NOT BORING MEDIA

THE FISH THAT WALKS ON LAND

High-Interest Nonfiction Reading Passage

WHAT'S INCLUDED

✓ Reading Passage ✓ Comprehension Questions
✓ Answer Key ✓ Teacher Guide

GRADES 4-6 • LEXILE ~750L • DOK LEVELS 1-4

Reading they'll actually do.

NOT BORING MEDIA — TERMS OF USE

TERMS OF USE

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WHAT'S INCLUDED

✓ High-interest nonfiction reading passage (300-400 words)

✓ 6 comprehension questions spanning DOK levels 1-4

✓ Complete answer key with explanations

✓ Teacher guide with standards, pacing, and extensions

Questions or feedback? Leave a review or message us through TPT!

THE FISH THAT WALKS ON LAND

In the muddy mangrove swamps of Africa, Asia, and Australia lives a fish that breaks all the rules. The mudskipper can walk on land, climb trees, and breathe air—abilities that seem impossible for a creature with gills and fins.

Mudskippers have adapted to life in the intertidal zone, where water levels rise and fall with the tides. Rather than staying in water like sensible fish, mudskippers spend most of their time on land. They've evolved remarkable physical features that make this seemingly impossible lifestyle work.

Their pectoral fins have become almost like arms. Mudskippers can prop themselves up and 'walk' across mud and sand by moving these fins in an alternating pattern. Some species can even climb mangrove roots to escape predators or find food. They're not graceful, but they're surprisingly effective at getting around.

Breathing presents a bigger challenge. Fish normally extract oxygen from water using gills, but mudskippers can absorb oxygen directly through their moist skin and mouth lining. They must keep these surfaces wet at all times, which is why they're always covered in mud. They also hold water in enlarged gill chambers, like a built-in oxygen tank.

Mudskippers use their unusual lifestyle to exploit food that other fish can't reach. They hunt insects, crabs, and worms on the exposed mudflats. Males build elaborate mud towers to attract females and fiercely defend their territories, sometimes fighting rivals using their surprisingly powerful jaws.

Scientists find mudskippers fascinating because they may resemble the ancient fish that first crawled onto land millions of years ago. By studying how mudskippers survive out of water, researchers gain insights into how life made the incredible transition from sea to land—one of the most important events in evolutionary history.

The mudskipper proves that evolution doesn't follow a rulebook. Given enough time and environmental pressure, life always finds a way.

Word Count: 284 | Lexile: ~750L | Grades 4-6 | Source: National Geographic

COMPREHENSION QUESTIONS

Name: _____ Date: _____

1 **Where do mudskippers primarily live?**

- ◯ A) Deep ocean
- ◯ B) Freshwater lakes
- ◯ C) Intertidal zones and mangrove swamps
- ◯ D) Arctic waters

2 **How do mudskippers breathe out of water?**

- ◯ A) They have lungs
- ◯ B) They absorb oxygen through skin and mouth lining
- ◯ C) They hold their breath
- ◯ D) They don't need oxygen

3 **Why must mudskippers stay covered in mud?**

- ◯ A) For camouflage
- ◯ B) To keep breathing surfaces moist
- ◯ C) To stay warm
- ◯ D) To attract mates

4 **What advantage does living on land give mudskippers?**

- ◯ A) They can fly
- ◯ B) They can access food that other fish can't reach
- ◯ C) They grow larger
- ◯ D) They live longer

5 **Why are scientists interested in studying mudskippers?**

- ◯ A) They make good pets
- ◯ B) They may reveal how ancient fish transitioned to land
- ◯ C) They produce medicine
- ◯ D) They're endangered

6 **What does mudskipper evolution suggest about adaptation?**

- ◯ A) Adaptation is impossible
- ◯ B) Only mammals can live on land
- ◯ C) Organisms can evolve to exploit new habitats given time and pressure
- ◯ D) Fish always stay in water

ANSWER KEY

The Fish That Walks on Land

1. C) Intertidal zones and mangrove swamps

DOK 1 — Recall. The passage states mudskippers live 'in the muddy mangrove swamps' and 'the intertidal zone.'

2. B) They absorb oxygen through skin and mouth lining

DOK 1 — Recall. The passage explains: 'mudskippers can absorb oxygen directly through their skin and mouth lining.'

3. B) To keep breathing surfaces moist

DOK 2 — Inference. The passage states: 'They must keep these surfaces moist, which is why they're always covered in mud.'

4. B) They can access food that other fish can't reach

DOK 2 — Inference. The passage states: 'Mudskippers use their unusual lifestyle to exploit food that other fish can't reach.'

5. B) They may reveal how ancient fish transitioned to land

DOK 3 — Analysis. The passage explains mudskippers 'may resemble the ancient fish that first crawled onto land.'

6. C) Organisms can evolve to exploit new habitats given time and pressure

DOK 4 — Extended Thinking. The passage concludes: 'evolution doesn't follow a rulebook. Given enough time and pressure, life finds a way.'

TEACHER GUIDE

The Fish That Walks on Land

STANDARDS ALIGNMENT

- CCSS.ELA-LITERACY.RI.4.1 — Refer to details and examples in a text
- CCSS.ELA-LITERACY.RI.5.4 — Determine meaning of words and phrases
- CCSS.ELA-LITERACY.RI.5.8 — Explain how author uses evidence
- NGSS — Connections to scientific practices

PACING OPTIONS

- Quick Read (10-15 min): Passage + questions 1-4
- Standard (20-25 min): Full passage + all questions
- Deep Dive (35-40 min): Add discussion + extension

DISCUSSION QUESTIONS

- Mudskippers can do things no other fish can do. What advantages might come from being able to exist in two different environments?
- Scientists think mudskippers resemble ancient fish that first walked on land. How does studying living animals help us understand extinct ones?
- The passage says 'evolution doesn't follow a rulebook.' What rules about nature did you believe that this story challenges?

EXTENSION ACTIVITIES

- Draw the evolutionary steps that might have taken fish from fully aquatic to amphibious (like mudskippers) to fully land-dwelling.
- Research another animal that lives between two environments (like penguins or sea lions) and compare their adaptations to mudskippers.
- Design a fictional creature that could survive in two very different environments. What adaptations would it need?

DIFFERENTIATION

- Struggling: Pre-teach vocabulary, partner reading
- Advanced: Add research, compare to related events
- ELL: Visual supports, pre-teach context

SOURCE

- National Geographic / Journal of Experimental Biology