



- Coral Reef Lesson Plan -

Coral reefs are beautiful and diverse ocean ecosystems that are found all over the world in scenic tropical regions. These small pockets bursting with life and color play host to a significant percentage of the ocean's species and provide nutrients and gases that affect not just the close surrounding habitats but the entire planet! Unfortunately, these unique and beautiful destinations are dwindling and dying all over the world each year because of human influence and climate change. It is important to learn about, understand, and protect coral reefs to keep their unique flora and creatures safe and flourishing! This lesson will give students an opportunity to research and explore the world of coral reefs while discussing the impact of the seriousness of coral reef habitat decline and

learning ceramic techniques!

Objectives and Goals

- Students will research the coral reefs and the species that inhabit them.
- Students will learn about and discuss the impact of human influence and climate change on coral reefs.
- Students will learn ceramic techniques and methods to create coral reef creatures and plants.

Visual Art Standards

- Utilizing inquiring methods of observation, research, and experimentation to explore unfamiliar subjects through art making.
- Apply visual organizational strategies to design and produce a work of art, design, or media that clearly communicates information or ideas.
- Understanding human impact and climate change on environments and ecosystems.
- Understanding extinction and how this happens over time in environments that are under pressure.
- Understanding geography and oceanography and how these help locate, research, and save coral reefs from extinction.



Tools & Materials

- AMACO® Low Fire (cone 05)
 25M White Art Clay
- AMACO® Low Fire (cone 05) Glazes: Crystaltex (CTL) LG-Series (LG)
- Scoring Tool (11199R)
- Fettling Knife (11192H)
- Rolling Pin (11195L) or brent[®] Slab Roller
- Brushes
- Sponges Paper
- Pencil
- Scissors

Sters



BUILD THE BASE: Your students can either build a solid base that they will hollow out later or pinch one from a ball of clay. The pinched base should have an internal structure to support the scene that will be built on top of it.



SLIP AND SCORE: Once all the pieces are cut out, pinched, and arranged, have students slip and score the scene together.



RESEARCH AND SKETCH: Have students research coral reefs, their environment and location, and their plant and animal species. What coral reefs are particularly vulnerable? Have them choose a few of their favorite creatures and plants to create a small ceramic coral reef scene!



PINCH: Other creatures and details may need to be pinched from a ball of clay. Have students break down their subject matter into simple shapes to determine what hand-building method is best for each element.



ADD DETAILS: Using coils, texture tools, other methods, your students can add details to their pieces! Remind students to write their name on the bottom of their work.



BISQUE: Once the coral reefs are finished, allow them to sit out until they are bone dry, then load them into the kiln. Fire them to cone 04.



GLAZE: Once the work is fired, students are ready to glaze. Remind students to wipe off their work with a damp sponge and apply the correct number of glaze coats.

GLOSSAKY

Slip and Score: A method of joining clay pieces by scratching the surface where they will meet, and applying slip between them before pressing them together and blending their edges.

Pinching: A method of handbuilding in clay where one uses their fingers to press a ball of clay outward into shapes and vessels (as opposed to rolling coils, slabs, or using the pottery wheel)

Coral Reef: a ridge of rock in the sea formed by the growth and deposit of coral

Coral Polyps: tiny little creatures that gather and grow into a form that we identify as "coral"

Coral Bleaching: When ocean conditions change (temperature, human impact, etc.) and vital living parts of the reef ecosystem are lost, coral polyps and other plants found in these areas die off and the whole landscape will lose its once-vibrant colors

Ecosystem: a biological community of interacting organisms and their physical environment



FINAL FIRE: When glazing is finished, load the pieces into the kiln. Fire them to cone 05. After firing, return them to your students for a classroom presentation!

