Same Pond, Three Fates

Teacher		**Class**	Grade 3
Subject	Science	**Topic**	Surviving in a habitat
Date		**Room**	
Lesson length	60 minutes	**Country**	United States

Students learn that one habitat suits some organisms well and others poorly. They sort pond animals and argue each rank with evidence.

Curriculum links

- Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

Learning objectives

- Students will rank three pond organisms by how well they survive with evidence.
- Students will construct a spoken survival argument with evidence for each rank.

Success criteria

- I can place each animal as thrives, struggles, or cannot survive.
- I can say my claim and give habitat evidence for it.

What students already know

Ask: What does a habitat give plants and animals? Listen for food, water, shelter, and space.

Key words

habitat	the home place that gives food, water, shelter, and space [3]
survive	keep living and growing in a place
evidence	true facts you use to show your idea is right
claim	an idea you say is true and can prove
shelter	a safe hiding place to live in

Materials

- pond poster showing water, plants, insects, and bank
- three large labels: Thrives, Struggles, Cannot survive
- sticky notes and pencils
- printed Worksheet Task F for each pair
- slides and projector with sound for video

Before the lesson

- Print Worksheet Task F: Finish the argument. Use evidence about what each living thing needs - one per pair
- Make pond poster and three large labels: Thrives, Struggles, Cannot survive
- Test Slide 6, Video clip 1 (0:00-4:42) with sound and captions
- Set desks for pairs facing pond poster and sticky-note station

Lesson outline

0–7 min **Starter** 7 min · Whole class

Hook interest in pond survival and recall what a habitat provides.

YOU DO

1. Show Slide 1 title and welcome the class to pond science.
2. Say the hook and show Slide 2 question: Could a frog live well in a hot, dry desert?
3. Ask pairs to whisper a yes or no with one reason in 1 minute.
4. Take 2 quick answers and link them to habitat needs.

STUDENTS DO

1. Look at Slide 2 and discuss with a partner for 1 minute.
2. Share a yes or no answer with one reason.
3. Listen for the words food, water, shelter, and space.

Say: Same pond, three animals, three different endings. Can you prove your ending? Look at this question and tell your partner what you think and why.

Ask: Could a frog live well in a hot, dry desert? Why? (No, because it needs water and pond food it cannot get there.) · What does any habitat have to give? (Food, water, shelter, and space. [3])

Check understanding: Thumbs up if you can name all four habitat needs; if not, point to Slide 3 bullets and chant them together.

Support: Let a student point to the pond poster water and plants while naming the need. **Stretch:** Ask ready students: What if the desert had a small pond for one month - who might struggle less?

Use: Slides 1-2

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7–17 min **Teaching** 10 min · Whole class

Teach that one habitat fits some organisms well and others poorly.

YOU DO

1. Show Slide 3 and read the bullets with the class.
2. Show Slide 4 statement and explain thrives, struggles, cannot survive.
3. Connect pond to science: a pond is a freshwater ecosystem [2] where we study creatures and the conditions they need [6].
4. Model the sentence frame: We claim _ will _ because it gets _ .

STUDENTS DO

1. Repeat the four habitat needs and the big idea aloud.
2. Practice the sentence frame with the teacher using hand signals.
3. Point to food, water, and shelter on the pond poster.

Say: A habitat is the home of plants and animals. It gives food, water, shelter, and space. Each habitat gives different amounts of each. So in one home, some live well and some cannot live at all.

Worked example: Big idea model: In one habitat, some live well, some struggle, some cannot live at all. A frog with pond water and insects thrives, a rabbit that only drinks there struggles.

Ask: Why can the same pond be good for one animal and bad for another? (Each habitat gives different amounts of food, water, shelter, and space.) · What must your because part include? (Habitat evidence about food, water, shelter, or space. [3])

Check understanding: All students hold up 1, 2, or 3 fingers for thrives, struggles, cannot survive when you name frog in pond; reteach if mixed.

Support: Post the frame We claim _ will _ because it gets _ with picture cues for food, water, shelter. **Stretch:** Ask ready students to restate the big idea using pond and desert as examples.

