



MARKETPLACE FOR KIDS EDUCATION DAY
Thursday, January 4, 2024
9:00 A.M. – 2:00 P.M.
VALLEY CITY STATE UNIVERSITY

Welcome!

On-Line Registration opens **Friday, November 9, 2023**. All registrations are “first come first served.” The registration must be complete before it can be processed.

Registration closes **Friday, December 15, 2023**. You will be notified when your registration has been received and processed.

Education Day General Schedule:

(A personalized schedule for each student will be printed on their name badge)

***Note that these times are subject to change**

9:15 am – 9:30 am	Pre-Opening Music	11:35 am – 12:00 pm	(Teal) Non-Project Students Lunch
9:30 am – 9:50 am	Opening Rally		(Maroon) Non-Project Students View Projects
10:00 am – 10:25 am	All Students Attend Classes	12:00 pm – 12:25 pm	(Teal) Non-Project Students View Projects
10:35 am – 11:00 am	All Students Attend Classes		(Maroon) Non-Project Students Lunch
11:00 am – 11:30 am	Project Students Eat Lunch	12:30 pm – 12:55 pm	All Students Attend Classes
11:10 am – 11:35 am	Non-Project Students Attend Classes	1:05 pm – 1:30 pm	All Students Attend Classes
11:30 am – 12:25 pm	Project Students Present Projects at Hall of Great Ideas Showcase	1:40 pm – 2:00 pm	Closing Rally

Class List and Description

A. Land Surveying and Mapping

Discovering Land Surveying and how we, as Land Surveyors, help build the world around us by using technology such as Laser scanners, Robots, GPS and Drones.

B. A “Breakout” from Traditional Roles!

Feeding a growing world is one of the most vital future needs for all of us! In this session, students will have fun “breaking out” of lock boxes while learning about many career paths that are available to them and how these jobs relate to agriculture and feeding the world. Come and be challenged! Limit 24 Students.

C. Customs & Border Protection

Demonstrate Red Man Defensive tactics and handcuffing. Limit 16 Students.

D. DIY Breadboard Circuits

Come learn and explore circuit builds and the basics of electricity flow through circuits. In this session, students will become familiar with circuitry components like photoresistors, push buttons, batteries, LED’s, capacitors, and breadboards. Each build increases in complexity, and all components are reusable so that builds may be disassembled and recreated! Two 50-minute sessions and one 25-minute class. Limited 16 Students.

E. Electric Motors

For this class we will use two 20-minute sessions to explain how electric motors work and each student will build a simple electric motor that they can take home with them. Each student will build a motor kit, and then run the motor using a battery to learn how electricity make a motor turn. Grades 5 and above. Limit 10 Students.

Electric Circuits

A 20 Minute session where we will explain how an electric circuit works to turn on a light. Students will build a simple circuit they can take home. The project will have a battery, a switch, and a lamp they will connect with wire and be able to turn the light on and off. Grades 5 and above. Limit 10 Students.

F. Intro to Entrepreneurship

Welcome to the world of problem solving and profits. In a fast 25 minutes you’ll learn how to create new products like an entrepreneur. Students will participate in a hands-on project to learn how to solve problems with creativity. Limit 24 Students.

G. Experiments with Electricity

We will be using snap circuits and teaching kids about conductive materials and insulators, mechanical energy and electrical energy. Limit 24 Students.

H. Young Workers – Talking Safety

Let’s talk about safety for young workers. Your first real job could come with real risks. Limit 24 Students.

I. Energy Opportunities in North Dakota

Discuss what forms of energy exist and what methods are used in North Dakota to produce electricity and other forms of power. Explain the importance of energy relating to our quality of life, environment, and economic impacts to society.

J. Fun with Chemistry

Let's play with glitter and fingernail polish remover as an example of how a "calming bottle" is made. In this experiment, we will discuss how different chemicals are attracted or repelled from each other. Limit 24 Students.

K. The Wonder of the Human Brain

Students will learn about how the human brain controls a variety of everyday tasks such as thinking, planning, making decisions, creating categories, and memory. Students will test the limits of their own minds via several interactive experiences such as creating and then attempting to recall a list of items in order as well as describing characteristics of an image flashed momentarily.

L. Lessons About Your Money

The more you know about how to make money, how to save money, and how to spend money, the less likely it is that you will have problems as an adult. Do you know people who never seem to have enough money? If you don't want to live that way, listen up. We have some good information to share with you today.

M. Manufacture a Window with Marvin

Have you ever wondered how manufacturing works? Join Marvin as we discuss how we go about making as many quality windows as we can in a day for people's homes. There are lots of jobs that make this possible, from engineers to production workers, everyone has a role to play.

N. Basic Observational Astronomy

A quick look at seasonal constellations of the Northern Hemisphere.

O. Operation LifeSaver

Railroad Safety, trespass prevention, and how to report emergencies that occur while on or near railroad property.

P. A Poetry of Things

The great American poet William Carlos Williams once wrote "no ideas but in things" to suggest how abstract ideas often emerge from specific details. In the session's first half, we'll focus on how sensory description can help students make a poem from an object in or out of the room. For the second half, we'll transition to editing strategies and introduce students to the submission process for publication. Grades 6 - 8. Limit 12 Students.

Q. Build Electronic Gadgets for Yourself

Do you want to create a cool and romantic lighting show? Do you want to build a robot that can run, dance, and be controlled by you? If your answer is yes, join this class. We will present how to build your electronic gadgets through several steps. You will learn about the fundamentals of circuits and how to use resistors while building a smart device with your own hands. Limit 24 Students.

R. Nursing and the Human Body

Students will learn about the ear drum, view different appearances, and what those appearances mean. Listen to the heart sounds and learn about the heart placement in the body. Students will also learn hands only CPR and the lifesaving effects. Limit 12 Students.

S. Stress Busters

We all have times when we feel happy, excited, and energetic. We also have times when we feel scared, sad, or overwhelmed. Psychologists can help people understand their emotions and teach them healthy ways to work through their feelings. In this session we will talk about what stress feels like and we will make stress balls that students can use the next time they feel stressed.

T. Food Truck Project

Learn basics on developing your own business by designing your own Food Truck business. Color and design a 3-D Food Truck along with a one-page menu.

U. Career Paths in Aviation

How STEAM can lead to Entrepreneurship by problem-solving and using critical thinking. Learn about the different career paths in Aviation.

V. Money DOES Grow on Trees!

Wood, paper, heating, buildings, musical instruments, crafts, toys, nuts, fruits, and even mushrooms! "Wood" you believe it comes from a tree? Many jobs rely on forestry and selling "specialty forest products" could be an opportunity to start your own business to earn extra money. Limit 30 Students.

W. Money Smart

Developing positive financial habits and understanding the concept of money, budgeting, saving, and more!

X. US Army Corps of Engineers

Natural Resource Specialist/Park Ranger Career Information.

Y. Who takes care of the roads we drive on every day?

Have you ever wondered who takes care of the roads you drive on to get to your house? Have you ever wondered who designed that bridge your school bus drives over? Have you ever wondered who cleans the snow off the roads? Come and explore the different career paths with the North Dakota Department of Transportation.

Z. Rain to Drain

Students will construct models to learn about the movement of stormwater in natural and developed communities and ways to use green infrastructure and stormwater best management practices to reduce urban runoff and nonpoint source pollution.