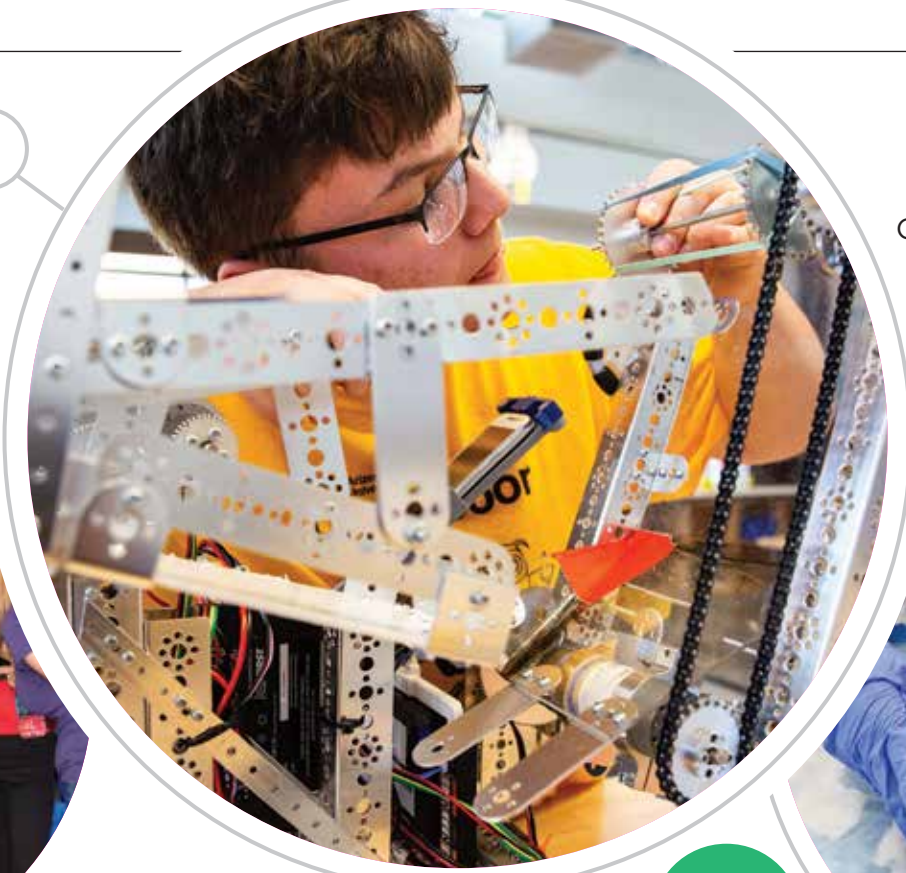
SATURDAY, JANUARY 25TH
10:00-3:00

University of Arizona College of Medicine - Phoenix

(Phoenix Biomedical Campus
435 N 5th Street, Phoenix)

LEARN MORE AT phoenixmed.arizona.edu/connect2stem

Design, create and build using the **Engineering Design Process**.



Science is Fun captivates children through STEMonstrations

Open your mind and **experience STEM**.

Farm Science Day

Saturday, February 22, 2020, 10A-2P

Arid-Land Agricultural Research Center
21881 North Cardon Lane, Maricopa, Arizona

Interactive Insect Zoo
Biotechnology
Natural Rubber Production
Measuring Photosynthesis
Irrigation Technology
Robot Tractor – Ride Along

World's Largest Field Scanner
Plant Your own Cotton
Face Painting & Kid's Crafts
Cricket-Spitting Contest!
And Much, Much More!

