

The Amazing Amazon

Purpose:

This lesson will make students aware of the phenomenal diversity of plant and animal life that is found in the Amazon rainforest, as well as be able to identify the characteristics that distinguish different types of animals.

Curriculum Match:

For Curriculum Match visit:

<http://www.vanaqua.org/education/LearningOutcomesandIRPConnections.pdf>

Direct experience is the basis of human learning

- Students should be provided opportunities to develop an aesthetic appreciation of the environment

(Taken from Appendix C: Cross – Curricular Outcomes)

** Adapt to best suit your grade level.

Materials:

- paper
- pencil
- clipboard or binder (hard surface to write on)
- worksheet

Background Preparation:

Students should have some background knowledge about the Amazon rainforest and the types of animals and plants that live there. Knowledge about the different layers of the forest as well as the differences between mammals, reptiles, insects, birds, fish and amphibians would be very useful.

Procedure at the Aquarium:

Have students explore the Amazon Rainforest Gallery and locate the different types of animals indicated on the worksheet, and work through it.

Pre-Activities or Extensions:

1. The following web link has some great pre and post rainforest activities for grades K-12. Click on your desired grade level to download the lesson plans. Check out the home page for information, as well as frequently asked questions, about Rainforests.

<http://www.rainbird.com/rainforest/download.htm>

2. With older students, discuss the importance of rainforest diversity. What do we take from the rainforest? What is the state of rainforests around the world? Why are rainforests important? What can we do to help protect the rainforests?

Assessment: Use an observation sheet to assess students as they work in the Aquarium; showing evidence that they:

- Follow directions
- Are able to recognize and identify the difference between mammals, reptiles, amphibians, insects and birds

- Can differentiate between insects and arachnids (spiders)
- Can recognize how patterns are essential for some animals survival
- Are able to formulate well thought out relevant questions

Amazon Information

What Makes a:

Mammal a Mammal

- Warm blooded
- Fur or hair
- Four chambered heart
- Live birth
- Feed babies milk

Reptile a Reptile

- Cold blooded
- Lay hard or leathery eggs in sand or dirt
- Dry scaly skin
- Ectothermic (gets body heat from environment)

Bird a Bird

- Lays eggs
- Has hollow bones
- Has feathers
- Endothermic (self regulated body heat)

Insect an Insect

- Exoskeleton
- 3 distinct body segments (head, thorax, abdomen)
- 6 legs

Arachnid an Arachnid

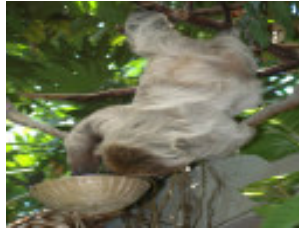
- Exoskeleton
- 2 body segments (cephalothorax, abdomen)
- 8 legs

Fish a Fish

- Scales
- Breathes with gills
- Lays eggs or live birth depending on species
- Lives in water always

Amphibian an Amphibian

- Lays soft eggs in water
- Breathes through skin
- Cold blooded
- Thin scaleless skin



THE AMAZING AMAZON!

The Amazon Gallery is truly amazing! It is the only place in the Aquarium you can find such a diverse group of animals.

Locate an example of the following types of animals, and explain why they are part of that group.

1. A Reptile

What makes a reptile a reptile? Think about how it gives birth, its skin, how it keeps warm, and how it breathes.

What is the name of the reptile you found? _____

Where did you see it? _____

What was it doing? _____

Draw your reptile.

2. A Bird

What makes a bird a bird? Think about how it gives birth, its skin/covering, its bones, how it breathes, and how it keeps warm.

What is the name of the bird you found? _____

Where did you see it? _____

What was it doing? _____

Draw your bird.

3. A Fish

What makes a fish a fish? Think about its skin, how it breathes, how it gives birth, its body temperature, and its living environment.

What is the name of the fish you found? _____

Where did you see it? _____

What was it doing? _____

Draw your fish.

4. A Mammal

What makes a mammal a mammal? Think about yourself! Think about how it gives birth, how it stays warm, and how it takes care of its young (or does it?).

What is the name of the mammal you found? (It can't be a person)

Where did you see it? _____

What was it doing? _____

Draw your mammal.

5. An Amphibian

What makes an amphibian an amphibian? Think about its skin, where it lives, how it breathes, how it gives birth, its body temperature, and its life cycle.

What is the name of the amphibian you found? _____

Where did you see it? _____

What was it doing? _____

Draw your amphibian.

6. An Insect

What makes an insect and insect? Think about how many body parts it has, how it breathes, and its life cycle (metamorphosis).

What is the name of the insect you found? _____

Where did you see it? _____

What was it doing? _____

Draw your insect.

7. An Arachnid (Spider)

What makes a spider an arachnid? Think about how many body parts it has; how many legs it has.

What is the name of the spider you found? _____

Where did you see it? _____

What was it doing? _____

Draw your spider.