

Empathy Explorers

Title: Empathy Explorers

Theme: Animals have emotions, just like people do, but they often express them in different ways than people.

Targeted Audience: K-2

Lesson Goals: Guests will learn to better identify emotions in animals and what we can do to better foster positive emotions in animals

Lesson Objectives:

- Audience will be engaged throughout program
- Students will identify an animal as an individual, rather than as a species
- Students will identify what an animal needs to be comfortable and healthy
- Students will model an animals perspective
- Students will recognize emotions in animals that are similar to ours.

Measuring Objectives:

- Have at least 2-3 questions asked during each lesson.
- Elicit a positive change in opinions from the first introduction of an invertebrate and then after the class has given that invertebrate a name
- Students will build an enrichment item with the appropriate needs for a given animal
- Students will demonstrate what a snake would do in different scenarios
- Students will correctly identify animal emotions

Resources/Materials:

- Enrichment construction materials (Session 1) enough for 4 groups
 - Newspaper
 - Markers
 - Cardboard tubes
 - Shredded paper
 - Substrate
- Animal emotion cards (Session 2)
- Animal emotions PowerPoint (Session 2)

Lesson Time: Two one-hour sessions

Lesson Content:

Lesson 1 (Approx. 1 hour)

- 1) Welcome to Empathy Explorers
 - a) Introduce yourself

 - b) Set expectations
 - i) Today's lesson is going to last about an hour. We will be back at the end of the week to learn even more about empathy.
 - ii) Get to know audience – Have they met any Racine Zoo ambassador animals before? What have they been studying in school? About animals? About empathy?
 - iii) We will be meeting two live animals in today's class and it is important that we are welcoming to them and treat them with respect.

- 2) Introduce the big idea
 - a) Animals have emotions, just like people do, but they often express them in different ways than people.
 - i) Using empathy we can find out what a person or animal is feeling. This can help us make an animal feel better or provide them with a better life.

 - b) Today we are going to be talking about
 - i) How can we better get to know an animal?
 - ii) How can we provide for an animal that will help them feel better?

 - c) Ask the class:
 - i) What are some things you look for to figure out how your friends or family are feeling?
 - ii) What are some things that you do to help someone who's feeling sad or afraid?
 - (1) Positively accept answers.

- 3) Activity 1 (**Individualization:** Naming an animal)
 - a) Before we can begin understanding how animals are feeling we need to get to know them better.
 - i) When you meet someone new what are some things you ask them?
 - (1) Positively accept answers
 - (2) Highlight asking what someone's name is as a way to get to know someone.

 - b) Introduce an invertebrate. For now do not give the animals name and focus on species facts.
 - i) **See ambassador animal facts at the end of lesson plan for specific information**

- c) Ask the class:
 - i) **How does this animal make you feel? Is this animal friendly? Would you keep this animal as a pet?**
 - (1) Positively accept answers
 - d) At the Racine Zoo we usually name an animal based off of their personality.
 - i) What are some of your pet's names? Why did you name them that?
 - (1) Positively accept answers
 - e) Talk to the students about the individual animal's personality and then have them brainstorm a fitting name for the animal as a class.
 - i) **See ambassador animal facts at the end of lesson plan for specific information.**
 - f) Think pair share:
 - i) Brainstorm potential names for your invertebrate based off of their personality.
 - g) Give a final summary of your invertebrate using their name, personality traits, and some species specific facts.
 - i) **Example:** *"This is Bananas. She is a Madagascar Hissing Cockroach. Bananas got her name because she loves to eat Bananas AND on days like today she just acts bananas. Did you see how active she's been today? She was even kind of feisty bringing her to the program. While Bananas might not find any real bananas living in Madagascar, eating old fruits, vegetables and other detritus they can find is how they give back to the ecosystem and help make some of the most magnificent rainforests in the world."*
 - h) Ask the class:
 - i) **How does this animal make you feel? Is this animal friendly? Would you keep this animal as a pet?**
 - (1) Positively accept answers
- 4) Activity 2 (**Modeling Caring:** Enrichment making)
- a) Animals experience all kinds of different emotions, but we would like them to always be happy and healthy. At the Racine Zoo we know the best way to ensure a happy and healthy animal is to provide them with a living space that has everything they need.
 - b) Once we've met all of the animals basic needs we will give them enrichment. Enrichment is anything you give to an animal to help improve their life
 - i) Ask the class:
 - (1) "What is something you have at home that makes you happy?"
 - (2) **"What are some things we give animals to make them happy?"**

- c) Meet a lizard
 - i) **See ambassador animal facts at the end of lesson plan for specific information**

- d) Ask the class:
 - i) What are some things that every animal needs to live?
 - ii) What are some things we could give to this specific animal to make them happier?