FREE – Family Friendly Farm and Science Activities

USDA

ARIZONA SCITECH SIGNATURE event

tinyurl.com/USDA-Maricopa

ARIZONA

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TREATMENT

JANUARY

WEDNESDAY 1/22

5:00-8:00

Spotlight on STEM: Presented by Science is Fun and Cybersecurity

Basha High School
5990 S Val Vista Dr, Chandler, AZ 85249

SATURDAY 1/25

10:00-3:00

Connect2STEM

UofA College of Medicine - Phoenix
435 N 5th St, Phoenix, AZ 85004

FEBRUARY

SATURDAY 2/1

1:00-5:00

ASU Open Door @ West campus

Arizona State University - West Campus
4701 W Thunderbird Rd, Glendale, AZ 85306

10:00-2:00

El Mirage Public Safety Day

Gateway Park
10100 N. El Mirage Rd El Mirage, AZ 85335

THURSDAY 2/6

6:30-8:00

Greenfield Star Party

C O Greenfield Elementary School
7009 S 10th St, Phoenix, AZ 85042

See what the **City of Buckeye** is doing in the fields of agri-tech and astronautics!

SATURDAY 2/8

1:00-5:00

ASU Open Door @ Downtown Phoenix campus

Arizona State University - Downtown Phoenix Campus
13590 N 47th Ave, Glendale, AZ 85306

8:00-5:00

2020 Arizona Science Bowl for High School

ASU-West Campus La Sala in the UCB
13590 N 47th Ave, Glendale, AZ 85306

10:00-3:00

Chandler Science Spectacular

Downtown Chandler
178 E Commonwealth Ave Chandler, AZ 85225

SUNDAY 2/9

9:00-3:00

2020 SciTech Festival at the Buckeye Air Fair

Buckeye Municipal Airport
3000 S Palo Verde Rd, Buckeye, AZ 85326

WEDNESDAY 2/12

5:00-6:30

STEM Fair and Maker's Expo

Arizona College Prep - Erie Campus
1150 W Erie St, Chandler, AZ 85224

THURSDAY 2/13

7:30-2:00

2020 Key to Employment Symposium

UofA Student Union Ballroom
1303 E University Blvd,
Tucson, AZ 85719

SATURDAY 2/15

12:00-4:00

2020 Tech Fest

Glendale Public Library - Main Branch
5959 W Brown St,
Glendale, AZ 85302

10:00-2:00

Family SCIFest

Children's Museum Tucson
200 S 6th Ave, Tucson, AZ 85701

10:00-4:00

Southwest Maker Fest

Downtown Mesa
150 W Pepper Pl Mesa, AZ 85201

8:00-5:00

2020 Arizona Science Bowl for Middle School

ASU-West Campus La Sala in the UCB
13590 N 47th Ave, Glendale, AZ 85306

TIME TBD

Vail Pride Day

Pima County Fairgrounds
11300 S Houghton Rd, Tucson, AZ 85747

9:00-11:00

I Love Science! Day

Arizona Museum of Natural History
53 N Macdonald, Mesa, AZ 85201

SATURDAY-MONDAY 2/15-17

10:00-5:00

Sustainability Weekend

Arizona Science Center
600 E Washington St, Phoenix, AZ 85004

THURSDAY 2/20

5:00-8:00

STEMCon 9.0

Canyon View High School
6024 N Perryville Rd, Waddell, AZ 85355

FRIDAY 2/21

6:00-8:00

Conservation Science Night

Phoenix Zoo
455 N Galvin Pkwy, Phoenix, AZ 85008

SATURDAY 2/22

1:00-5:00

ASU Open Door @ Tempe campus

Arizona State University - Tempe Campus
301 E Orange St, Tempe, AZ 85281

10:00-3:00

Chandler Innovation Fair (Including HISEF)

Hamilton High School
3700 S. Arizona Ave. Chandler, AZ 85248

10:00-2:00

Farm Science Day

US Arid-Land Agriculture Research Center
21881 Cardon Ln, Maricopa, AZ 85138

TUESDAY 2/25

12:30-5:30

Arizona Coyotes STEM Summit

Gila River Arena
9400 W Maryland Ave, Glendale, AZ 85305

TUESDAY-THURSDAY 2/25-27

9:00-2:30

AZ Renaissance Festival Student Days

Arizona Renaissance Festival Fairgrounds
12601 E, US-60, Gold Canyon, AZ 85118

THURSDAY 2/27

6:00-7:30

STEAM Extravaganza

Beaver Creek School
4810 E Beaver Creek Rd, Rimrock, AZ 86335

5:00-7:00

Cortina's 5th Annual STEAM Night

Cortina Elementary School
19680 S 188th St, Queen Creek, AZ 85142

8:00-3:30

Sahuarita's Stemtacular Festival

Sahuarita Middle School
350 W Sahuarita Rd, Sahuarita, AZ 85629

SATURDAY/SUNDAY 2/29-3/1

10:00-4:00

Tres Rios Nature Festival

Base & Meridian Wildlife Area
S Avondale Blvd, Tolleson, AZ 85353, USA,
Tolleson, AZ 85353

