# PBS Reno Curiosity Classroom | Pre-K Workshop Offerings

# **Preschool**

#### **Curious George Construction Vehicles — Preschool**

Put on your hard hat and vest and learn about construction sites with Curious George in this engaging lesson. Children will learn about different construction equipment, the function of each machine, and construction site safety through a read aloud, a video clip, a creative art project, building with blocks, and an active game.

3.PK.9, 7.PK.2, 7.PK.3, 5.PK.1

#### If You Give a Mouse a Cookie — Preschool

The well-known book introduces the important concepts of sequencing and cause and effect. During the lesson, children will also practice counting and matching the number of objects in a set to the correct number. 1.PK.4a, 1.PK.4b, 1.PK.3c, 1.PK.3, 1.PK.5, 5.PK4a, 6.PK.4, 6.PK.7, 7.PK.2, 7.PK.5, 8.PK.5

#### The Cat in the Hat — Preschool

This delightful classic is the foundation of a fun lesson that provides children an opportunity to use their imaginations, work on gross motor skills, and practice problem solving. Students will be encouraged to demonstrate their balancing skills like the Cat in the Hat through an engaging activity.

2.PK.2, 1.PK.1, 3.PK.2

#### **Robotics** — Preschool

What is a robot? Can robots think for themselves? Students will learn that humans have to program robots to do what they want them to do. With the use of robotic animals, students will learn basic coding skills and have the opportunity to program their animal to move it around the classroom.

3.PK.1, 4.PK.2, N.PK.2, P.PK.2, 1.PK.1

#### Mouse Shapes — Preschool

What can you make with various geometric shapes? In this lesson, children have the opportunity to explore geometric shapes through hands-on activities and games. They discover that these shapes are in their everyday environment.

4.PK.1a, 4.PK.1b

PBS Reno Curiosity Classroom uses on air, online, and print resources to help parents, caregivers, and childhood educators prepare children for success. As part of the PBS Reno service, we offer FREE Curiosity Classroom workshops.

An engaging video, a read aloud, and fun hands-on activities are integrated into the workshop. Lessons are aligned to the CCSS, NGSS, NV Academic Content Standards, and Nevada Pre-Kindergarten Standards.

All materials are supplied, and an educational professional facilitates each workshop.

For more information or to schedule a workshop contact <a href="mailto:education@pbsreno.org">education@pbsreno.org</a> or 775.600.0551.

#### We're Going on a Bear Hunt — Preschool

This classic song and story invites children to bravely set out to find a bear. Students will retell a story, sharpen math skills, and make a map. The lesson is filled with engaging, fun activities.

3.PK.1, 7.PK.1a, 7.PK.2, 1.PK.4a, 1.PK.4b, 2.PK.1, G5.PK.1

#### **Dental Hygiene** — Preschool

In this lesson, children will learn about ways to keep their teeth healthy. They will go on a virtual field trip to the dentist's office and learn about oral hygiene. Through various fun activities, they practice flossing and brushing. 1.PK.1, 1.PK.3

#### Benny's Pennies — Preschool

When Benny asks his family members what he should buy with his five new pennies, each one gives him an idea. After this delightful book is read, children will learn about the attributes of a penny through hands-on observation. A counting game will give the children practice counting 1-10 cents. Students will learn to identify a penny and a nickel.

M.1.PK.4, M2.PK.1, M3.PK.1



# PBS Reno Curiosity Classroom | Kindergarten Workshop Offerings

"My kiddos always enjoy the PBS Reno workshops and their presentations! There was real, genuine excitement for science in my classroom today!"

— Cottonwood ES, Kindergarten

"The students were excited to take their materials home and share with their families."

— Incline ES, Kindergarten

"I heard my students say, 'This is the coolest experiment EVER!' They learned the water cycle."

