

Jurassic Art

Art

Jacqueline Harmon, Margaret Salesky, Erin Finley
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Grade Level	9th – 12th Grade	**Time Frame**	380 Minutes
Subject	Visual Arts	**Duration**	8 Class Periods
Course	Visual Arts		

Essential Question

How do we make visual conclusions based on the evidence presented?

Summary

Do we really know what dinosaurs looked like? In this lesson, students learn about different dinosaurs and discuss society's interpretation of their behavior and appearance based on the little evidence we have. Then, they will sketch different dinosaurs, using small models as a guide. Students will then research a specific dinosaur and, using the evidence they find, come to their own conclusion on their chosen dinosaur's appearance and create a sculpture of a baby and its egg. They will create an infographic of the research and sketches they did. Both the sculpture and infographic will be displayed in an art show.

Snapshot

Engage

Students participate in a S-I-T activity using images of animal skeletons.

Explore

Students watch a video about dinosaur reconstruction and sketch their own interpretations of dinosaurs based on dinosaur models.

Explain

Students research a dinosaur, complete a CER, and create an infographic based on their research.

Extend

Students sketch and sculpt a baby dinosaur and egg based on their research.

Evaluate

Students participate in a Gallery Walk and reflect on the lesson using Rose, Bud, and Thorn.

Standards

Oklahoma Academic Standards (Fine Arts: Visual Art (High School: Proficient (I)))

VA.CP.3 : Make creative choices and practice individual expression in application of concepts, language, techniques, and skills.
I.VA.CP.3.1 : Apply relevant criteria from cultural contexts to examine, reflect, and plan for works of art and design.

Oklahoma Academic Standards: English Language Arts (Grade 12)

12.3.W.2: Compose informative essays, reports, or technical writing that:
- objectively introduce and develop topics
- include a defensible thesis
- incorporate evidence (e.g., specific facts, details, charts and graphs, data)
- maintain an organized structure
- use sentence variety and word choice to create clarity and concision
- establish and maintain a formal style
- emulate literary devices from mentor texts

Attachments

- Claim, Evidence, Reasoning (CER)—Jurassic Art - Spanish.docx
- Claim, Evidence, Reasoning (CER)—Jurassic Art - Spanish.pdf
- Claim, Evidence, Reasoning (CER)—Jurassic Art.docx
- Claim, Evidence, Reasoning (CER)—Jurassic Art.pdf
- Dinosaur Infographic Rubric—Jurassic Art - Spanish.docx
- Dinosaur Infographic Rubric—Jurassic Art - Spanish.pdf
- Dinosaur Infographic Rubric—Jurassic Art.docx
- Dinosaur Infographic Rubric—Jurassic Art.pdf
- Dinosaur Sculpture Rubric—Jurassic Art - Spanish.docx
- Dinosaur Sculpture Rubric—Jurassic Art - Spanish.pdf
- Dinosaur Sculpture Rubric—Jurassic Art.docx
- Dinosaur Sculpture Rubric—Jurassic Art.pdf
- Graphic Organizer—Jurassic Art - Spanish.docx
- Graphic Organizer—Jurassic Art - Spanish.pdf
- Graphic Organizer—Jurassic Art.docx
- Graphic Organizer—Jurassic Art.pdf
- Lesson Slides—Jurrasic Art.pptx

Materials

- Lesson Slides (attached)
- Research Note Catcher (attached; one per student)
- CER handout (attached; one per student)
- Dinosaur Infographic Rubric (attached; one per student)
- Dinosaur Sculpture Rubric (attached; one per student)
- Internet capable devices for students
- Class set of dinosaur models/toys
- Sketching materials
- Clay
- Clay tools
- Paint
- Paintbrushes

20 minutes

Engage

Cross-Curricular Connections

While this lesson is mainly related to art, there are strong connections to science, history, and ELA. For cross-curricular connections, we encourage you to reach out to other teachers at your school to collaborate.

Use the attached **Lesson Slides** to guide the lesson. Use **slide 1** to introduce the lesson. Move to **slides 2 and 3** and go over the essential question and lesson objectives.

Display **slide 4** and introduce the S-I-T (Surprising, Interesting, Troubling) instructional strategy. Instruct students to analyze the picture on each slide, then try to guess what animal or creature it is. Then, guide them through the S-I-T process for each picture. Move through **slides 5-14**, giving students a few minutes on each slide to make their guess and discuss as a class.

Alternative S-I-T activity

If you would rather have students work in groups for this activity, print the images from each slide and attach them to blank 5x7 notecards. Have students work in groups to analyze the image, guess the animal, and complete the S-I-T on the back of the notecard.

45 minutes

Explore

Display **slide 15**. Instruct students to watch the video "How Scientists Solved this Dinosaur Puzzle" and be ready to discuss it after. Play the video on the slide.

Embedded video
https://youtube.com/watch?v=oPPJ7GGDyAw

When the video ends, move to **slide 17** and take a few minutes to discuss the questions with students.

Transition to **slide 18** and distribute sketching materials and dinosaur models to students. Instruct students to choose a model to sketch, making sure they follow the guidelines on the slide.

Second Video Option

If you would like an additional video option to show your students, this is a great option:

PaleoArt - New Visions of Ancient Creatures

This video is linked on hidden **slide 16**.

135 minutes

Explain

Distribute the **Claim, Evidence, Reasoning (CER)** handout (attached) and instruct students to set up their internet capable device.

Before starting the CER activity, direct students to choose a dinosaur to focus their research on. Use the list on **slide 19**, or create your own. Allow students 5-10 minutes to look up each dinosaur and make their choice.