SATURDAY 2/29

1:00-5:00

ASU Open Door @ Polytechnic campus

Arizona State University - Polytechnic Campus
7001 E Williams Field Rd, Mesa, AZ 85212

7:00A-8:00P

Gila Valley Health and STEAM Festival

Eastern Arizona College
113, 615 N Stadium Ave, Thatcher, AZ 85552

ASU Arizona State University

Open Door 2020

Join us at ASU's annual open house for an exciting behind-the-scenes look at the most innovative university in the nation!

ASU Open Door is an opportunity for visitors of all ages to participate in hands-on activities and explore laboratories, living collections, museums and innovative learning spaces.

To get your **FREE** tickets and more information visit **opendoor.asu.edu.**

Each of ASU's campuses have a unique identity and we invite you to visit all locations!

West: Saturday, Feb. 1, 1–5 p.m.
Downtown Phoenix: Saturday, Feb. 8, 1–5 p.m.
Tempe: Saturday, Feb. 22, 1–5 p.m.
Polytechnic: Saturday, Feb. 29, 1–5 p.m.

@asuopendoor

#1 in the U.S. for innovation
ASU ahead of Stanford and MIT
– U.S. News & World Report, 5 years, 2016–2020

BEST COLLEGES U.S.News & WORLD REPORT MOST INNOVATIVE 2020

ZOVIO℠ PASSWORD GENERATOR

Great passwords are the key to staying safe online. A password should contain 12 or more characters, have a combination of uppercase and lowercase letters, numbers and special characters.

INSTRUCTIONS Use the first letter of each word, the number and special character to create your very own password.

EXAMPLE SENTENCE

At Zovio, we are _____ a _____
(VERB ENDING IN ING) (ADJECTIVE)
path to enable tomorrow's success that meets
the _____ _____ where they are, _____.
(NUMBER) (ANIMAL) (PLACE)
_____ can be a positive force for change,
(HOBBY)
creating the most _____ of all:
(ADJECTIVE)
_____. At Zovio,
(MIX 1 PROPER NOUN AND 1 SPECIAL CHARACTER !#$*?)
using _____ to create a _____ will enable
(FOOD) (NOUN)
each _____ to be in a class of their own.
(JOB)

EXAMPLE RESULT

At Zovio, we are **s**lurping a **c**urvy path to enable tomorrow's success that meets the **52 w**hales, where they are, **D**enver. **B**asketball can be a positive force for change, creating the most **g**rumpy of all: **#S**uperMan. At Zovio, using **p**izza to create a **s**paceship will enable each **s**cientist to be in a class of their own.

NEW PASSWORD: sc52wDBg#Spss

ORIGINAL SENTENCE ***At Zovio, we are charting an exciting new path to enable tomorrow's success that meets the learner where they are, on their terms. Technological disruption can be a positive force for change, creating the most cherished individual right of all: opportunity. At Zovio, using technology to create opportunity will enable each person to be in a class of their own.***

CHANDLER SCIENCE SPECTACULAR

ARIZONA SCITECH SIGNATURE event

10 A.M. - 3 P.M. SATURDAY, FEB. 8

The Chandler Science Spectacular showcases the businesses, artists, students and makers from its Community of Innovation. This free event offers unique opportunities for attendees to explore the discoveries of science engineered in their own backyard. Chandler uses 'sneaky science' by entertaining the whole family while explaining how science is important to daily life. Check out **interactive demonstrations** and **hands-on activities** by Chandler's technology companies such as Northrop Grumman and Intel, along with the next generation of science from ASU, UArizona and more.