- e) Build a piece of enrichment for your animal
 - i) Break into 4 groups.
 - ii) Give each group a set of supplies for an enrichment piece.
 - (1) (newspaper, paper, rocks, substrate, tubes, etc...)
 - iii) Let the animal explore each group's enrichment if approved by the educator.
 - iv) Each group will present their enrichment to the class.
 - (1) Ask: **"What about your enrichment would make the animal we met happy?"**

- f) Conclusion
 - i) Review today's lesson
 - (1) We're learning about the feelings animals have.
 - (2) Today we named an invertebrate after we learned about their personality.
 - (3) We also met a lizard and built a piece of enrichment area that would make them happy.
 - ii) Set up the second lesson
 - (1) We'll be back to talk about how we can observe animals and better understand what they are feeling.

Lesson 2 (Approx. 1 Hour)

- 1) Welcome to Empathy Explorers
 - a) Introduce yourself
 - b) Set expectations
 - i) Today's lesson is going to last about an hour
 - ii) We will be meeting two live animals in today's class and it is important that we are welcoming to them and treat them with respect.
 - iii) Review previous session – What animals did we meet in the last class? What were their names? What did we build?

- 2) Reiterate big idea and introduce today's lesson
 - a) Animals have emotions, just like people do, but they often express them in different ways than people.
 - i) Using empathy we can find out what an animal is feeling. This can help us make an animal feel better or provide them with a better life.

- b) Today we are going to be talking about:
 - i) What is it like to live like an animal?
 - ii) How do animals who don't look like us express themselves?
 - iii) How can we tell what an animal is feeling?

- c) Ask the class:
 - i) What are some things you look for to figure out how your friends or family are feeling?
 - ii) What are some things that you do to help someone who's feeling sad or afraid?

- 3) Activity 3 (**Perspective taking:** Walk in a snakes shoes)
 - a) One way to better understand how someone is feeling is to learn more about how we live. When we think about what someone else's life is like we call that taking a walk in their shoes

 - b) Ask the class:**
 - i) A friend forgot their lunch at home and they don't have food to eat at lunch time. Put yourself in their shoes. How would you feel? What could you do to help?
 - ii) At recess there is someone sitting out with no one to play with. Put yourself in their shoes. How would you feel? What could you do to help?
 - iii) A classmate forgot their pencil case at home and they don't have anything to write with. Put yourself in their shoes. How would you feel? What could you do to help?

 - c) Meet a snake
 - i) **See ambassador animal facts at the end of lesson plan for specific information**

 - d) Have the class take the perspective of your snake. Have them bring their arms in close to their bodies, glue their feet together, and practice moving in a slithering motion.

 - e) Ask the class:**
 - i) You haven't been able to find any food for weeks, when you finally find the scent of a mouse it is very close to much larger animals like humans. Put yourself in their shoes. How would you feel? What could you do to help?
 - ii) You have searching for food all day, when you return to your hide you find that someone has dropped trash all over the entrance. Put yourself in their shoes. How would you feel? What could you do to help?
 - iii) You are basking in the sun when suddenly a human walks up to you, they start making loud noises and moving in a very unpredictable manner. Put yourself in their shoes. How would you feel? What could you do to help?

- f) Conclusion
 - i) Everyone, even animals, have things in their life that effect how they act and feel. Try to put yourself in their shoes before making judgments about their actions.

- 4) Activity 4 (**Anthropomorphism**: Can you tell what animals are feeling?)
 - a) Ask the class
 - i) If you want to know how someone in your family or your friends are feeling what do you look for?

 - b) There are lots of different ways to tell how someone is feeling. Watching their body language can tell you from a great distance. Watching someone's facial features can tell you what someone is feeling even if you don't speak the same language. If you were talking on the phone you can use the tone of someone's voice or the sounds that they were making.

