



**Teacher's Guide
For the Cheyenne Mountain Zoo
Docent Auxiliary
Classroom Safaris, Tours, and Programs
2023-2024**

The Cheyenne Mountain Zoo Docent Auxiliary is a group of dedicated and knowledgeable docent volunteers who take pride in taking teachers and students on an educational tour through the beautiful Cheyenne Mountain Zoo. Since 1969 docents have been providing classroom school safaris and tours designed to coincide with the Colorado Academic Standards and grade-level expectations. The docents will enhance your student's course of study with a power point classroom "Safari" prior to your visit to the zoo. Many of the Docent Safari presentations are accompanied by animal bio-facts for the students to see and touch. A specific tour vocabulary list is provided to the teacher specific to the tour. Guided tours at the Zoo are Docent led to enhance student learning and permit active dialog as the students apply their science knowledge outside of the classroom.

A trip to the zoo allows students to connect learning of concepts from their curriculum that are linked directly to grade level specific **2020 Colorado Academic Life Science and/or Social Studies Standards**. We have made the connection for you in how our classroom safaris and tours tie into the Colorado Academic Standards!

From Kindergarten to high school students, the Cheyenne Mountain Zoo Docent Auxiliary offers unique learning opportunities. Students can learn how they can positively impact the conservation and preservation of animals and their environments around the globe.

Don't delay! Give us a call and schedule a wonderful "outdoor classroom" learning experience for your students!

Sue Sallee
VP Outreach
Cheyenne Mountain Zoo Docent Auxiliary
cmzdocenttours23@gmail.com
(719)-599-8758

Scheduling a Docent Classroom Safari and Docent Led Tour

Contact Person: Sue Sallee, Vice President Outreach

Email: cmzdocenttours23@gmail.com **Phone:** (719)-599-8758

Tours & Safaris Offered: Monday, Tuesday, Thursday, and Friday throughout the school year.

We will be as flexible as possible to accommodate your specific dates and times, and the availability of our Safari and Tour Docents. Safari Docents will be scheduled to come to your school and present a power point presentation to prepare the students for their upcoming zoo tour. Tour Docents with one chaperone per group will lead the tour. We want to ensure a productive learning experience for everyone for the classroom safari and your tour and visit to the zoo.

Call to schedule as early as you can! Spring Tours (March through May) fill up quickly!

Classroom Safari: 45 min. power point presentation at your school with showing of biofacts to the students one week before docent led zoo tour. **** Generally, not included in summer tours.**

Docent Led Tour: 60-minute tour (K and 1st Grades)

90-minute tour (2nd Grade and Up)

Please see the following pages for Tour Descriptions and Zoopeteer Programs.

Tour Requirements: **One Adult Chaperone** per group to supervise students during the Docent Led Tour. Students are to be supervised by their chaperone after the docent-led tour and while on zoo grounds.

Cost: \$13.75 per student

(1 Chaperone and/or Teacher for each group: **\$0.75 each.**)

Additional Adults accompanying the docent led tour must prepay the teacher \$19.75 prior to the tour.

To ensure the best outcome for all students, adults paying at the front gate, are NOT included in the docent-led tour. These adults will be charged the full admittance rate and are able to meet up with the groups at the drop off area after the tour. **Zoo Memberships do not apply to docent-led tours. CMZ is a not-for-profit organization that relies on gate tickets for funding.****

Booking Information Needed: Please leave your name, your school's name, as well as your best contact phone number. Calls/Emails will be returned as soon as possible.

Rescheduling:

If you have a problem with your tour date, please contact VP Outreach: Sue Sallee @ #719-599-8758) as soon as possible, to reschedule. If you need to change/cancel your classroom safari, please contact Tami Dikens @ #719-330-9236. In the event of **inclement weather and/or late starts**, it is your responsibility to cancel the tour as much in advance as possible and reschedule your tour by contacting Sue Sallee.

(Please do not contact the zoo directly.). **The CMZ Docent Auxiliary does NOT cancel tours, only the schools can do this. We will do our best to reschedule your classroom safari and/or tour.**



Kindergarten Coats and Colors Tour

Description: The Kindergarten Coats and Colors Tour focuses on making connections with patterns in the natural world. Students will learn about meat eaters, plant eaters, and both plant and animal eaters (carnivore, herbivore, omnivore). Students will learn many ways to sort and classify organisms based on their **physical characteristics**. They will understand what makes an animal's covering important (protection, warmth, camouflage, attraction/identification, movement, and communication).