SPONSORED BY:

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DOWNTOWN CHANDLER | 178 E. Commonwealth Ave.
CHANDLERAZ.GOV/SCIENCE

Libraries and the STEM Movement

Kelly Pearson
YOUTH SERVICES MANAGER
Burton Barr Central Library
1221 N. Central Ave.
Phoenix, AZ 85004

As a librarian, every day I have a conversation with a customer who is amazed at the broad range of services we have to offer. My message to them is always the same, libraries are about fair and equal access to information not just books. Libraries also provide a safe place for the community to interact with each other. I think people underestimate the need for a community hub. Think about your community. How many places are there for broad sections of the community to gather together? How many of them are free? It's a pretty small list and in a lot of areas, a library is the only place on the list. Virtual gatherings have their benefit, but humans rely a great deal on non-verbal cues in processing information. We need that interactive element, we need to physically be together. That's why, to borrow a movie line, libraries and makerspaces go together like peas and carrots. The goal of both is to provide a collaborative space that encourages learning, exploring and sharing.

Libraries have always served as an out of school learning environment. Storytimes help to build literacy skills, crafts help develop motor skills, and computers offer students a way to finish their homework. Makerspaces are a natural progression. In our MACH1 Makerspace we teach coding, 3D modeling, sewing, and various sciences. We provide families with access to STEM interactives that they might not otherwise have. We provide a safe environment where ideas and thoughts flourish. What do I mean by a safe environment? I'm talking about the freedom to fail. Failure teaches us to think more critically, to take risks, and to keep going. In the words of my grandfather, "It builds character." Schools are under pressure to teach to tests, which doesn't give them a lot of wiggle room to play and fail. In every MACH1 program, there is an initial stumbling block in which the child fails and doesn't know what to do. This leads to a conversation about what went wrong, how to fix it and that the world didn't end because they failed.

This is an exciting time for libraries and makerspaces. I think we have barely scratched the surface on how these two entities can combine and work together to serve the community. As a member of the community, you are a part of this conversation. Visit your libraries and makerspaces and see how you can be a part of them.

MARCH

WEDNESDAY 3/4

3:30-5:50

STEAM Fest Family Event

Avondale Civic Center Library
11350 Civic Center Dr, Avondale, AZ 85323

THURSDAY 3/5

5:00-8:00

PADT SciTech Open House

PADT - Tempe
7755 S. Research Drive, Tempe AZ, 85284

5:00-10:00

STEAMtastic

PVCC Black Mountain Campus
34250 N. 60 St. Scottsdale, AZ 85266

SATURDAY 3/7

10:00-1:00

Innovation Nation STEM Festival

Northland Pioneer Center, Performing Arts Center Snowflake
1001 W Deuce of Clubs, Show Low, AZ 85901

10:00-2:00

Canyon Ridge STEM Festival

Canyon Ridge School
17359 W Surprise Farms Loop N, Surprise, AZ 85388

4:00-10:00

Bear Essential's Young Reporter Cookout

Saguaro National Park West
2700 N. Kinney Rd., Tucson 85743

SATURDAY 3/14

9:00-3:00

20th Annual Ancient Technology Day: Prehistoric & Historic

Pueblo Grande Museum
4619 E Washington St, Phoenix, AZ 85034

This guide gives you dates and times for the events but go to azscitech.com to find out what to expect and how to get involved.

ASU Ira A. Fulton Schools of Engineering
Arizona State University

outreach.engineering.asu.edu

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Experience STEM in the Outdoors!