 - c) Practice interpreting emotions
 - i) The instructor will say an emotion and the class will show the emotion using body language.**
 - (1) Happy
 - (2) Sad
 - (3) Hungry
 - (4) Tired
 - ii) The instructor will say an emotion and the class will show the emotion using a sound.**
 - (1) Fear
 - (2) Anger
 - (3) Surprise
 - (4) Discovery
 - iii) The instructor will say an emotion and the class will show the emotion using their face.**
 - (1) Confusion
 - (2) Relaxed
 - (3) Love
 - (4) Joy
 - d) Animal Emotion cards
 - i) Hand out animal emotion cards. Each is labeled with an emotion and has a human face making the emotion.
 - ii) Practice using the cards. The instructor will say an emotion and demonstrate using body language and facial reactions. Do this a few times before only using body language and facial expressions.
 - iii) Show animal emotion PowerPoints

- (1) For each picture/video shown students will hold up the animal emotion card that corresponds with each emotion.
 - (2) Debrief each emotion.
 - (a) **What is the animal doing that made you choose that emotion?**
 - (b) Tell the class how you interpreted emotion.
 - (3) While we can never ask the animal exactly how they are feeling, by caring for animals, treating them as individuals, and stepping into their shoes we can learn more and more about how they show us how they are feeling.
- e) Meet a mammal
- i) **See Ambassador Animal Facts at the end of lesson plan for specific information.**
 - ii) Try to synthesize all four lessons in this interpretation
 - (1) Animals name/personality
 - (2) How we care for the animal in the zoo
 - (3) Ask the class to interoperate:
 - (a) Animal Body language
 - (b) How we read the animals emotions
- f) Wrap up animal emotions
- i) Just like humans animals show their emotions through facial expressions, and body language.
 - ii) By better understanding how animals show our emotions we can better interact with and care for animals.
- 5) Conclusion/wrap up
- a) **Restate big idea:** Animals have emotions, just like people do, but they often express them in different ways than people.
 - b) During our two sessions we
 - i) Met four animals
 - ii) Learned that animals have individual characteristics
 - iii) Learned that giving animals better care can also improve their emotional state
 - iv) Learned that every animal has its own unique perspective
 - v) Learned how to better read animals emotions through their body and facial language
 - c) By getting to know animals and their emotions better we can improve their lives and improve the ways that we interact with animals in our own life

Racine Zoo Ambassador Animal Facts

Invertebrates (Lesson 1: Activity 1)

Madagascar hissing cockroaches

- Habitat: Found in the lowland rainforests of Madagascar.
- Lifespan: can live up to 5 years in human care.
- Diet: Madagascar Hissing Cockroaches are **detritivores**, meaning they eat decaying plants or animal matter. These insects and other decomposers play an important role in the ecosystem. They eat other animal's leftovers and keep the forest clean and carcass free (fed fruits and veggies at the zoo).
- Quick Fact: When a Madagascar Hissing cockroach sheds its exoskeleton, they eat it because it's filled with nutrients.
- Conservation status: not endangered.

Madagascar hissing cockroach's common characteristics:

- Some are very active and move around a lot/Some are very slow and calm
- Some will hiss frequently when touched/Some will hiss rarely if ever
- Some go out on a program very easily/ Some hold onto their hides as they leave
- This cockroach is a girl, you can tell because if she was a boy she would start growing horns on the front of their head
- Name some fruits and veggies they likely eat at the zoo. Ask if these are foods the students also enjoy
- You can estimate their age using the size of the cockroach.

Desert Millipede

- Habitat: Found in the tropical and subtropical forests in western Africa.
- Lifespan: 3 to 5 years in the wild; 7 to 10 years in human care.
- Diet: They will eat dead leaves, plants, algae, and mosses (fed fruits and veggies at the zoo).
- Quick Diet Fact: Once a millipede digests its food, they leave their wastes along the forest floor. It contains helpful nutrients for the environment that can later act as new soil for the environment.
- Conservation status: not endangered.

Millipede common characteristics:

- Some are very active and move around a lot/Some are very slow and calm
- Some will actively move around
- Some are easy to find on their substrate/ Some are buried and hard to find when going on a program
- Name some fruits and veggies they likely eat at the zoo. Ask if these are foods the students also enjoy
- You can estimate their age using the size of the millipede

Lizards (Lesson 1: Activity 2)

Harley - prehensile-tailed skink

- Habitat: Found in the rainforests of Solomon Islands -northeast of Australia (they are endemic to this area).
- Lifespan: up to 15 years (Harley - 12/1/15)
- Diet: They are the only skink that is completely herbivorous (Fed fruits and veggies at the zoo).
- Quick Facts: Juvenile skinks will often eat the feces of adult skinks in order to obtain essential gut bacteria.
 - Rely on their sense of smell to forage for food at night.
 - They gain a majority of their water intake through their diet. Therefore, they rarely come down to the ground for water.
 - The Skinks use their long claws and prehensile-tail to climb tree branches in order to obtain the best leaves. Leaves make up a majority of the Prehensile-tailed skinks diet.
- Conservation status: most likely endangered - not a lot of data on them in the wild.