Move to **slide 20** and introduce students to the Claim, Evidence, Reasoning instructional strategy. Present the research question to students:

"How do paleontologists and paleoartists determine what a dinosaur looked like?"

Once they have chosen a dinosaur to focus their CER on, direct students to create their claim (answer) to the question and record it on the handout provided. Then, ask them to conduct their own research to provide evidence in support of their claim and record that on the handout as well. Finally, ask students to write down their reasoning (conclusion) and present their evidence to support their answer. Allow students 1-2 class periods to conduct their research.

Optional CER Activity

If your students need further scaffolding before completing the Claim, Evidence, Reasoning activity on their own, consider completing an example as a class. The article This Dinosaur May Have Had a Body Like a Duck's is a good resource to use for an example, or to give students a place to start their research.

Distribute the **Dinosaur Infographic Rubric** (attached).

Display **slide 21** and instruct students to navigate to Canva.com and either log in or sign up for a free account. Instruct them to choose a template for their infographic using the search feature at the top of the page. Once they have chosen a template, direct students to use their rubric as a guide to create their infographic about their chosen dinosaur. Encourage students to be creative by using the graphic elements available to them in Canva. For further Canva instruction, see the Canva Tech Tool Card. When students have finished their work in Canva, have them submit their infographic. This can be done by asking students to print their infographic after downloading a PDF of it from Canva or by submitting their work via LMS.

Optional Timing Modification

If you need to condense your timeline for the lesson, consider having students complete the CER activity and the Infographic at the same time.

135 minutes

Extend

Distribute the **Graphic Organizer** handout (attached) and display **slide 22**. Direct students to use their gathered research to fill out their graphic organizer by sketching each perspective and part of their chosen dinosaur. Remind students that their sketches will be displayed with their infographic, so it should be their best work. Allow one class period for students to complete their graphic organizer.

When students have completed their graphic organizers, distribute the **Dinosaur Sculpture Rubric** (attached) along with clay and sculpting tools.

Move to **slide 23**. Tell students they will be sculpting a baby version of their chosen dinosaur along with the egg it hatched from. Direct them to use their gathered research, graphic organizer, and the Dinosaur Sculpture Rubric to help guide their work. Allow as much time as students need to complete the sculpting and painting or glazing process.

Using Different Mediums

If clay sculpture is not an option for your students, consider the following alternatives:

1. Paint or Draw your interpretation of your chosen dinosaur
2. Use paper mache to sculpt your interpretation of your chosen dinosaur

45 minutes

Evaluate

Display **slide 24**. Instruct students to set up their sculpture, infographic, and sketches in a display at their desk or table. Introduce students to the Gallery Walk instructional strategy and group or pair them before beginning the activity. Tell students to walk around and view their classmates' work. Encourage them to take time to discuss each display with their partner or group. When students have completed the Gallery Walk, have them return to their seats.

Optional Art Show

If you would like to display student work in a more formal setting, consider organizing an Art Show for your students and inviting other students, teachers, and parents to come view your students' creations.

Distribute notebook paper and pencils to students and display **slide 25**. Introduce students to the Rose, Bud, and Thorn instructional strategy. Direct students to answer the questions on the slide. When students have finished, ask for volunteers to share their answers.

Resources

- Black, R. (202, July 24). How dinosaurs raised their young. *Smithsonian Magazine*. https://www.smithsonianmag.com/science-nature/dinosaurs-parents-new-egg-discovery-180975361/
- British Geological Survey. (n.d.) Geological timechart. British Geological Survey. https://www.bgs.ac.uk/discovering-geology/fossils-and-geological-time/geological-timechart/
- K20 Center. (n.d.). Canva. Tech tools. https://learn.k20center.ou.edu/tech-tool/612
- K20 Center. (n.d.). Claim, evidence, reasoning (CER). Strategies. https://learn.k20center.ou.edu/strategy/156
- K20 Center. (n.d.). Gallery walk/carousel. Strategies. https://learn.k20center.ou.edu/strategy/118
- K20 Center. (n.d.). MagicSchool AI. Tech tools. https://learn.k20center.ou.edu/tech-tool/3416
- K20 Center. (n.d.). Rose, bud, and thorn. Strategy. https://learn.k20center.ou.edu/strategy/2224
- K20 Center. (n.d.). S-I-T (Surprising, interesting, troubling). Strategies. https://learn.k20center.ou.edu/strategy/926
- Ogasa, N. (2022, December 1). This dinosaur may have had a body like a duck's. *ScienceNews*. https://www.sciencenews.org/article/dinosaur-fossil-body-like-duck
- Osterloff, E. (n.d.) Were dinosaurs good parents? The Natural History Museum, London, UK. https://www.nhm.ac.uk/discover/were-dinosaurs-good-parents.html
- Philip J. Currie Dinosaur Museum. (n.d.) All about baby dinosaurs. Philip J. Currie Dinosaur Museum, Canada. https://dinomuseum.ca/2019/11/all-about-baby-dinosaurs
- Pickrell, J. (2016, August 21). How do we know what dinosaurs looked like? BBC Science Focus. https://www.sciencefocus.com/nature/how-do-we-know-what-dinosaurs-looked-like
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- The Dinosaur Database. (n.d.) *Dinosaur Pictures and Facts.* https://dinosaurpictures.org/
- University College Cork (Ireland). (2024, May 21). Researchers discover hidden step in dinosaur feather evolution. *ScienceDaily*. https://www.sciencedaily.com/releases/2024/05/240521124309.htm#
- Vox. (2019, March 29). *How scientists solved this dinosaur puzzle* [Video]. YouTube. https://www.youtube.com/watch?v=oPPJ7GGDyAw