MISSOULA CLAY  Where does it come from?

THE EARTH + TIME + A SPECIAL PLACE

Why is Missoula clay awesome? It is special to where we live. You can only find this exact mix of clay right here, where the mountain rocks and glacial lake mixed up this recipe! Clay is created over thousands or millions of years through Weathering.

WEATHERING  rain, wind, gravity, and more erode solid rock into smaller pieces.

Very small pieces of certain types of rock create clay. This clay was left in the Missoula valley by moving water coming down from the mountains that slowed down enough for the tiniest particles of rock to settle to the bottom of the lake bed in this very valley.

MISSOULA ANIMALS

Are Missoula Animals the same as the Missoula Clay? Are they special to where we live?

What makes animals the kind of animal they are?

THE EARTH + TIME + A SPECIAL PLACE

What wild animals live in the different environments around you? Do characteristics of the animal say anything about where they live and what they do?

Animals evolve one tiny change at a time, over thousands and millions of generations to look and act the way they do so they survive better in their environment.
Do you have a favorite animal, one you love or respect beyond all others? Let’s make a model of your totem animal!

TOTEM When an animal has a special meaning to a culture or an individual artist it is known as a totem. The word comes from the Ojibwe language. The Ojibwe people are Native Americans from the Great Lakes Region of the United States. Totems, or clans, are an important part of identity and social order for the Ojibwe.

See the next page for some Native American Cultural Education Resources!

For this project, we’re going to borrow the Missoula clay from the earth and then give it back when we’re finished!

PREPARE YOUR CLAY!
Moisten: Keep your dry clay in its baggie OR carefully place your dry clay in a small bowl. Slowly add water with a spray bottle or by the spoonful. Mix as you go with your fingers.

Kneed: When the clay starts to stick together and clump, squish and kneed it until it turns into something you can model with. Smooth, and Squishable.

SCULPT YOUR ANIMAL!
1. Start with a lump of clay that is just the right fit in your palm. Now slowly roll that lump of clay around in your hands until a nice smooth ball forms. Maybe the shape of that ball will tell you what animal to make! My first one looked like a turtle to me, so I went with that idea!
2. If you already have an animal in mind, you can roll the ball into a fat cylinder that better suits the animal’s shape. My second animal is imaginary, but it could easily turn into a hippo or a horse.
3. Gently pinch out the legs, neck, and head, but leave them sort of chunky. Don’t make any bits sharp or skinny or they will break off. Don’t attach any clay parts, though, as they tend to fall off!
If things have gone wrong with your first try at pinching, just start over! Clay is considered “giving” because it gives the artist lots of chances to try again!
4. If you want you can add a decorative surface to your totem animal. You can press patterns into your animal; my turtle’s shell was made using the end of a Sharpie cap for the outer circle and a plastic straw for the inner circle. You can also scratch into the clay with just about anything: I like using a dampened toothpick! Damp, but not wet!

**SET YOUR ANIMAL FREE!**

Finally, think about where your animal might like to live. You can find an environment in your yard, in a nearby park, at the edge of a river. After the clay dries, place your animal in its environment and set it free! It will melt back into the earth where the clay originally came from and become part of its environment, its special place. If you want, you can visit your animal and see how it WEATHERS back into tiny rock pieces over time as it returns to the earth!

*Want to learn more about animals and their importance to Native American cultures? These are a sampling of resources created by and about Native Americans.*

**K-2nd grade:**

**All Ages:**
Watch the playlist “Ojibwe Clans” by 7 Generation Games on YouTube
Watch the Zuni creation story, “How Coyote and Eagle Stole the Sun and Moon” by Erica Pretty Eagle on YouTube.

**13-15yrs:**
Read the book, *Jak’s Story* by Aaron Bell, Dundurn, 2010, A YA novel exploring Ojibwe connections to the land.

**For Teachers and Parents:**
3rd Grade Lesson Plan: “Animal Adaptations”, taught through the oral histories of the Crow Tribe or Apsáalooke people of Montana. Visit http://www opi mt.gov and visit the Indian Education for All page, then Indian Education Classroom Resources. Under Science, this is the first lesson.

p.s. Montana has lots of resources for Indian Education For All here, with many essential lesson plans and links to other educational resources.