

## **Aloha Teachers (and Parents):**

The following activities will meet educational standards in Social Studies, Math and Arts for Grades 3-5. We hope you will find them relevant and adaptable to your curriculum.

### **ACTIVITY NO. 1 Food Chain**

#### **FACT**

- The following are some of the animals that live on Komodo Island:

Macaque monkey	Timor Deer
Cockatoos	Wallacean Drongo
Green pit viper	Water Buffalo
Giant turtles	Wild boar
Palm civet	Gree Jungle Fowl
Noisy Friarbird	Great-billed heron

#### **FUN**

- Guess what each of these creatures has in common? Actually, each of these creatures is part of a Komodo Dragon's normal diet! Knowing that the Komodo is at the top of the food chain on Komodo Island, let's see where the other creatures fall.

- Find out information about their habitats, life span, and most importantly, their DIET! What do they eat? How often do they eat? Are they solitary diners or do they prefer to dine in packs? Do they prefer to catch their food alive, or do they prefer carrion...meat from animals that are already dead?

- Draw or tape pictures of each of these creatures to the chalk board or a piece of poster board. At the very top of the board, draw/paste a picture of a Komodo Dragon. At the very bottom of the board, draw/paste pictures of fish and insects.

- Then use colored chalk or markers to connect pictures of predators to prey. Once everyone has had a chance to establish their creature's diet, examine the food chains. Aside from the Komodo, which creatures would you say are towards the top of the food chain? Explain your answer. When

## Food Chain 2

examining the qualities of the dominant predators, what similarities do you notice among the animals? How are these creatures different? What enables them to stay higher on the food chain than other animals? Explain.

- Next, identify creatures (besides the fish and insects) that you would say are at the bottom of the food chain. Explain your answer? What makes these creatures similar? How are they different?

- Are there any creatures you could remove from the food chain that you think would NOT make an immediate difference in the overall diet of these creatures? If you were to remove the Komodo Dragon, which creature do you think would become the apex predator on Komodo Island? Explain your answer. If you removed insects from the bottom of the food chain, which creatures would be most immediately affected? Would the removal of insects affect only a few animals, or could it affect the whole food chain?

- For many reasons, humans could be considered to be near the top of the food chain, right along with some of the greatest predators on Earth. Can you name other creatures besides the Komodo Dragon that are considered to be top predators? What qualities do these creatures have in common? What qualities seem to keep humans nearer the top of food chain than the bottom? Do you agree that humans are nearer the top than the bottom? Explain your answer.



## ACTIVITY NO. 2

### Dragon Diet

#### FACT

● The average Komodo Dragon weighs just 3.5 ounces at birth and is on average 16 inches long. When Komodos are full grown adults, they average 9 feet in length and roughly 200 pounds. That's a lot of growth during a Komodo's life, which is estimated to be around 30 years long.

● One of the reasons Komodos grow so large is because of their voracious appetite! Komodos often eat 25% of their body weight in a single meal. What is 25% of 200 pounds?

● In some instances, Komodo Dragons have been observed to eat up to 80% of their body weight in a single sitting. What is 80% of 200 pounds?

#### FUN

- Let's say that for one day, you were given the appetite of a Komodo. Can you calculate what 25% of your own body weight would be?  
Can you calculate what 80% of your body weight would be?

#### FURTHER FUN

● Now knowing the number of pounds of food you would have to eat in order to take in 25% and 80% of your body weight, can you put together two menus using the following items to see just how much food you would have to consume to equal the appetite of a Komodo Dragon?

Hamburger- 8 ounces

Pizza- 32 ounces

Can of soda- 12 ounces

Bowl of ice cream- 10 ounces

Bag of potato chips- 16 ounces

Loaf of bread- 16 ounces

Jar of peanut butter- 28 ounces

Chicken breast- 10 ounces

Bowl of macaroni and cheese- 12 ounces

## Dragon Diet 2

● Knowing that Komodos often eat huge amounts of food in one sitting, let's explore how much food you eat in one meal or one day. Don't worry about counting calories for now, just pay attention to how many ounces of food you consume. (For example, a small bag of chips and can of soda would equal 22 ounces, or almost a pound and a half of intake.) When you have counted your ounces for a single meal or for a single day, see if you can calculate what percentage of your body's weight you are consuming. How does that compare to a Komodo's intake?



## ACTIVITY NO. 3

### The Art of the Dragon

#### FACT

● Symbolic and artistic representations of dragons exist in many cultures.

#### FUN

● Research these images. Use the following cultures to begin to build your picture and story database.