- Spanish Springs ES, Kindergarten

# Kindergarten

#### **Curious George Goes Camping — Kindergarten**

This lesson is designed to teach children about tracking animals in the wild. Through a video clip, read aloud, and several activities, students will learn about nature and even make their own unique animal tracks. SL.K.1, SL.K.2, L.K.6, NGSS-K-ESS2-2

#### Give It a Push, Give It a Pull — Kindergarten

In this lesson, students are given the opportunity to observe, measure, and describe how pushes and pulls of various objects are used to produce and control motion. They will plan and conduct simple hands-on investigations about motion and begin to understand the relationship of cause and effect.

SL.K.1, RI.K.1, K-PS2-1, K-PS2-2

#### Little Cloud — Kindergarten

In this lesson, children will use science and their imaginations to explore clouds. They will learn about the water cycle and why a cloud "rains." Then they put this knowledge to the test by performing a science experiment to try to make their own cloud rain. W.K.1, RI.K.7, SL.K.1, K-ESS2-1, K-ESS3-2

#### Robotics — Kindergarten

There are many types of robots in the world. How do we know if a machine is a robot or not? Students will learn what makes a robot a robot. Then they get the chance to work with a robot and discover different ways to control and command a robot.

K.AP.A.1, K.CS.HS.2, K.IC.C.1, K.IC.SI.1

#### My Oh My, A Butterfly — Kindergarten

Let's take a journey through the butterfly life cycle. Students will learn about the four stages of the life cycle; including the egg, larva, pupa, and butterfly. They will also end the lesson by making their own diagram of the butterfly life cycle using pasta!

W.K.1, RI.K.1, SL.K.1, SK.K.1, SL.K.2, K-LS1-1

### Rainbow Fish Discovers the Deep Sea — Kindergarten

This lesson takes the children on an underwater math adventure. Through story-telling and story development, the children will practice graphing, adding, and subtracting.

K.OA.A.1, K.CC.A.3, K.CC.B.4, K.CC.A.1, W.K.1, K.MD.2, K.MD.3, K.OA.2

### **Counting Coins — Kindergarten**

In this fun lesson, students will focus on counting money and shopping. Students will use pennies, nickels, and dimes to purchase the parts needed to build a bike. The lesson will conclude with a fun game of money BINGO! K.CC.A.1, K.CC.A.3, K.MD.8.3, E10.1.1

# Pete the Cat and His Four Groovy Buttons – Kindergarten

Count down with Pete in this story about four groovy buttons. Children are introduced to simple subtraction in this fun lesson. Not only does Pete lose buttons, but so does each child as they participate in a story reenactment. They will continue to practice math skills through various activities.

K.CC.B.4A, K.OA.A.1, K.OA.A.2



# PBS Reno Curiosity Classroom | 1st Grade Workshop Offerings

## 1st Grade

#### Bones — Grade 1

Let's take a look at what is inside our bodies. Our bones are amazing. In this lesson, students will get the opportunity to discover what a bone looks like all the way through. They will also be able to explore bone sizes, and their important functions. Let's make NO BONES about it... your students will have fun learning about their super skeletons!

#### Glowing, Glowing, Gone — Grade 1

This lesson is designed to teach children about the characteristics of a firefly. Through a video clip, read aloud, and several activities, students will discover why a firefly has its blinking light. The lesson includes an introduction to synonyms and writing about fun firefly facts.

RL.1.1, SL.1.1, 1.RL.2, 1.RL.3, 1.LS1.1a

#### Mirror, Mirror — Grade 1

Using flashlights and mirrors, learners explore how light travels. They investigate how light is reflected differently by curved and rough surfaces and why mirrors are the best surfaces for seeing themselves.

1-PS4-2, 1-PS4-3

#### Trading Up — Grade 1

This lesson is an excellent introduction to how to "trade" several smaller valued coins for larger coins. They will start with pennies and as they earn more, they will trade them for nickels, then dimes, quarters, and then a dollar. Once a dollar is earned, they can buy their class special "merchandise."