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts, and vocab list.

Docent Led Zoo Tour: 60 min. docent led tour, scheduled 4-7 days after Classroom Safari

Colorado Science Standard #2: Life Science:

Students know and understand the characteristics and structure of living things, the process of life, and how living things interact with each other and their environment.

Grade Level Expectation (Kindergarten):

To live and grow, animals obtain food they need from plants or other animals, and plants need water and light.

Elaboration on the GLE:

Students can answer the question: How do structures of organisms enable life's functions?



First Grade Coats and Colors Tour

Description: The First Grade Coats and Colors Tour focuses on offspring and their resemblance to parents. Students will learn to identify **physical characteristics** in order to compare and contrast animals and their babies. Students will understand how **adaptations** can increase an animal's chance for survival.

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts, and a vocab list.

Docent Led Zoo Tour: 60 min. docent led tour, scheduled 4-7 days after Classroom Safari

Colorado Science Standard #2: Life Science:

Students know and understand the characteristics and structure of living things, the process of life, and how living things interact with each other and their environment.

Grade Level Expectation (1st Grade):

1. All organisms have external parts they use to perform daily functions.
2. Young organisms are very much, but not exactly, like their parents, and also resemble other organisms of the same kind.

Elaboration on the GLE #1:

2. Different animals use their body parts in different ways...
3. ...In many kinds of animals, parents, and the offspring themselves engage in behaviors that help the offspring survive.
4. Animals have body parts that capture and convey different kinds of information needed for growth and survival.

Elaboration on the GLE #2:

1. ...Why do individuals of the same species vary in how they look, function, and behave?
2. Young animals are very much, but not exactly, like their parents.
3. Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways.



African Rift Valley (ARV) Tour

Target Grade: Second Grade

Description: The focus of the African Rift Valley Tour is on the animals, their ecosystems, and their connection to the **Maasai** people of the Rift Valley. Students learn about the unique features of the valley, including **kopjes, baobab trees, water holes, soda lakes,** and the **savannah**, and how living things depend on their environment.

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts, and a vocab list.

Docent Led Zoo Tour: 90 min. docent led tour, scheduled 4-7 days after Classroom Safari. 4 Stations for 60 students and over. 2 Stations for less than 60 students.

1. Giraffe Statues (kit in DRC) 2. Giraffe Cargo_Box 3. Poaching (kit in DRC) 4. Maasai (2nd floor of tower) (kit in DRC)

Colorado Science Standard #2: Life Science:

Students know and understand the characteristics and structure of living things, the process of life, and how living things interact with each other and their environment.

Grade Level Expectation #2 (2nd Grade):

A range of different organisms lives in different places.

Elaboration on the GLE:

There are many different kinds of living things in any area, and they exist in different places on land and in water.

Colorado Social Studies Standard #2: Geography:

Geography provides students with an understanding of spatial perspectives and technologies for spatial analysis, awareness of interdependence of world regions and resources and how places are connected at local, national, and global scales.

Geography: Grade Level Expectation (2nd Grade):

People in communities manage, modify, and depend on their environment.

Geography: Colorado Essential Skill:

Make observations and draw conclusions about the relationship between a community and their environment.



Amazing Mammals Tour

Target Grades: Third Grade & Up

Description: This tour emphasizes mammalian characteristics, adaptations, basic needs, and habitats around the world. Students learn about similarities and differences between mammals ~ what adaptations make a mammal arboreal, terrestrial, or aquatic? What are the structural differences between carnivores, herbivores, and omnivores? What behavioral differences do we find between diurnal and nocturnal mammals? These questions and more will guide our exploration of mammals at Cheyenne Mt. Zoo.

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts, and a vocab list.

Docent Led Zoo Tour: 90 min. docent led tour, scheduled 4-7 days after Classroom Safari

Colorado Science Standard #2: Life Science:

Students know and understand the characteristics and structure of living things, the process of life, and how living things interact with each other and their environment.

