

The Building Blocks of Language: Lesson 7

Chapter 2 — Lesson 7

Why “River Horse”?

Today’s Word: HIPPOPOTAMUS

Tool Carried Forward: HABITAT

New Handle: ROOT WORDS

After the Morning Routine

Begin after the class’s established morning routine. Use the classroom routines, song, movement, visual supports, and participation structures that are already working for your class.

Then bring the investigators back together. Say: “Investigators, today we have another case.”

Write on the board: HIPPOPOTAMUS

Ask: “Can anyone tell us this word?” Give the class time to answer. Then say the word together: HIPPOPOTAMUS.

Tell the class: “We have investigated this giant word before. Today we are coming back to it with tools we did not have the first time.”

Today’s investigation: WHY “RIVER HORSE”?

1. Return to a Word We Know

Start with the familiar routine. See it: HIPPOPOTAMUS. Say it together. Then clap it: HIP | PO | POT | A | MUS.

Five syllables. Remind the class: “These breaks show us the spoken beats in HIPPOPOTAMUS.” Do not reopen the earlier word hunt. Today the class is looking for a different kind of structure inside the word.

2. Introduce Root Words

Write: ROOT WORDS. Tell the class: “We already know that words can be broken in different ways. Today we are going to look at roots.”

Explain: “A root is a word or word part that carries an important piece of meaning into another word.” Some roots came into English through other languages and through history.

HIPPOPOTAMUS gives us two very old Greek words to investigate. Write them with space between them: HIPPOS POTAMOS. Underneath, write: HORSE RIVER.

Explain: “HIPPOS was a Greek word for HORSE. POTAMOS was a Greek word for RIVER. Those words came together in an old Greek name that meant RIVER HORSE. Through a long history of language, that name became our English word HIPPOPOTAMUS.”

The English word came through Latin from Greek hippopotamos; its Greek pieces come from hippos, “horse,” and potamos, “river.” Source: Merriam-Webster.

Whiteboard Note

Do not rewrite RIVER HORSE underneath the two roots. Say “river horse” aloud. Keeping the board as HIPPOS — HORSE and POTAMOS — RIVER will make the next comparison easier to see and keep the root meanings lined up.

Teacher move: Keep this part quick. The goal is not to teach Greek in depth. The goal is to show students that a word can carry meaning from older word parts.

Now ask: “Why might someone have looked at this animal and thought ‘river horse’?” Do not solve it yet. Tell the class: “That is what we are going to investigate.”

3. Bring Back HABITAT

Write: HABITAT. Ask: “Does anyone remember what we learned about HABITAT?” Let the children answer. Bring forward the class’s understanding from Lesson 6.

If needed, restate: A habitat is the place or environment where a living thing naturally lives and gets what it needs.

Then explain what is changing today: “Yesterday HABITAT was something we investigated. Today we are going to use HABITAT as one of our investigation tools.”

Ask: “What does a hippopotamus’s habitat look like?” Then: “What does a horse’s habitat look like?” Now build the comparison directly underneath the roots.

4. Build the Whiteboard Investigation

Keep the root words at the top: HIPPOS POTAMOS

HORSE RIVER

Below that, begin a three-part comparison. Put HORSE underneath the HORSE side. Put HIPPO underneath the RIVER side. Put SAME between them.

HORSE	SAME	HIPPO
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Draw vertical lines if they help the class see the three areas. This gives the teacher one simple place to carry the rest of the investigation. HORSE holds things that belong especially to the horse. HIPPO holds things that belong especially to the hippopotamus. SAME holds things the class discovers that the two animals share.

5. What Is the Same? What Is Different?

Start broadly. Ask: “Where does a horse spend most of its time?” and “Where does a hippo spend most of its time?” Write the children’s useful answers in the appropriate areas.

Suggested prompts: “Where does a horse spend most of its time?” “Where does a hippo spend most of its time?” “Do they both use water?” “Do they use water in the same way?” “What do they both need from their habitat?” “What evidence do we see on the board?”

The teacher does not need to ask every question. Use the prompts to keep the investigation moving and let the class build the board.

6. Teacher Fact Bank

HIPPO

Hippos spend much of the daytime in water. Common hippos live around slow-moving rivers and lakes in Africa and often leave the water at night to graze. A hippo can close its nostrils underwater and can stay submerged for several minutes. Source: San Diego Zoo Animals & Plants.