Use: Slides 3-4

17–29 min **Guided practice** 12 min · Whole class

Model evidence-based ranking using video and pond cards.

YOU DO

1. Play Slide 6, Video clip 1 (0:00-4:42) and ask students to spot food, water, and shelter.
2. Show Slide 7 cards and read the frog and rabbit evidence aloud.
3. Think aloud to rank frog as Lives Well and rabbit as Lives Less Well.
4. Show how birds with waterproof feathers keep dry because rain runs off [5].

STUDENTS DO

1. Watch the video and call out food, water, or shelter they see.
2. Read Slide 7 cards with the teacher and point to the evidence words.
3. Vote thrives, struggles, or cannot survive and repeat the model claim.

Say: Listen for which animals live well and why. Spot food, water, and shelter in the habitat. Now watch how I use the card facts to prove my rank.

Worked example: I claim the frog will thrive because it gets water to lay eggs and pond insects to eat. Step 1: read card: Lays eggs in water and eats pond insects. Step 2: match to pond water and food. Step 3: rank as Frog - Lives Well. Contrast: Rabbit - Can drink at pond but cannot live in water, so it struggles.

Ask: Why does the frog rank as Lives Well in the pond? (It lays eggs in water and eats pond insects, so it gets water, food, and space.) · Why does the rabbit rank as Lives Less Well? (It can drink at the pond but cannot live in water, so it misses shelter and food.) · How do waterproof feathers help a pond bird in wet places? (Rain runs off, so the bird stays dry and warm. [5])

Check understanding: Use mini whiteboards: write Thrives or Struggles for frog and rabbit with one evidence word; scan and correct any mix of rank and evidence.

Support: Pair students so one points to the pond need on the poster while the partner says the evidence using the fact that habitats provide water, air, shelter, and food [5]. **Stretch:** Ask ready students how the rabbit rank would change if the pond bank had soft soil for burrows and grasses for food.

Use: Slide 6, Video clip 1 (0:00-4:42)

29–50 min **Main activity** 21 min · Pairs

Build and share spoken pond arguments with written evidence.

YOU DO

1. Point to the pond poster and three labels: Thrives, Struggles, Cannot survive.
2. Hand out sticky notes and Worksheet Task F and read the task direction together.
3. Send pairs to place a water bird, a penguin that needs icy sea fishing [5], and a desert camel built for hot, dry sand [5].
4. Stop at 15 minutes for pair-to-pair sharing of one claim with evidence.

STUDENTS DO

1. Discuss and stick each animal under Thrives, Struggles, or Cannot survive.
2. Complete Worksheet Task F: Finish the argument. Use evidence about what each living thing needs.
3. Practice saying: I claim ___ will ___ because ___, then share evidence with another pair.

Say: Same pond, same water, different lives. In pairs, sort the three animals, stick your notes under Thrives, Struggles, or Cannot survive, then finish the argument. Use evidence about what each living thing needs.

Worked example: Strong pair model: We claim the water bird will thrive because it gets pond water, fish, and shelter, and its feathers shed water. We claim the camel cannot survive because a hot, dry animal that saves water and blocks sand [5] does not find its needs in a pond.

Ask: Where does the camel belong and what is your evidence? (Cannot survive, because it is built for hot, dry places and saving water, not pond water and shelter. [5]) · Where does the penguin belong in this pond and why not higher? (Struggles, because it needs icy cold sea water for fishing for food, which this pond does not give. [5])

Check understanding: Teacher circulates with checklist for claim plus habitat evidence; if a pair has no because, point them to the pond need icons on the poster.

Support: Pair students so one points to the pond need on the poster while the partner says the evidence using the fact that habitats provide water, air, shelter, and food [5]. **Stretch:** Have ready students argue how the penguin's rank would change if the pond froze over in winter and gained fish.

Use: Worksheet Task F

50–60 min **Plenary** 10 min · Whole class

Check the big idea and success criteria with true or false and claims.