Social Studies Standard: E10.1.1

#### **Discover Pumpkins — Grade 1**

Pumpkins are tough enough to handle all of the handson activities presented in this lesson. Children will explore math and science concepts through a video clip, read aloud, and several engaging activities. Students will discover why a pumpkin floats and how to efficiently count pumpkin seeds using place value. 1.MD.C.4, 1.MBT.B.2

#### Moon in Motion — Grade 1

In this lesson, students will explore how the moon moves across the sky at night and how the moon changes in a cycle that lasts about a month. Through a video clip, read aloud, and scientific exploration, students will be introduced to four phases of the moon. The culminating activity is demonstrating their knowledge by using Oreo cookies. Of course they get to eat the "moon"!

RL.1.1, SL.1.1, 1-ESS1-1, 1.RL.2, 1.RL.3

#### Spiders, Aaaaarrgh! — Grade 1

Students will explore the characteristics of a spider through a fictional book, a short video clip, and an art activity. After sharing the read aloud, students will retell the story. The lesson ends with a fun art project using what they learned about different spiders' webs. RL.1.1, RL.1.2, RL.1.3, RL.1.5, LS1.A, SL.1.1, W.1.3

#### Robotics — Grade 1

1.CS.D.1, 1.AP.PD.1

Why do humans use robots? During this workshop, we will discuss the many reasons robots help us. One useful thing that robots can do is be programmed to do tasks over and over again. Students will get the opportunity to program their robots to do loops (repetitive tasks). What will your robot do for you?

"I can't decide which of your workshops my favorite is. I am always so impressed every time you come. This is a wonderful program that I hope to be able to continue with for many years to come. Thank you Channel 5!"

— Spanish Springs ES, 1st grade

"Your workshops provide such a fun way of learning!! Thank you for including my class in on the fun."

— Gomes ES, 1st grade



# PBS Reno Curiosity Classroom | 2nd Grade Workshop Offerings

# 2nd Grade

#### A Koala is NOT a Bear! — Grade 2

Animals possess certain needs that its habitat meets. Students will gain knowledge about koalas and their environment through viewing a short video clip, exploring factual information with supporting photos, and listening to the read aloud Koala Lou. The culminating activity is a short writing assignment and art project.

RL 2.1, SL 2.1, RL.2.3, RL.2.5, 2-LS4-1

#### \*Going Batty — Grade 2

This lesson is designed to integrate students' knowledge of living things – bats and birds, as well as, learn about the importance National Parks play in the survival of bats. The lesson includes listening to the read aloud Bat Loves the Night, viewing a short video clip, utilizing a Venn diagram to organize information, and finally playing an active game that demonstrates echolocation.

RL.2.1, 2-LS4, W.2.8

### Weathering and Erosion — Grade 2

In this lesson, students learn about erosion and weathering through a hands-on Skittles experiment. Students discover weathering and erosion are two different processes that can occur at the same time due to water, wind, and air.

RI 2.1, SL.2.1, 2-ESS1-1

#### Wiggling Worms — Grade 2

Worms are hard at work down in the ground. The lesson encourages students to collect data by observing live earthworms, labeling drawings, and drawing conclusions about the earthworm's life. The culminating activity is to write about "a day in the life of an earthworm."

RI 2.1, W.2.1, SL.2.1, 2-LS4-1, W.2.8

#### Like Fruit? Thank A Bee! — Grade 2

Using paint and sticky notes students will be able to visualize how bees pollinate flowers. Using an active hands-on activity, students will learn about the important role pollen plays in producing the foods we eat, and plant reproduction.
2-LS2-2

"Students were able to identify a problem, plan a solution, test and rebuild. This allows students to be successful when solving a problem. It builds confidence and my students had a blast. Great vocabulary!" — Anderson ES, 2nd grade

"Hands on excitement! Your lessons engage the children the entire time. We wish we could have more PBS Reno workshops!" — Peavine ES, 2nd grade

"This lesson exceeded my expectations and I am so pleased I decided to work with PBS Reno to bring these lessons to my students." — Sutro ES, 2nd grade

### Alexander's Money — Grade 2

Children can relate to Alexander's quandary. Alexander somehow spends his money in a very short amount of time. Students are charged with the task of keeping track of Alexander's money. They explore different coin combinations and play a game comparing coin values.

