CLASSROOM PACK

Where Did the Dinosaurs Go?

Extinction and Birds · Episode 3

Ages 4–8 · K to Grade 2 · one lesson, 40–45 min · video about 5½ min

Today's big word

fossil

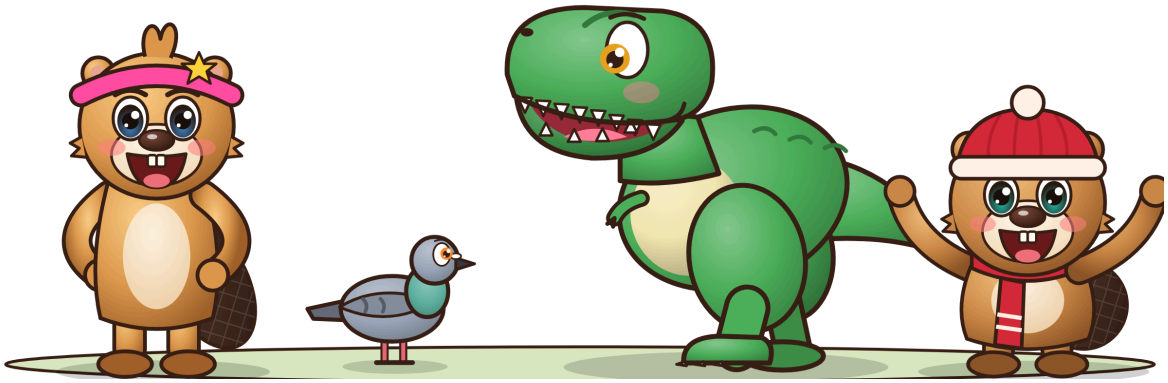
Fos-sil

Watch: mayeandpete.com

What's inside

1. Lesson plan with pause points: 2 pages, teacher
2. Discussion guide: 1 page, teacher
3. Build It! Mystery Fossil: student sheet + teacher page
4. Vocabulary cards: colour + word-wall line version
5. Exit tickets: K and Grades 1–2
6. Answer key: teacher
7. Home note: 2 per page
8. Colouring sheets: 2 pages
9. Certificate + 12 stickers

For teachers and parents. Pages marked TEACHER are for grown-ups; STUDENT pages are for children; HOME goes home. Print in colour, or use the low-ink black-and-white version. The science is checked against the episode's sources (page 3). Connects to early-years science topics such as what animals need, how Earth can change quickly or slowly, and observing clues.



Lesson Plan

TEACHER Episode 3: Where Did the Dinosaurs Go? · 1 of 2

Kids: "I can..."

- say what a fossil is.
- tell you what happened when a giant space rock hit Earth.
- explain why some small animals survived.
- tell you that birds are dinosaurs!

Teacher goals

- Fossils (bones, teeth, footprints, shells, leaves) are clues in rock about life long ago.
- About 66 million years ago an asteroid hit near what is now Mexico; dust and smoke made the world dark and cold, and plants failed.
- The big dinosaurs (and many small ones) went extinct; some small animals that needed little food survived.
- Birds are living dinosaurs: feathers, hollow bones and three-toed feet.
- People and big dinosaurs never met: more than 60 million years apart.

Lesson flow (40–45 min)

Min	Part	What to do
5	**Hook: bird feet**	Show a picture of a bird's foot. Ask: "Who else has three toes and claws like this?"
10	**Watch with pause points**	Play the episode. Stop at the pause points below. Each stop is short, under a minute.
7	**Discuss**	Use the discussion guide. Walk like a T. rex, then hop like a pigeon: compare.
15	**Build It! Mystery Fossil**	Lift the cloth, guess who made each print, make a fossil to dry. See the teacher page.
5	**Exit ticket + wrap-up**	K or Grade 1–2 version. Close together: "Big ideas..." "...little by little!"

Hold That Thought: pause points

Time	Pause after	Do
0:41	after Pete says "Fos-sil"	Clap the two syllables. What could be a fossil?
1:56	Hold That Thought! (after "Say it out loud!")	Pause longer: arms wide for giant dinosaur, hands small for tiny animal. Answer starts at 2:00.
2:46	after Pete asks "What happened next?"	Take guesses: who had room to grow once the big dinosaurs were gone?
3:30	Pete's Mix-Up: after "Is Pete right?"	Thumbs up or down, then play: shout "NOOOO!" with the card.
4:12	after Pete says "I'm looking at a dinosaur?!"	What do pigeons and dinosaurs share? (feathers, hollow bones, three toes)

Times checked against the final Episode 3 cut (5:38). Pause at the time shown.

Lesson Plan

TEACHER Episode 3: Where Did the Dinosaurs Go? · 2 of 2

Materials

- Screen to play the video (about 5½ min)
- Play dough or salt dough (1 slab per group of 3–4)
- Objects to press: a shell, a leaf, a toy dinosaur with three-toed feet, a blunt stick or spoon handle (for bird tracks)
- A cloth; plastic magnifiers (never at the sun)
- Copies: student sheet (1 per child), exit ticket (1 per child), home note (1 per 2 children), vocab cards (1 set)

Prep

15 min: roll out a dough slab per group; press the four objects in secret and cover with a cloth; print and cut vocab cards; cue the video at 0:00.

