

Lesson Plan – Hedgehog

Summary:

In this episode of Sketch and Coffee Live at 5:30am Texas time, Blade sketched a hedgehog and shared history, science, and cultural facts about this 15-million-year-old insectivore. The discussion covered their relation to shrews, global distribution, European folklore, and their role as weather predictors — a tradition that inspired Groundhog Day in the U.S. Defense adaptations like quills and venom resistance were explained, alongside appearances in literature and video games. Watch the full episode here: <https://www.youtube.com/live/qll5zUqRpaw?si=xOYD69tR90VayC9J>

Objective:

Students will learn about hedgehog biology, behavior, habitat, folklore, and cultural significance.

Standards:

- NGSS LS4.C: Adaptation
- NGSS LS4.D: Biodiversity and Humans
- C3 Framework D2.His.2.3-5: Compare life in specific historical time periods

Materials:

- Whiteboard or projector
- Images of hedgehogs
- Access to the Sketch and Coffee Live episode
- Student worksheet (provided below)

Procedure:

1. Introduce hedgehogs using photos and the summary from above.
2. Discuss each of the 9 Fun Facts, pausing to elaborate or answer questions.
3. Show relevant episode clips to illustrate folklore, defense, and pop culture references.
4. Lead a class discussion about how animals influence human culture and vice versa.
5. Assign worksheet for review and reflection.

Assessment:

- Participation in discussion
- Completion and accuracy of worksheet answers

Extension:

- Research another animal with both practical and folklore significance.
- Compare hedgehog defense strategies to another spiny animal (porcupine, echidna).

Rubric:

Criteria	4 – Excellent	3 – Good	2 – Satisfactory	1 – Needs Improvement
Participation	Actively engages, asks questions, offers insights	Participates and answers when prompted	Limited participation	No participation
Content Understanding	Accurately explains all Fun Facts and cultural links	Explains most facts with minimal errors	Some understanding, needs prompting	Minimal or no understanding
Worksheet Completion	Fully completed, correct answers	Completed with minor errors	Partially complete or multiple errors	Incomplete

9 Fun Facts About Hedgehogs:

1. Age of the species: Hedgehogs have been around for about 15 million years, with hedgehog relatives showing up even earlier in the fossil record. Their basic body plan has stayed successful for a very long time. Link: <https://www.hedgehogstreet.org/about-hedgehogs/hedgehogs-history/>

2. Ancestry and related animals: Hedgehogs are in the family Erinaceidae, making them distant cousins of gymnures and moonrats, not rodents. They sit in their own branch of small insect-eating mammals. Link: <https://www.britannica.com/animal/hedgehog-mammal>

3. Size: Most hedgehogs measure about 5 to 12 inches long, which is right in that small-loaf-of-bread range. Short legs and a compact body help them snuffle along the ground for food. Link: <https://kids.nationalgeographic.com/animals/mammals/facts/hedgehog>

4. Global distribution and number of species: There are roughly 17 to 19 species across five genera, native to Europe, Asia, and Africa, with introductions to places like New Zealand. Different species fit different habitats, from gardens to deserts. Link: <https://www.hedgehogstreet.org/about-hedgehogs/hedgehogs-history/>

5. European folklore: European stories often cast hedgehogs as clever, helpful creatures, sometimes even protectors of the garden or little weather watchers. Classical writers and later folklore both added to their cozy reputation. Link: <https://www.wildlifeonline.me.uk/animals/article/european-hedgehog-food-feeding-behaviour-folklore>

6. Groundhog comparison for weather lore: German Candlemas lore used a hedgehog to “predict” spring. Settlers in Pennsylvania kept the same tradition but swapped in a local animal, the groundhog, to play the same role. Link: <https://time.com/4650202/groundhog-day-history-2/>

7. Predator resistance and quill defense: A hedgehog’s first move is to curl into a tight, spiky ball that is hard for predators to bite. On top of that physical shield, they show resistance to some snake venoms, which adds another layer of safety. Link: <https://www.smithsonianmag.com/science-nature/animals-venom-cant-touch-180960658/>

8. Pop culture boost from Sonic the Hedgehog: Sega’s Sonic, launched in 1991, turned hedgehogs into global pop icons and kept them in the public eye through games, shows, and films. That pop culture spotlight boosted general interest in the real animal. Link: <https://www.theguardian.com/games/2023/oct/27/sonic-superstars-sonic-the-hedgehog>

9. Modern popularity as garden helpers and internet stars: Gardeners welcome hedgehogs because they help with natural pest control, and wildlife groups encourage making gardens hedgehog-friendly. They also thrive online, where cute hedgehog clips and photos are everywhere. Link: <https://www.rspb.org.uk/helping-nature/what-you-can-do/activities/pests-ditch-the-chemicals>

Worksheet:

Name: _____ **Date:** _____

Review Questions

6. How long have hedgehogs been around as a species?
7. What animals are hedgehogs most closely related to?
8. How big is a typical hedgehog?
9. Where in the world are hedgehogs found naturally?
10. How are hedgehogs portrayed in European folklore?
11. How did the groundhog take over the weather prediction role in America?
12. What are two main defenses hedgehogs use against predators?
13. Name one literary and one video game appearance of a hedgehog.
14. Why do gardeners often welcome hedgehogs?

Discussion Prompt

Do you think hedgehogs are better known for their real-life abilities or their pop culture appearances? Why?

Data Analysis

If a hedgehog eats 70 grams of insects a night, how much will it eat in one week?
Show your math.

Reflection

Would you want hedgehogs in your garden? Explain why or why not.