2.MD.C.8

#### Robotics — Grade 2

Imagine what it would be like if your dance moves did not follow the words of the song. Imagine what a story would be like if you put the ending first. In this series of robotics lessons, students get to discover the importance of sequencing. With the use of a robot, children will make their own sequences to try to keep their robot on a path. One wrong step in the sequence and your robot may experience an epic failure! 2.AP.C1, 2.AP.M.1, 2.AP.PD.1

### Race for Survival — Grade 2

If you could choose any color to be, what color would you choose? A chameleon has the ability to change it's color so it can blend into its surroundings. How does camouflage effect an animals ability to survive? What about a predator's ability to eat? Students will investigate camouflage through a short video clip, read aloud, and fun hands-on activity.

2-LS2-1, 2 LS4-1



\*In collaboration with

Freat Basin

# PBS Reno Curiosity Classroom | 3rd Grade Workshop Offerings

# **3rd Grade**

#### Canine House of Cards — Grade 3

Take the challenge! Students are introduced to the engineering design process through a short video clip, read aloud, and engaging hands-on activity. The challenge is to construct a strong building out of tape and index cards, using one common architectural shape. This building needs to be stable and hold at least one dog biscuit.

RI3.1, W3.2, 3-5-ETS1-1,3-5-ETS1-2, 3-5ETS1-3, 3.RI.4

#### Float My Boat — Grade 3

Students will examine how surface area and water displacement affect a boat's ability to float. The lesson focuses on the engineering design process where students build a physical model and demonstrate an understanding of what real engineers do. 3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3, RI.3.1, RI.3.4, RL.3.7, W 3.2

#### Inspiring Acts of Kindness — Grade 3

What is our responsibility in the world? This lesson inspires students to think of small ways to do something for the common good. After listening to the read aloud Miss Rumphius, students will demonstrate the understanding of the word philanthropy through writing. During the workshop, students will explore blending color and create a simple painting. RL.3.1, RL.3.2, RL.3.7, W 3.3, SL 3.1

"This lesson was so entertaining. The content integration was masterful! Thanks for the adventure this afternoon!" — CC Meneley ES, 3rd grade.

"This was a great way to add literature, teach fractions, show the connection between fractions and division, and have fun doing it." — Sage ES, 3rd grade

"The students absolutely love the workshops that are provided in the classroom! These workshops promote critical thinking through creative activities, connecting themselves to the world and to literature. Thank you guys for your work!" — Double Diamond ES, 3rd grade

#### **Sharing Cookies — Grade 3**

Ma bakes a dozen cookies for her children, but the doorbell rings and they must share their cookies with friends. Students will explore the concept of fractions and easy division through a video clip, the read aloud The Doorbell Rang, and a fun hands-on activity. W3.3, 3.OA.A.1, 3.OA.C.7, 3.NF.A1, SL.3.1, 3.OA.A.2

#### Snap, Crackle, and Jump — Grade 3

Charge a balloon and have some fun moving objects without touching them. In this lesson, students will be involved in exploratory activities to learn about static electricity. They will collect, record, and evaluate data. W 3.2, 3-PS2-3, 3-LS4-1, 3 ESS2-1, W.3.8, 3-ESS2-1, SL 3.1

#### Pigs Will Be Pigs — Grade 3

This lesson focuses on counting money and making choices within a budget. Students will solve problems involving decimals when adding and subtracting monetary values. The read aloud encourages the students to calculate how much money is found by the Pig family. Then they will be asked to order from the menu and stay within a budget. RL 3.1, 3.OA.D.8

#### Robotics — Grade 3

Sensors are working all around us. We see them when a door opens automatically. We see them when paper towels dispense on their own. Sensors might detect light, movement, or sound. Robots use sensors to discover and respond. Students will get to work with a robot to learn to control it using sensors. 3.CS.D.1, 3.IC.C.1

#### Eat Like a Bird — Grade 3

The challenge is to collect "food" using different types of "beaks" and to find the food that's easiest to pick up. Students will discover how the shape of the beak determines what type of food the bird will eat. The lesson includes a video clip, read aloud, and hands-on investigation. Students record, analyze, and interpret data.