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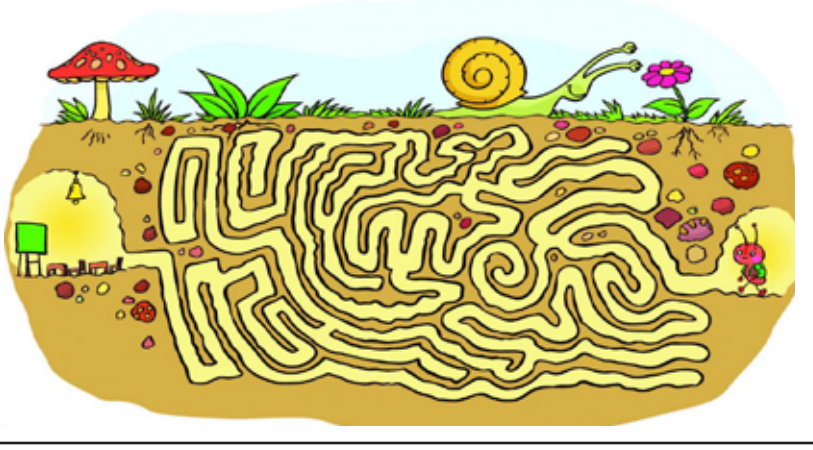
Our residential Outdoor STEM Centered Education Programs at one of our residential camps
or
Our Mobile STEM Discovery Lab.

Contact us!
Info@tontocreekcamp.org
tontocreekcamp.com



SAT/SUN 3/14 – 15

9:30-5:30

Science City at the Tucson Festival of Books

University of Arizona Mall
1401 E University Blvd, Tucson, AZ 85721

WEDNESDAY 3/18

4:30-7:30

Geeks Night Out

Tempe Community Complex
3500 S. Rural Road Tempe, AZ 85282

SAT/SUN 3/21-22

TIME TBD

Luke Days 2020

Luke Air Force Base
14185 Falcon St, Luke AFB, AZ 85309

SATURDAY 3/28

10:00-3:00

Arizona Parenting Magazine's Camp and Summer Expo

OdySea in the Desert
9500 East Vía de Ventura, Scottsdale, AZ 85256

9:00-1:00

Spring Into QC

Mansel Carter Oasis Park
19535 E Appleby Rd, Queen Creek, AZ 85142

Take off on an adventure with STEM

Chill out at **Science City** at the Tucson Festival of Books

Can you identify the 5 images that make up the SciTech Gecko?

APRIL

SATURDAY 4/4

10:00-4:00

Prescott Regional SciTech Festival 2020

Embry-Riddle Aeronautical University - Prescott
3700 Willow Creek Rd, Prescott, AZ 86301

TUESDAY 4/28

5:00-7:00

AESD STEAM Showcase

Sevilla Elementary School
3801 W Missouri Ave Phoenix, AZ 85019

WEDNESDAY 4/29

5:00-7:00

Sierra Verde STEAM Night 2020

Sierra Verde STEAM Academy
7241 W Rose Garden Ln, Glendale, AZ 85308

THURSDAY 4/30

3:00-5:00

Salpointe Catholic High School STEM Showcase

Salpointe Catholic HS
1545 E Copper St, Tucson, AZ 85719

Love sports? Check out ways to improve your game through STEM.

Meet Murphy, our **SciTech Leopard Gecko**

Visit **azscitech.com** to find more events that are not listed in this program. Plus, you can search for events that have subjects you're interested in like arts or food science!

Each year thousands of students participate in Biosphere 2's STEM-based field trips where they see our planet through the eyes of a scientist. Bring your class to experience the world's largest living research center, Biosphere 2.