The following website is also an excellent starting point:

<http://www.theserenedragon.net/home.html>)

Africa

North, Central, South America

Australia and New Zealand

Austria

China

Egypt

England

France

Germany

Greece

India

Japan

Korea

Polynesia, Indonesia, Malaysia,  
and the Pacific Rim

Russia

Scandinavia

Spain

Vietnam

● Either print pictures or draw pictures of dragons from around the world. (Keep the culture's identification on the back of the drawings so students cannot see it.) Attach any stories associated with that dragon to the back of the picture, then post the pictures around the classroom on various walls. Students will then have a "museum day," where they move from picture to picture noting which dragons appear to be most similar, and which appear to be most different. Students will keep track of what makes the dragons similar or different (number of toes, color, wings, size, etc.) When students have had a chance to look at all the pictures, discussion ensues. Which dragons would you say are most similar? Let

## The Art of the Dragon 2

students identify the number of the dragons, then move the pictures to the front of the room so everyone can observe them. What features do the dragons have in common? And what sets them apart from other dragon groupings?

Next, begin to reveal the cultures that the dragons come from. Are there any surprises? Do dragons that come from similar geographical areas seem to share any qualities, or are they completely different? What might this say about the cultures that they originate from? How do dragons change from culture to culture?

- Have students identify two dragons they think are most different from each other. Have the students vote if necessary to identify the two dragons that are least alike. Once the selections have been made, read the two dragons' stories aloud. Pay attention to how the dragons are represented in the stories. Are they forces of good or evil? Do they interact with human beings, or are they something to be feared? What physical qualities do they possess that make them unique? Does the story have a central human character, or is the dragon the central character? What do the stories tell you about the cultures they originate from? (Example: If the story is about a dragon who is always frightening fisherman in their boats, what do we know about the people in the story... where and how may they live?)

- Almost every culture in the world celebrates stories of dragons. What if you were to tell a dragon story that takes place in America today? What would your dragon look like? What features would make him uniquely a modern American dragon? Where would he be from in America, and why would you choose that location? Would your dragon have a name? Create a drawing of your American dragon today, and be prepared to explain the special features you have given him.

## FAMILY FUN

### Create a mobile

*For this activity, you will need two wire coat hangers and some yarn. You will also need to find or draw some pictures related to Komodos.*

● Take two wire coat hangers and put one inside the other crosswise. Fasten the hooks together with the yarn. Then, decide which of the following pictures you would like to include on your mobile. Try to either draw or find at least 8 pictures.

- 1) Komodo dragons at work or at play.
- 2) Animals and birds that Komodo prey upon.
- 3) The Komodo in various stages of its life cycle.
- 4) The Komodo and other members of the monitor lizard family.
- 5) The Komodo and other types of lizards and reptiles.

● Use yarn that is cut into varying lengths to suspend your pictures from your hangers. Place at least two pictures per hanger arm. When completed, find a safe spot to hang your mobile from your ceiling!

### Dragon tracks

*For this activity, you will need a potato, a marker, a paring knife, a butter knife or spoon, paint or food coloring, a Styrofoam plate, paper, and a sense of adventure. (The paring knife should be used with either the guidance or supervision of an adult.)*

● Begin by cutting the potato in half. Use a towel or paper towel to dry the surface of the cut potato as much as possible. Then use the marker to draw a dragon's claw on the flat central surface of the cut potato. Do the same on the other half of the potato, but make the claw a mirror image so that you will have both a right and left claw.

● Next take the paring knife and cut the outline of the claw you have drawn on the potato. Then use your butter knife or spoon to begin to scrape away the potato that surrounds the outline of the claw. (This can also be done in reverse, to scrape away the shape that is inside the outline.)

Once you have scraped away about a half an inch of potato, you should be left with the stamp of a dragon claw. Do the same for the other potato half.

- Next, pour some paint onto your Styrofoam plate. (Make sure you are working in a protected area on newspapers in case of a spill.) Lay out the paper you would like to make tracks on. Then dip your claw stamps in the paint and place them in tracks on the paper. You are making a dragon's path!

- Follow the same procedure to make the claws, but use sugar cookies instead of paper, and food coloring instead of paint. Yum! Dragon tracks!

### **Crossword or Word Find**

*For this activity, you will need a sheet of graph paper and dictionary (if doing the crossword).*

- Place the following words related to Komodo Dragons into a word find. Try to find letters that words can share so that you can make your words go horizontally, vertically, and diagonally.

Ectothermic	heterothermic	bilateral symmetry
Oviparous	island endemic	tropical
Terrestrial	iteroparous	arboreal
Diurnal	gular region	carrion

- For the crossword, make a list of the words on a sheet of paper, and use a dictionary to look up the definitions. Then put your words onto the graph paper (lightly, using pencil), and make sure you have words that are sharing letters.

- Then make a list of "Down" clues and "Across" clues, making sure you number the first letter of the word with the corresponding clue number. Go back to the words on the graph paper and erase the letters, replacing them with empty outlined squares. Give the puzzle to your friends or parents and see how they do!