

Pets in the classroom lesson plan: Aquatic Turtle V Tortoise

Prepared By: Gretchen Whittaker,

4-8 Gifted Teacher at Acorn Montessori School in Prescott Valley, Arizona

Grade: 4

Standards:

Arizona State Science Standards:

L4: The unity and diversity of organisms, living and extinct, is the result of evolution.

Objective: Students will be able to identify the primary similarities and differences between aquatic turtles and land living tortoises.

Pets included:

Note: If you do not have access to these type of pets at your school this lesson plan can still be used by substituting videos of pets of these type for students to watch, observe and respond to instead of using the actual animals. Having live animals to observe is preferred if possible.

*Red eared slider



*Sulcata Tortoise



Lesson overview:

Our school is home to a variety of classroom pets. Two pets that live at our school are a red eared slider, and a Sulcata tortoise. Often, students get them mixed up and aren't sure how they are different because at first glance they look similar. This lesson seeks to have students observe the two pets, note differences and similarities, and understand how aquatic turtles and tortoises are related, yet unique. This helps students better understand and appreciate these animals in a way that connects to grade level state standards.

Lesson Steps:

1. Set up the classroom before the lesson: Write the objective on the board where students can look at it and read it along with you, and so that you can refer back to it at the end of class. Set up observation spaces for each of the animals. (For example, the aquatic turtle lives in my classroom and could be observed in her tank, or could be placed into the smaller dry enclosure used for transport and to contain her for routine care, but the Sulcata lives in the next room over so either the entire enclosure would need to be moved for the visit, or a smaller space would need to be set up for during this lesson.) Make sure to plan ahead for the space pets will have for this so that they are safe and comfortable- this is not something to plan last minute.
2. Prepare students ahead: the day before doing this lesson, talk to students about what to expect and go over proper behavior around animals, even if you have covered it before.
3. When students arrive on the day of the lesson, Introduce the objective to students.
4. Talk about how to behave around animals, emphasizing that students need to move slowly, and speak quietly. It is important to respect the animals that we have in our classroom and be kind and gentle with them whenever we are near them, taking care of them, or otherwise handling them.
5. Introduce today's pets of focus: a red eared slider turtle, and a Sulcata tortoise.
6. Have students take turns observing the two different animals.
7. As they observe them, have them record what they notice about them, anything they wonder (questions they have), and anything the animal reminds them of. This can be done in a journal or just on regular paper. Encourage students to draw pictures of what they see. They can do overall drawings and/or close ups of specific parts of the animal (for example a close up of the slider's webbed feet). At each station students should have access to information about the

animal's diet (see attached information if needed), housing needs, and adult size. They should include information from this in their notice, wonder, remind chart.

I Notice...	(Students should write down all the things they notice about the animal, how it moves, its normal home, etc. This can include drawings, and lists, and does not need to be fully developed sentences)
I Wonder...	(Students should write down any questions they have)
It reminds me of...	(This is a place for students to make connections to other things they know about or have observed.)

8. Have students switch and observe the other animal, completing a second Notice, Wonder, Remind.
9. Use a Venn diagram on the board and have students share things that they noticed about each of the animals, filling in as they share, and moving items as needed from one or the other into the middle.
10. Ask students to think, pair, share about what they notice based on the Venn diagram and how turtles and tortoises seem to be similar and different.
11. Ask students to share what they noticed, and any things they are still wondering about.
12. Make sure through guided questions and class discussion students understand that both tortoises and turtles are reptiles, their similar characteristics, and their differences.
13. Have each student complete a "Then vs Now" exit ticket to help you check understanding and plan for any reteaching that may be necessary.
- 14.

I used to think...
But now I know...

Supplementary Information:

Red-eared sliders grow up to 8-12 inches in overall length and about 6.5 pounds

Sulcatas grow up to 18 inches in shell length and to 80-110 pounds

(These photo images were found via a Google image search and were not composed by the author of this lesson plan.