Grade Level Expectations (3rd Grade):

1. *Organisms have unique and diverse life cycles.*
2. *Being part of a group helps animals obtain food, defend themselves and cope with changes.*
3. *Different organisms vary in how they look and function because they have different inherited information; the environment also affects the traits that an organism develops.*

Elaboration on the GLE:

1. *Students can answer the question: How do the structures of organisms enable life's function?*
2. *Being part of a group helps animals obtain food, defend themselves and cope with changes. Groups may serve different functions and vary dramatically in size.*



Life Cycles Tour

Target Grades: Third Grade and up

Description: The Life Cycles Tour focuses on how life cycles among living **organisms** vary depending on the **species**, how they reproduce and how long they will survive/live in their **environment**. Students will learn to identify how living things grow, develop, and change during their lifetime due to their genetic make-up and the environment in which they live. The tour will examine the **life cycles** of insects, fish, amphibians, reptiles, birds, and mammals.

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts, and a vocab list.

Docent Led Zoo Tour: 90 min. docent led tour, with 3 stations: LOFT cockroach (ZOOM docent), Bird station near beaver (kit in DRC, Cabinet D), Amphibians and reptiles outside Budgies, inside Scutes in bad weather (kit in DRC, Cabinet D)

Tour is scheduled 4-7 days after Classroom Safari.

Colorado Science Standard #2: Life Science:

Students know and understand the characteristics and structure of living things, the process of life, and how living things interact with each other and their environment.

Grade Level Expectations (3rd Grade):

1. *Organisms have unique and diverse life cycles.*
2. *Different organisms vary in how they look and function because they have different inherited information; the environment also affects the traits that an organism develops.*

Elaboration the GLE:

1. *Students can answer the question: How do the structures of organisms enable life's function?*
2. *Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles.*
3. *Many characteristics of organisms are inherited from their parents. Other characteristics result from individuals' interactions with the environment, which can range from diet to learning. Many characteristics involve both inheritance and environment.*



Colorado Life Zones Tour
Target Grades: Fourth Grade and Up

Description: This tour complements the fourth-grade study of Colorado by stressing the life zones found in our great state. Students will identify and describe local regions (life zones) in Colorado, looking at the resources shared and by their living and non-living components. Many of these can be seen from the side of Cheyenne Mountain! Your class will get an up-close look at many of Colorado's native plant and animal species in our fabulous Rocky Mt. Wild exhibit.

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts, and a vocab list.

Docent Led Zoo Tour: 90 min. docent led tour, with biofact stop station; scheduled 4-7 days after Classroom Safari.

Colorado Science Standard #2: Life Science:

Students know and understand the characteristics and structure of living things, the process of life, and how living things interact with each other and their environment.

Grade Level Expectation (4th Grade):

Organisms have both internal and external structures that serve various functions.

Elaboration the GLE:

Students can answer the question: How do internal and external structures support the survival, growth, behavior and reproduction of plants and animals?

Colorado Science Standard #3: Earth and Space Science

Students know and understand the processes and interactions of Earth's systems and the structure and dynamics of Earth and other objects in space.

Grade Level Expectation (4th Grade):

Four major Earth Systems Interact

Elaboration on GLE:

Students can answer the questions: What patterns of Earth's features can be determined with the use of maps? (Altitude and Latitude)

Grade Level Expectation #2 (5th Grade):

Matter cycles between air and soil and among plants, animals and microbes as these organisms live and die.

Elaboration of GLE #2 (5th Grade):

Interdependent Relationships in Ecosystems: ...Organisms are related in food webs...

Colorado Social Studies Standard #2: Geography:

The study of geography creates an informed person with an understanding of spatial perspective and technologies for spatial analysis; and an awareness of the interdependence of the world regions and resources, and how places are connected at the local, national, and global scales. Students understand the complexity and interrelatedness of people, places, and environments. Geography helps students appreciate the dynamic relationships and complexity of the world.

Prepared Graduates:

4.Examine the characteristics of places and regions, and the changing nature among geographic and human interactions.



Ecology—The Study of Our Environment
Target Grades: 4th Grade and Up:

Description: This tour is designed to be a custom fit for your class and its focus of study. Ecology examines structures and adaptations necessary for species survival at the lower grade levels and moves into biodiversity and energy flow as students master necessary concepts. We will discuss the needs of your students before the safari and tour to be sure your class masters the standards and learns about the concepts using real life examples at the zoo.