YOU DO

1. Invite three pairs to state: I claim ___ will ___ because ___ and class checks the because part.
2. Show Slide 12 and vote true or false for each complete statement.
3. Restate that adaptations like waterproof feathers [5] or fat and fur for cold [5] explain fit.
4. Collect Worksheet Task F as exit evidence and preview garden habitat.

STUDENTS DO

1. Share claims aloud and give thumbs up if the because uses habitat evidence.
2. Vote true or false and correct the false idea together.
3. Self-check success: show fingers for I can sort and I can argue with evidence.

Say: Prove your ending one last time. Say your claim loud and clear. Then show me if you can spot what is true about every habitat.

Ask: A habitat gives food, water, shelter, and space - true or false? (True.) · Every plant and animal can live well in any habitat - true or false? (False; some live well, some struggle, some cannot live at all.)

Check understanding: Exit vote on Slide 12 statements plus collect Task F; if many miss the false statement, reteach tomorrow with desert versus pond sort.

Support: Let a student answer by pointing to Thrives, Struggles, or Cannot survive labels instead of speaking the full sentence. **Stretch:** Ask ready students to explain what extra food, water, shelter, or space [3] a struggler would need to thrive.

Use: Slide 12

Common mistakes

Mistake	How to spot it	How to fix it
Thinking any animal can live well anywhere if it wants to	Student ranks camel as thrives in pond because it can drink water	Match all needs: a desert animal needs hot, dry conditions and sand protection [5], not just water, so pond shelter and food do not fit.
Mixing up survives less well with cannot survive at all	Student puts rabbit and camel both under cannot survive	Ask: Can it get some needs but not live there? Rabbit can drink at pond but cannot live in water, so it struggles; camel gets almost none, so it cannot survive.
Giving an opinion instead of habitat evidence	Student says I like frogs so it thrives	Point to card facts: use lays eggs in water and eats pond insects to prove food and water match.

Support

- Pair students so one points to the pond need on the poster while the partner says the evidence using the fact that habitats provide water, air, shelter, and food [5].
- Provide sentence frame I claim ___ will ___ because ___ with picture cues for food, water, shelter.

Stretch

- Have ready students argue how the penguin's rank would change if the pond froze over in winter and gained fish.
- Have ready students explain what extra habitat needs a struggler would require to thrive.

For the LSE or teaching assistant

Stay with target pairs in main activity; help point to pond needs, read Task F aloud, and prompt the because with evidence words.

Check for understanding

Question	Answer
A pond frog lays eggs in water and eats pond insects. Will it thrive, struggle, or not survive in a pond? Give evidence.	Thrive, because it gets pond water for eggs and insects for food.
A camel is built for hot, dry desert life. Will it thrive in a pond? Give evidence.	Cannot survive, because the pond does not give its hot, dry food, water-saving, and shelter needs. [5]
A rabbit can drink at the pond but cannot live in water. Will it thrive or struggle? Why?	Struggle, because it gets water to drink but not water shelter and pond food to live.

Homework

Ask at home: name one pond animal and one thing it gets from the pond.

Sources

1. Core Science Concepts | Grade 3 Curriculum | The Inquiry Project · inquiryproject.terc.edu · https://inquiryproject.terc.edu/curriculum/curriculum3/core_science_concepts.cfm.html
2. Download the Lesson List · science.edu · https://www.science.edu/Acellus/curriculum/science/lesson-lists/Grade%203%20Science.pdf
3. Slide 2 Let's begin by reviewing what a habitat is. A habitat ... · pa.gov · https://www.pa.gov/content/dam/copapwp-pagov/en/pgc/documents/education/wildlife-on-wifi/documents/bird%20and%20mammal%20adaptations%20notes.pdf
4. Living things and their habitats - KS1 Science - BBC Bitesize · bbc.co.uk · https://www.bbc.co.uk/bitesize/topics/zx882hv
5. What is a habitat? - KS1 Science curriculum - BBC Bitesize · bbc.co.uk · https://www.bbc.co.uk/bitesize/topics/zx882hv/articles/znjxb7h
6. Habitat investigation: Science primary resource | National ... · natgeokids.com · https://www.natgeokids.com/uk/primary-resource/investigating-habitat-primary-resource/