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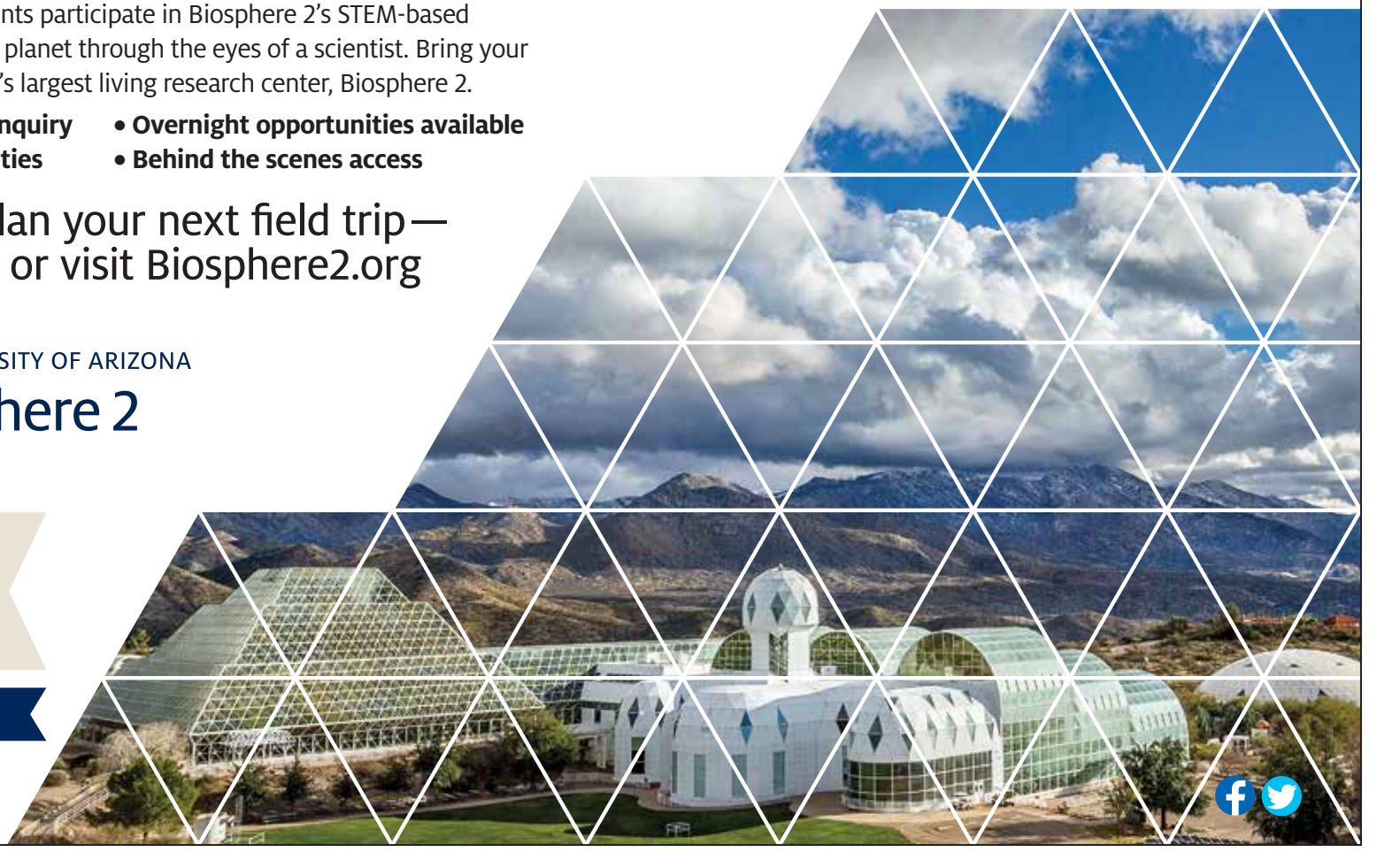
FIELD TRIPS!



Seeing
the universe
is no longer a shot in the dark.

Twinkle, twinkle little star, how I wonder what you are? Kids of all ages can find the answer to this question in Arizona. It's the ideal destination for stargazing, thanks to the state's good weather and sound stewardship, as well as the fact that its mountainous geography shields dark-sky oases from urban skyglow.

Arizona boasts ten (!) Dark Sky Parks, defined by the International Dark-Sky Association (IDA) as lands with "exceptional quality of starry nights and a nocturnal environment that's specifically protected for its scientific, natural, educational, cultural heritage, and/or public enjoyment."

The most famous of these is Grand Canyon National Park, where remarkably beautiful night skies lend jaw-dropping credence to the Park Service's reminder that "half the park is after dark."

On a clear night, you can see Mercury, Mars, Jupiter and the Andromeda galaxy. The sky is awash in stars, double stars and star clusters.

Arizona's dark history — and bright future.

Arizona helped birth the dark-sky preservation movement when, in 2001, the IDA designated Flagstaff as the world's very first Dark Sky Place for the city's commitment to protecting its stargazing-friendly skies.