Red Eared Slider Aquatic Turtle Diet at a glance:

Red Ear • Yellow Belly • Belize • Cumberland • Nicaraguan • Pond


Slider Food Poster

Highly Recommended Daily Foods


Dandelion Greens Green Lettuce



Red Leaf Lettuce Turnip Greens



Omega One Mazuri



Hatchling **Juvenile / Adult**



50% Protein
50% Veggies 25% Protein
75% Veggies

Recommended Amount of Pellets

Under 1 Year – The pellet amount should be the size of their head as if it were hollow daily

Over 1 Year – Pellets 3x a week the size of their head as if hollow, or a few pellets daily

Highly Recommended **Moderate Use: 1x Weekly**

Green Leaf Lettuce
Dandelion Greens
Turnip Greens
Red Leaf Lettuce
Aquatic Plants


Endive Lettuce
Romaine Lettuce
Kale
Carrots

Moderately - Once a Week

Endive Romaine Lettuce Kale




Carrots




Provide in Small Quantities 2x Monthly


Cuttlebone ¼
2x per month



Blueberries



Enders



Recommended Feeder Fish

Safe Feeder Fish: Mosquitofish, Platy, Molly, Guppies, Swordtails, Enders

Unsafe Feeder Fish: Goldfish, Minnows, White Suckers

Unsafe fish contain Thiaminase which breaks down and inactivates thiamin (Vitamin B1). If fed in large dosages or over a long period of time, it can cause a severe vitamin B1 deficiency which is fatal if left untreated.


TURTLES ARE OPPORTUNIST, PLEASE DON'T OVERFEED

LY Rev:003

Sulcata Tortoise Diet and housing at a glance:


Hatchling Leopard & Sulcata Reference Guide

(*Stigmochelys pardalis* & *Centrochelys sulcata*)



Hatchlings require a closed chambers with an ambient temp of 80 degrees F. They require daily soaking. They are free grazers. Their diet consists of 70% grasses and hay, 30% weeds, and flowers.

In captivity they may be fed dark leafy greens in moderation, keeping mind that these tortoise require a course, high fiber diet. Calcium supplements are recommended.



Lighting & Heating

UVA & UVB are required, diurnal schedule. UVB tube 10% or Compact bulb.
Approx. 12-14 hrs. Per day
Heat lamp should emit visible light. 65-75 Watts is recommended

No Feeds

- *Spinach
- *Broccoli
- *Avocado
- *Cabbage
- *Peppers
- *Fruits
- *Tomatoes
- *Protein
- *Alfalfa Hay

Seasonal greens & veggies: flowers & weeds

Housing

Dual Climate Zones-


- Cool end 80°F
- Basking zone 95-100°F
- Night temp 70°F+

Humidity

- For tortoise under a year 60-80%

Enclosure size (hatchling & juvi) Min. 4'X6' Height 12'

Closed Chamber




Safe Grasses


- Escarole
- Chicory
- Endive
- Radicchio
- Mustard Greens
- Dandelion Green
- Timothy Hay
- Orchard Grass

Soaking


20-30 minutes daily, 80-82 degrees F.




Recommended Substrate



Humid Hide



Supplements



Safe Feed 1

Safe Grasses

- Buffalo grass (*Buchloe dactyloides*)
- Bermuda grass (*Cynodon dactylon*)
- Orchardgrass (*Dactylis glomerata*)
- Big Bluestem (*Andropogon gerardi*)
- Little Bluestem (*Andropogon scoparius*)
- Western wheatgrass (*Agropyron smithii*)
- Blue Grama (*Bouteloua gracilis*)
- Arizona Fescue (*Festuca arizonica*)
- Lawn Fescue (*Festuca arundinacea*)
- Sheep Fescue (*Festuca ovina*)
- Creeping Red Fescue (*Festuca rubra*)
- Elephant grass (*Pennisetum purpureum*)
- Bluegrass (*Poa annua*)