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts, and a vocab list.

Docent Led Zoo Tour: 90 min. docent led tour, scheduled 4-7 days after Classroom Safari.

Colorado Science Standard #2: Life Science:

Students know and understand the characteristics and structure of living things, the process of life, and how living things interact with each other and their environment.

Grade Level Expectation (4th Grade):

Organisms have both internal and external structures that serve various functions.

Grade Level Expectation #2 (5th Grade):

Matter cycles between air and soil and among plants, animals and microbes as these organisms live and die.

Elaboration of GLE #2 (5th Grade):

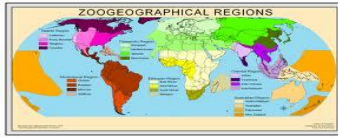
Interdependent Relationships in Ecosystems: ...Organisms are related in food webs...decomposers...Organisms can survive only in environments in which their particular needs are met. A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. Newly introduced species can damage the balance of an ecosystem.

Grade Level Expectation #5 (Middle School):

... Organisms are dependent on their environmental interactions both with other living things and with nonliving factors. (Ecosystems)

Grade Level Expectation #6 (Middle School):

Ecosystems are sustained by the continuous flow of energy, originating primarily from the sun, and the recycling of matter and nutrients within the system. (Food Webs)



Zoogeography Tour **Target Grades: 6th Grade and Up**

Description: This tour focuses on the worldwide distribution of animals by exploring their ecosystems. The tour addresses how animals change over time, that is, genetic change in population over time. Docents will discuss with students the influence of the earth's climatic conditions and help them make connections to the scientific principles that help to explain the factors that contribute to diversity and adaptation.

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, hands-on bio-facts, activities, and a vocab list.

Docent Led Zoo Tour: 90 min. docent led tour, scheduled 4-7 days after Classroom Safari

Colorado Science Standard #2: Life Science:

Students know and understand the characteristics and structure of living things, the process of life, and how living things interact with each other and their environment.

Grade Level Expectation #5 (Middle School):

Organisms and populations of organisms are dependent on their environmental interactions both with other living things and with nonliving factors.

Grade Level Expectation #7 (Middle School):

Ecosystems are dynamic in nature; their characteristics can vary over time. Disruptions to any physical or biological component of an ecosystem can lead to shifts in all its populations.

Grade Level Expectation #8 (Middle School):

Heredity explains why offspring resemble, but are not identical to, their parents and is a unifying biological principle. Heredity refers to specific mechanisms by which characteristics or traits are passed from one generation to the next via genes.

Elaboration of GLE #8:

In addition to variations that arise from sexual reproduction, genetic information can be altered because of mutations.

Grade Level Expectation #9 (Middle School):

Fossils are mineral replacements, preserved remains, or traces of organisms that lived in the past.

Grade Level Expectation #10 (Middle School):

Genetic variations among individuals in a population give some individuals an advantage in surviving and reproducing in their environment.

Grade Level Expectation #11 (Middle School):

Adaptation by natural selection acting over generations is one important process by which species change over time in response to changes in environmental conditions.

Grade Level Expectation #12 (Middle School):

Biodiversity is the wide range of existing life forms that have adapted to the variety of conditions on Earth, from terrestrial to marine ecosystems.



Endangered Species Tour
Target Grades: 6th Grade and up

Description: The middle school level Endangered Species Tour emphasizes the causes of endangerment from natural and human influences. Docents will discuss how low birth rate, slow maturation, narrow dietary habits, isolation, and loss of biodiversity contribute to endangerment. Students will learn how changes in the **ecosystem**, loss of **habitat** from natural disasters, and human activities play a large role in threatening a species' survival. Docents will explain how the Cheyenne Mountain Zoo participates in **conservation** efforts through successful breeding and reintroduction programs.

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts, and a vocab list.

Docent Led Zoo Tour: 90 min. docent led tour, scheduled 4-7 days after Classroom Safari.

Colorado Science Standard #2: Life Science:

Students know and understand the characteristics and structure of living things, the process of life, and how living things interact with each other and their environment.