Since then, several other Arizona communities have earned Dark Sky status from the IDA — including Sedona, Big Park (aka the Village of Oak Creek), Camp Verde, Kaibab Paiute Tribal Land and Fountain Hills. Arizona is home to more certified Dark Sky Places than any other U.S. state. And no country outside the U.S. can rival its 16 dark-sky communities.

Arizona, long synonymous with sunshine and blue sky, now offers a visitor experience that extends well past sunset to the stars beyond. And its dark side "up above the world so high" is spectacular.

For more information about dark skies, visit DarkSky.org. And check out the state's highly acclaimed observatories:

Lowell Observatory - Giovale Open Deck Observatory, Flagstaff
This public observing plaza features six advanced telescopes that offer an unparalleled viewing experience.

Mount Lemmon SkyCenter, Tucson
Located high above the city, SkyCenter offers SkyNights Stargazing Program with two of the largest telescopes available to the public.

Kitt Peak National Observatory, Tohono O'odham Nation
Located near Tucson, the Observatory is home to one of the largest arrays of optical and radio telescopes in the world.

Mount Graham International Observatory, Safford
Scientific researchers from around the world make use of the facilities at this research arm for the Department of Astronomy at the University of Arizona.

Fred Lawrence Whipple Observatory, Amado
The largest field installation of the Smithsonian Astrophysical Observatory has a Visitors Center featuring displays and exhibits on astronomy and astrophysics.

Flandrau's Observatory, Tucson
In the heart of the University of Arizona campus, discover a 16-inch telescope with free viewing of the stunning night sky on Thursday – Saturday evenings.

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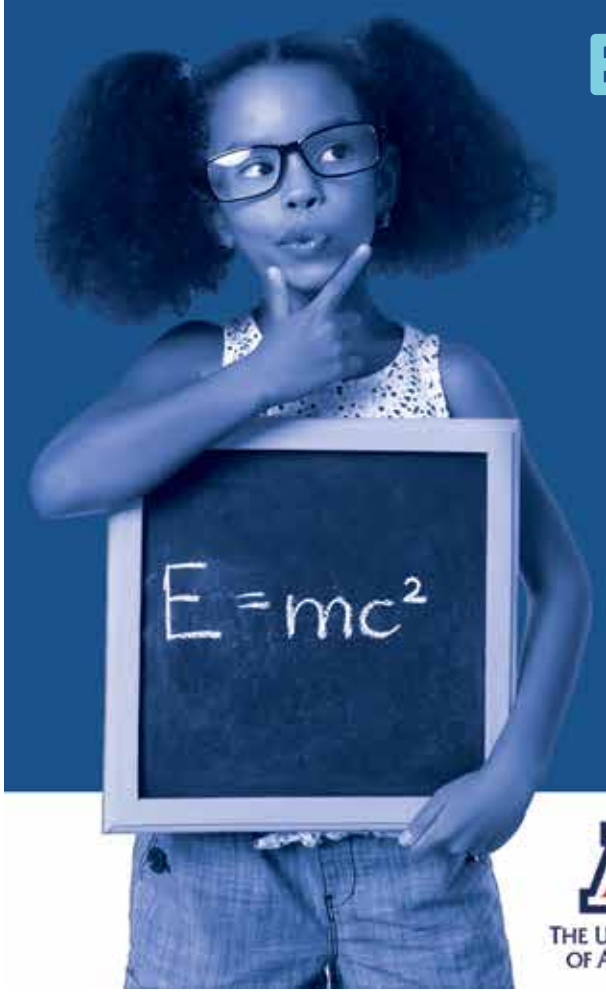

EMBRACE YOUR INNER NERD!

Celebrate Science, Technology, Engineering, Math - and Medicine.

CONNECT2 STEM

SATURDAY JAN. 25, 2020 10AM - 3PM

FREE ADMISSION!

150+ Hands-On Activities for ALL Ages

The University of Arizona | COX | Arizona SciTech

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phoenixmed.arizona.edu/c2s