

## SKULLS

Have you ever been walking in the woods or along a trail and found a skull lying on the ground? It's always an exciting experience and brings lots of questions with the discovery. Your questions maybe start like this: WOW- I wonder what animal this skull came from? Or, is there any way to tell from this skull the **NICHE** of this animal? (**NICHE** is how this animal was able to survive: was it a hunter (**PREDATOR**) or was it hunted (**PREY**).

There are many things you can learn from a skull.

**DID YOU KNOW**-You can tell if an animal is a hunter or the hunted by looking at its eye sockets?

**DID YOU KNOW**-You can tell what an animal eats by its teeth?

**DID YOU KNOW**-You can find out the name of an animal by using a TWO CHOICE KEY?

SO-LET'S LOOK AT SOME SKULLS AND SEE WHAT WE CAN FIND OUT

BEAR

BEAVER

COYOTE

WOLF

MOUNTAIN LION

WOLVERINE

MOLE

HARE

Let's take a look at the skulls eye sockets first. (That's the places where the animal's eyes were when it was alive.)

Why is eye placement important in determining how successful an animal is in life?

Here is the answer: Animals with their eyes facing forward (like ours) are able to focus on a single task. These animals are usually **(PREDATORS)** and so have to concentrate on the animal they want for dinner-**(PREY)**

Animals with their eyes on the side of their skulls have the ability to see what is happening around them. This is a VERY important characteristic because these animals are the **HUNTED (PREY)**. They don't want to be dinner for a wolf or a coyote!!!

NOW WITH ALL THAT NEW INFORMATION CAN YOU SEPARATE THE SKULLS INTO PREDATOR AND PREY GROUPS

With all the success you've had so far I think you should move on to another challenge. What do YOU think?

What about an animal's teeth? Teeth play a vital role in the game of success and survival in the natural world. Everything alive has to have food, and the teeth they developed over time determine their eating habits.

In relation to their diets, animals can generally be broken into four main groups: **CARNIVORES**, eating meat; **HERBIVORES**, eating plants; and **OMNIVORES**, eat a variety of foods, **INSECTIVORES** eating (guess what) Insects and other stuff.

The shape and arrangement of teeth tell us a lot about the food needs of an animal. **INCISORS** are in the front and are used for cutting. Dagger-like **CANINES** next to the incisors are used for tearing and shredding meat, **MOLARS**, in the back of the mouth are used for grinding

**OMNIVORES** have a mixture of all three types of teeth because they feed on a variety of plant and animal food sources. **HERBIVORES** are the plant eaters, and as such have only clipper like canines and molars that are adapted for grinding their foods. **CARNIVORES** are meat eaters and depend only on their incisors for nipping and biting. Their canines and molars are sharp and are used for grabbing and tearing apart their prey.

**INSECTIVORES** have teeth, however, they don't use them much since insects are so small they don't require much ripping, tearing, or chewing.

With all this new found information look at the teeth in each skull and divide them into **OMNIVORES**, **HERBIVORES**, **CARNIVORES**, and **INSECTIVORES**

Now, with all this NEW information let's use the attached two choice key to name each of the skulls. All you have to do is look at the first two choices choose one and then look at the end of your choice and go to the next indicated number until you come to the name of the animal you are looking for.