Grade Level Expectation #5 (Middle School):

Organisms and populations of organisms are dependent on their environmental interactions both with other living things and with nonliving factors.

****Grade Level Expectation #7 (Middle School):**

***Ecosystems are dynamic in nature; their characteristics can vary over time. Disruptions to any physical or biological component of an ecosystem can lead to shifts in all its populations.*

Grade Level Expectation #10 (Middle School):

Genetic variations among individuals in a population give some individuals an advantage in surviving and reproducing in their environment.

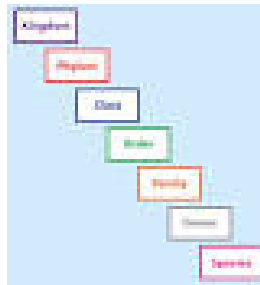
Grade Level Expectation #11 (Middle School):

Adaptation by natural selection acting over generations is one important process by which species change over time in response to changes in environmental conditions.

Grade Level Expectation #12 (Middle School):

Biodiversity is the wide range of existing life forms that have adapted to the variety of conditions on Earth, from terrestrial to marine ecosystems.

**Tour emphasizes this Grade Level Expectation.



ADVANCED MAMMAL BIOLOGY
Target Grades: 9th and Up

Description: As students visit some of Cheyenne Mountain Zoo’s animals, docents will discuss physiological and structural systems in greater depth than in the Amazing Mammals Tour. Students learn about behavioral adaptations for survival in a variety of ecosystems and how the classification of animals into taxonomic groups is largely dependent on structural similarities. Students will hear about the advances of scientific research that steadily clarify the relationships of species to each other.

Classroom Safari: No safari available.

Docent Led Zoo Tour: 90 min. docent led tour.

Colorado Science Standard #2: Life Science:

Students know and understand the characteristics and structure of living things, the process of life, and how living things interact with each other and their environment.

****Grade Level Expectation #10 (High School):**

***Evidence of common ancestry and diversity between species can be determined by examining variations including genetic, anatomical, and physiological differences.*

Grade Level Expectation #11 (High School):

Genetic variation among organisms affects survival and reproduction.

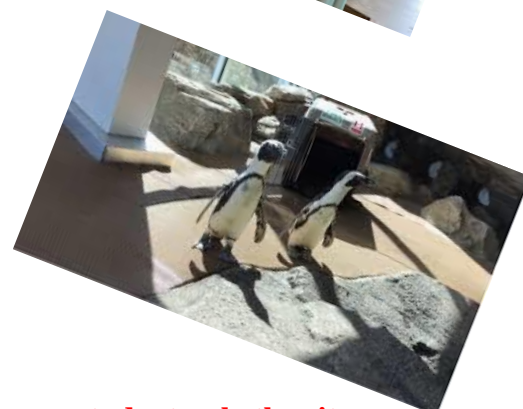
Grade Level Expectation #12 (High School):

The environment influences survival and reproduction of organisms over multiple generations.

***Tour emphasizes this Grade Level Expectation.*

Specialized Docent Tours

Planning a “specialized” life science unit with your students? The CMZ Docent Auxiliary will work with you to adapt one of our tours and specialize it to fit your course of study. Call Sue Sallee @ 719-599-8758 to discuss your specialized safari and tour.



Call us today to schedule a wonderful educational experience for your students whether it be a Zoopeteer program at your school, or Classroom Safari and Docent Led Tour at our beautiful Cheyenne Mountain Zoo! We look forward hearing from you!



Puppet Shows Zoopeteer Programs

Description of Zoopeteer Programs: Do you want to have your students totally entertained and learn key science concepts about animals that are grounded in the Colorado Academic Standards and grade level expectations? Then the Zoopeteer Programs are for your students!

The Zoopeteers introduce the exciting world of animals, their characteristics, and habitats, through an entertaining and very educational puppet presentation by the Cheyenne Mountain Zoo Auxiliary performing troupe.

Targeted Audience: Kindergarten, First, and Second Grades

(A description of the various puppet shows follows on the next pages.)

When Offered: Tuesday & Thursday; October through March with limited availability. (No Wednesdays). **Please schedule early as Zoopeteer Programs fill up quickly!**

Show Time: 35-45 minutes in length.