3-LS4-1, 3-ESS2-1, W.3.8



# PBS Reno Curiosity Classroom | 4th Grade Workshop Offerings

# 4th Grade

## Feeding Frenzy — Grade 4

How do insects eat? Different insects have specialized mouths for the food they eat. Students explore how insect mouthparts are specific to their food sources. Using several tools and models, students will gain an understanding of how different mouthparts support the survival of the insect.

SL4.1, 4-LS1-1, W4.4, W4.9

## Pop Bottle Waves — Grade 4

A plastic soda bottle will help students observe, draw, and write about how waves are shaped. Through an engaging activity, students are given the opportunity to move around and participate in a guided model of amplitude, wavelength, and frequency. Let the waves begin to rock and roll!

SL4.1, W 4.4, W 4.9, 4-PS4-1

# Sir Cumference and the Great Knight of Angleland — Grade 4

Join the adventure! Students go on a quest to discover acute, obtuse, right, and straight angles in this delightful lesson. As a culmination to the lesson, students will follow directions using different angles to create a treasure map of their own.

RI 4.3,4.G.A.1, 4.RI.7

### Spool Racer — Grade 4

In this lesson, students explore potential and kinetic energy by making a spool racer. This tabletop vehicle stores energy in the elasticity of a rubber band. Get ready, get set, and roll!

4-PS3-2, 4-PS3-3, 4-PS3-4

# Annie Alexander and her place in Nevada history — Grade 4

In 1905, Annie Alexander helped lead an expedition to Nevada to hunt for fossils. Even though they were searching in the desert, they found fossils of marine animals. How did this happen? Through a read-aloud and a short video, students will learn about the Ichthyosaur fossils found in Nevada and how they show what Nevada used to look like. Students will then make their own model of an ichthyosaur.

VA:Re7.2.4a, CCSS.ELA.RL.3.4

"Students were able to make connections with the workshop topic and what we have done in class on the topic." — Fremont ES, 4th Grade

"This lesson had a great balance of vocabulary and concept development with interactive learning for the kids. They were really engaged and enjoyed it all!" — Hunsberger ES, 4th grade

"I absolutely love the way the stories, projects, and tasks work so well with our curriculum and standards. The kids are so engaged and excited to participate."

— Southside ES, 4th grade

"Loved the use of a book, technology, hands on and listening skills. Thank you!"

- Jesse Hall ES, 4th grade

### More Bang for Your Buck — Grade 4

After winning a shopping spree at the local supermarket, Mrs. Pig has to figure out the value of all her goods. The lesson focuses on economic concepts. Students will play a game and keep a running total to maximize the value of a shopping spree.

4.NBT.B.4, 4.MD.A.2. SS.4.30

#### Tracking Our Money — Grades 4

We have all been involved in school fundraisers. This story describes how a class of 2nd graders tries to earn enough money to visit the Statue of Liberty. Through their efforts they also learn about expenses and profit. Students will explore how to use a simple ledger to track money. Through a hands-on activity they will build, read, write, and compare large numbers. 4.NBT.B.4, 4.NBT.A.3, 4.MD.A.2, 4.NBT.A.2

#### Robotics — Grade 4

Let's explore the actual parts that make up a robot. Students will learn about actuators, sensors, and the robot's computer brain. Children will get to build a robot and discover what each part does to make the robot function properly.

4.AP.M.1, 4.IC.C.1

