

Draw your favorite animal



5th-6th grade

This Research Booklet belongs to:



I will be a Junior Scientist today!



On my visit to Loveland Living Planet Aquarium



- I will:**
- use an indoor voice.
 - stay with my adult leader at all times.
 - use two gentle fingers to touch the animals in the touch tanks.
 - have fun!

- I will NOT:**
- write on the glass.
 - run, jump or climb.
 - tap or bang on the glass.
 - use flash photography near the octopus.
 - bring food or drinks into the galleries.

Cool Science!



Species—a group of organisms sharing similar Characteristics (e.g. rainbow trout; humans)

Organism—an individual form of life (e.g. an individual plant or animal)

Algae—a simple, non-flowering plant, often found in the water

Producer—an organism that can make its own food (e.g. a plant uses sunlight to make energy)



Polyps—an organism with a hollow, tube-shaped body and tentacles

Hypothesis—a statement that can be tested.

Observation—a detailed examination (to look at closely)

Conclusion—the result of an observation



Characteristic—a feature or trait that helps to identify or tell apart different things

Material—a physical substance composed of matter

Conduct—to transmit or send (like heat or electricity)

Appendages—an attached body part that sticks out and is used for something (leg, horn, tail)



Evidence—things helpful in forming a conclusion

Pectoral fin—the front pair of fins just behind a fish's head

Decomposer—an organism that breaks down dead plant or animal matter and turns it into nutrients



Observe the Gentoo Penguins!

Adaptations

What characteristic helps them survive in cold water longer than a human?

Rank these penguins from largest to smallest (1 being the largest, 3 being the smallest).

King ___ Gentoo ___ Emperor ___



Draw

Look closely at their beaks and draw the shape in this box!



How do you think the beak shape helps them to catch food, like fish and krill?



Exploring Local Species

Desert Tortoise

How do desert tortoises avoid the desert heat?



Desert tortoises rarely move more than a few miles from their birthplace. How is this an advantage for the tortoise?

River Otters

Look closely at the river otters. Based on your observations, what physical characteristics make the river otters a great swimmer?



The playfulness of a North American River Otter actually serves a purpose. Check mark the reasons why you think they play.

- Strengthen family bonds
- Increase their cuteness
- Help pass the time
- Increase hunting skills

Observing Marine Life

Blacktip Reef Shark



Compare and contrast. What are some similarities and differences you notice between the Blacktip Reef Shark and other sharks in the shark tank?

Similarities:

Differences:

Green Sea Turtle



The Gentoo penguin has been observed to hold its breath underwater for 7 minutes. The green sea turtle can hold its breath 50 times longer than a Gentoo penguin. Based on this information, how many hours can a green sea turtle hold its breath underwater?

_____ hours

The green sea turtle can lay from 75-200 eggs. Why would a turtle lay so many eggs? What are some predators baby green sea turtles might encounter on the beach and in the water?

Size, Shape, and Structure

White-faced whistling duck



Listen closely to the white-faced whistling duck. Describe in your own words what their calls sound like.

Swainson's Toucan



On each leg the Swainson's toucan has two toes facing forward and two toes facing backwards. Based on this fact, where in the rainforest would the Swainson's toucan live?

Rainforest Frogs

Observe the rainforest frogs near the rope bridge.



Poison Dart frogs are brightly colored. What does the bright color pattern mean to other animals? _____

How does the size of the Thumbail Dart Frog help it survive? _____