All shows are presented from a portable stage requiring 12 sq. feet of space plus sitting room, in one location for all presentations.

Charge: Free!!

Although there is no charge for these Zoopeteer Presentations (a public service of the Cheyenne Mountain Zoo Auxiliary), a donation to the program would be gratefully received to cover costs of the stage, props, and puppets for our Zoopeteers.

To Schedule: Teachers should coordinate show times and select a presentation **at their grade levels**. Call the Zoopeteer Coordinator: **Mindy Mahler @ 719-659-6841** or E-mail at zoodocentmahler@gmail.com to schedule your puppet shows.

Zoopeteers prefer to present more than one show on a given day and do not return to the same school during the performance season. (Please coordinate with K, 1st, and 2nd grade teachers in your building to schedule the puppet shows across your grade levels.

Contact the Zoopeteer Coordinator: Mindy Mahler
Phone: 719- 659-6841 or E-mail at zoodocentmahler@gmail.com

We look forward to having you book with the Zoopeteers and coming to your school!

Preschool & Kindergarten Programs

Presentation: “*Bear Cub is Lost*”

Some animals invite a lost bear cub to share their homes and food.

Presentation: “*Hippo-NOT-umus*”

Children will laugh and learn watching this puppet show based on a story that tells how important adaptations such as the elephant’s trunk are to an animal’s life. Portly the hippo tries to be other animals but finds that his own life is best for him.

First Grade Programs

Presentation: “*What’s My Habitat?*”

This Zoopeteer Presentation discusses habitats and opens with three animals in the wrong habitats. After they find their correct habitats, they play a guessing game with clues about other animals and where they live.

Presentation: “*Home for Polar Bear*”

An unhappy polar bear magically visits various habitats and finally discovers that an Arctic home is best for him.

Presentation: “*The Arctic*”

Ms. Docent and Cheyenne, the giraffe, take a wrong turn while searching for other giraffes and end up at the North Pole where they discover some very different animals.

Presentation: “*The Waterhole*”

Ms. Docent and Cheyenne meet several animals at a waterhole in Africa (Kenya) and learn about these creatures and their surroundings.

Second Grade Programs

Presentation: “*The Brave Little Tree Frog*”

An adventurous tree frog, with help from his friends, journeys across South America to save the rain forests.

Presentation: “*Colorado Wild*”

Ms. Docent and Cheyenne visit the different life zones of Colorado learning about the animals and plants in each zone.

Presentation: “*Water for Life*”

A wise, old tortoise helps show the students the diversity of life in a variety of different habitats, the importance of water to living things, and introduces the concept of conservation of water.

Colorado 2020 Academic Standards and Grade Level Expectations for Puppet Shows

Colorado Science Standard #2: Life Science:

Students know and understand the characteristics and structure of living things, the process of life, and how living things interact with each other and their environment.

Grade Level Expectation:

Kindergarten: *To live and grow, animals obtain food they need from plants or other animals, ...*

1st Grade: *1. All organisms have external parts that they use to perform daily functions.*

Young organisms are very much, but not exactly, like their parents, and resemble other organisms of the same kind.

2nd Grade: *2. A range of different organisms live in different places.*

Colorado Social Studies Standard #2: Geography:

The study of geography creates an informed person with an understanding of spatial perspective and technologies for spatial analysis; and an awareness of the interdependence of the world regions and resources, and how places are connected at the local, national, and global scales. Students understand the complexity and interrelatedness of people, places, and environments. Geography helps students appreciate the dynamic relationships and complexity of the world.

Grade Level Expectation:

Kindergarten: *Recognize that geographic tools represent places and spaces.*

1st Grade: *Locate places and spaces using geographic tools.*

2nd Grade: *Use geographic terms and tools to describe places and spaces.*

Call us today to schedule a wonderful educational experience for your students whether it be a Zoopeteer program at your school, or Classroom Safari and Docent Led Tour at our beautiful Cheyenne Mountain Zoo!

For Tours & Classroom Safaris:

Sue Sallee @ 719-599-8758 or E-mail @ cmzdocenttours23@gmail.com

For Zoopeteer (Puppet Shows):

Mindy Mahler @ 719-659-6841 or E-mail @ zoodocentmahler@gmail.com