Hippos move through water differently than horses. A horse swims by paddling through the water. A hippo usually moves along the bottom by walking, bouncing, or pushing off. This gives the investigators another interesting comparison: both animals can move through water, but they do it in very different ways.

Hippos can even sleep underwater. They have a reflex that lets them surface for air and sink again without fully waking. Hippos are grazers and commonly leave the water in the evening to feed on grasses. Source: San Diego Zoo Animals & Plants.

HORSE

Horses are primarily land animals. For a domestic horse, a familiar habitat picture might include pasture or paddock, forage such as grass or hay, fresh water, and shelter. Sources: Merck Veterinary Manual and Merck Veterinary Manual.

Horses really can swim. When swimming, the body is largely submerged while the horse keeps its head at or above the surface and propels itself with its legs. Equine swimming is used in some conditioning programs.

Horses have been known to hold their breath for up to about 20 seconds while swimming. Research on swimming horses describes a brief period of breath-holding at the beginning of exercise. Source: PubMed Central.

Horses can only breathe through their noses, not through their mouths. Horses also eat forage such as grasses and hay. Source: Merck Veterinary Manual.

7. Let the Board Tell the Story

As the investigation develops, the board might begin collecting ideas such as:

HORSE	SAME	HIPPO
spends most time on land	four-legged mammals	spends much of the day in water
swims by paddling	eat grass	pushes and bounds from the river bottom
keeps its head above water while swimming	need water	can remain completely submerged for several minutes
pasture, paddock, shelter	spend time on land	rivers and lakes

These are not answers that must be copied onto the board. They are examples for the teacher. Build the actual board from the class investigation. The goal is for the students to see relationships appearing between the two habitats.

8. Return to the Roots

When the comparison is developed, stop and go back up the board. Point to HIPPOS — HORSE. Then point to POTAMOS — RIVER. Say aloud: “River horse.”

Now ask: “Investigators, what does our evidence give us?” Then ask: “Does knowing the hippo’s habitat help us understand why RIVER became part of this name?” “Does comparing the hippo with a horse give us any clues about HORSE?” “What is the same?” “What is different?” “What might someone have noticed?” “What evidence made you think that?”

Let the class reason from the board. The class does not need to discover one hidden correct explanation. They are asking whether the comparison makes more sense now that they know more about both animals and their habitats.

9. Two Different Ways to Break One Word

Before closing, return once more to HIPPOPOTAMUS. Point first to HIP | PO | POT | A | MUS. Ask: “What kind of break is this?” The answer is SYLLABLES. These show the spoken beats.

Then point to HIPPOS POTAMOS and HORSE RIVER. Ask: “What kind of break did we investigate today?” The answer is ROOTS.

Explain: “These pieces give us a different kind of information. They help us investigate meaning and history.” Then state the larger rule: WORDS CAN BE BROKEN IN DIFFERENT WAYS FOR DIFFERENT REASONS. One break helped us hear the word. Another helped us investigate where its meaning came from.

10. Let the Investigators Use the Tools

Students may use the Lesson 7 worksheet alongside the whiteboard investigation. They can talk, draw, write, compare, label, point, work with a partner, or combine several forms of participation.

The teacher carries the larger investigation on the whiteboard. Students use the worksheet and classroom conversation to take hold of the parts they can carry themselves.

Close the Investigation

Return to the whole word: HIPPOPOTAMUS. Say it together. Then point back to HIPPOS — HORSE and POTAMOS — RIVER. Say: “River horse.”

Ask one final question: “Why does that name make more sense to us now than it did at the beginning of class?” Let the investigators answer. Then close by putting the whole word back together: HIPPOPOTAMUS.

The word did not change. The investigators did. They now have another way to enter a word: hear it, break it, look for meaning, follow its roots, use what they already know, compare evidence, and put the word back together with more understanding.

Sources

- San Diego Zoo Animals & Plants — Hippo
- Merriam-Webster — Hippopotamus
- Merck Veterinary Manual — Pasture for Horses
- Merck Veterinary Manual — Providing a Home for a Horse
- PubMed Central — Workload and Spirometry Associated with Untethered Swimming in Horses