Cheese - leopard gecko

- Habitat: Found in the deserts of the middle east.
- Lifespan: up to 30 years in human care (Cheese - 12/26/10).
- Diet: crickets, wax worms, mealworms, super worms, and other insects (fed crickets & reptile pellets at the zoo).
- Quick Fact: Geckos DO have teeth; however, they do not use them to chew. Instead, geckos swallow their prey whole. They use their teeth to seize, crush and kill their prey.
- Conservation status: Not endangered, but they are threatened by habitat loss.

Snakes (Lesson 2: Activity 1)

Fossil - Kenyan sand boa

- Habitat: Found in the deserts of Egypt, North Africa, and Kenya; they prefer soil that is sandy enough to burrow.
- Lifespan: may live to be 20 years old in human care (Fossil - July 15, 1997).
- Diet: mice, eggs, insects, and lizards - will constrict prey (Fed pinky mice at the zoo).
- Quick Diet Fact: The Kenyan sand boa typically hunts by lying in wait under sand and ambushing passing prey.
 - When food is scarce, sand boas can live over a year without any at all.

Neenah - western fox snake

- Habitat: Found in prairies, savannas, meadows, and fields of the Midwest including Wisconsin; always found near water!
- Lifespan: can live over 6 years (Neenah - November 23, 2001).
- Diet: eggs, rodents, and small mammals. (Fed mice at the zoo).
- Quick Diet fact: The western fox snake is part of the constrictor family. It will squeeze its prey to eat.
- Conservation status: not endangered but threatened. Biggest threat to Neenah are humans - due to looking like the copperhead snake.

Mammals (Lesson 2: Activity 1)

Minnie - striped skunk

- **Habitat:** Found in grasslands, forests, farmland, and urban areas all throughout the United States and Canada. They can also be found in northern Mexico.
- **Lifespan:** they can live up to 3 years in the wild and 6-8 years in human care.
- **Diet:** in the wild, they will eat small rodents, insects, reptiles, amphibians, eggs, fruits and veggies (fed fruits, veggies, omnivore nuggets, and hardboiled eggs. He also gets fed crickets and waxworms as enrichments.
- **Quick Fact:** Striped skunks are opportunistic omnivores, meaning that they will eat almost anything that is available to them.
 - Their diet is primarily insectivorous (when prey is abundant), but will then switch to a carnivorous diet during the colder months.
- **Conservation Status:** least concerned, but they are threatened by humans. They often get killed by cars and many people do not like them.

Gilly - Madagascar lesser tenrec

- **Habitat:** Found in the dry forests and grasslands of southern Madagascar.
- **Lifespan:** they can live up to 20 years.
- **Diet:** in the wild, they will eat any insect they can find. They will also eat some other small animals like baby mice (fed specially formulated pellets and live insects).
- **Quick Fact:** It depends on its good sense of smell and hearing to forage for food since it has poor eyesight.
- **Conservation Status:** not assessed

Minx – African Pygmy Hedgehog

- **Habitat:** Semiarid areas and dry savannahs
- **Lifespan:** they can live up to 10 years.
- **Diet:** in the wild, they will eat any insect they can find.
- **Quick Fact:** The spines on a hedgehogs back are made of the same material as our fingernails, keratin.
- **Conservation Status:** Population stable. African Pygmy Hedgehogs are often kept as exotic pets but require much more care than most families are able to provide.

Lenny - Long Tailed Chinchilla

- **Habitat:** Found in burrows or natural outcrops and crevices in both Chile and Peru (Andes Mountains).
- **Lifespan:** Up to 20 years.
- **Diet:** They eat grass and seeds, but have also been known to eat insects and bird eggs when available.
- **Quick Fact:** To eat, they hold their food between their front paws to nibble on it.
- **Conservation Status:** Critically endangered (due to fur trade).