Differentiation

Kindergarten: Focus on 2 ideas: a fossil is a clue in rock; birds are dinosaurs. Compare just two prints. Use the picture exit ticket, read aloud.

Grades 1–2: Add the survival idea: why did small animals that ate seeds or bugs need less food? Children record their guesses for each print on the student sheet and write or draw one sentence.

English language learners: Pre-teach 4 cards (fossil, dinosaur, bird, footprint track) with gestures. Use sentence frames: “I think a ___ made this print.” “Birds are ___.” Invite home-language words for bird and bone.

Extension: Make a long paper timeline: dinosaurs at one end, a tiny dot for people at the other.

Accuracy notes for grown-ups

- Non-bird dinosaurs lived from about 230 to 66 million years ago (more than 150 million years).
- The Chicxulub asteroid (about 10 km wide) hit Yucatán, Mexico, about 66 million years ago; dust and soot blocked sunlight. Volcanic eruptions in India may have added stress (not in the video).
- Pterosaurs (flying reptiles) and big sea reptiles such as plesiosaurs and mosasaurs also died out, but they were not dinosaurs.
- Birds evolved from small feathered theropod dinosaurs, so birds are dinosaurs. Say “non-bird dinosaurs” when you mean the extinct ones.
- The genus Homo appears about 2–3 million years ago and Homo sapiens about 300,000 years ago: more than 60 million years after the big dinosaurs. Our distant ancestors at the time were small mammals.

Sources

- Natural History Museum, London: nhm.ac.uk/discover/how-an-asteroid-caused-extinction-of-dinosaurs.html and nhm.ac.uk/discover/why-are-birds-the-only-surviving-dinosaurs.html; humanorigins.si.edu.
- Schulte et al. 2010, Science doi:10.1126/science.1177265 (Chicxulub impact and the end-Cretaceous extinction).

Assessment

Exit ticket (K picture version or Grades 1–2) at the end of the lesson; answers on the answer key. Look-fors: uses the word “fossil”; says small animals survived because they needed less food; says birds are dinosaurs; says people and big dinosaurs never met.

Discussion Guide

TEACHER Episode 3: Where Did the Dinosaurs Go?

Before watching

1. Where have you seen a dinosaur? Was it real, a toy, or in a movie?
2. What is the biggest animal you know? The smallest?

After watching

3. What is a fossil? What kinds of fossils did Maye show?
4. What happened when the giant space rock hit Earth?
5. Why could tiny animals live through it when giant dinosaurs couldn't?
6. Pete said cavemen rode dinosaurs. What was his mix-up?
7. Why does Maye say a pigeon is a dinosaur?

Pete's Mix-Up: a 3-minute script

Teacher: Pete said cavemen rode dinosaurs. Thumbs up if you agree, thumbs down if you don't.

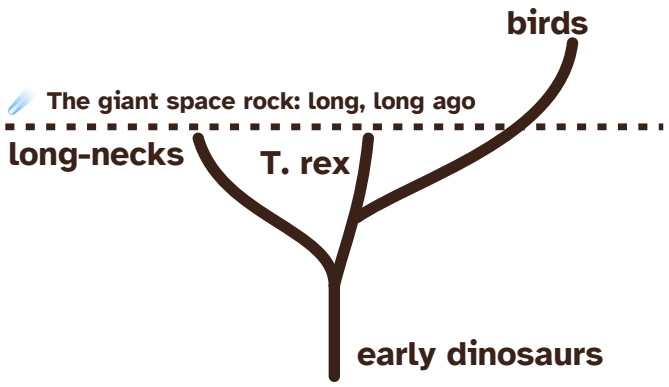
Teacher: The big dinosaurs were gone a very, very long time before the first people. On Maye's timeline, the dinosaurs are way over here, and people are a tiny dot way over there!

Teacher: People never met a T. rex, only in movies and toys. But we do meet dinosaurs every day: birds!

All: Mix-ups are how we learn!

Talk move: If a child says “all the dinosaurs died”, don't say “wrong”; say “Did they ALL go? Look out the window. Who remembers Maye's big secret?” (Birds are dinosaurs.)

Draw it: the dinosaur bush



One trunk splits into branches; birds branch off next to T. rex (both are meat-eating theropods). Most dinosaur branches end at the dashed line (when the giant space rock hit). The bird branch keeps growing to today, so birds are dinosaurs.

Build It! Mystery Fossil

STUDENT Episode 3: Where Did the Dinosaurs Go?

Name: _____

You need: ☐ play dough or salt dough ☐ a shell, leaf, toy dinosaur, blunt stick ☐ a cloth ☐ a grown-up helper

Grown-ups: check for wheat allergies. Dough is not for eating. Wash hands after.

1. A grown-up hides secret prints in the dough.
2. Lift the cloth! Look closely at each print.
3. Count the toes. Look for a claw mark at the tip.
4. Guess who made it! Let your own print dry.

	My guess	Who made it?
Print 1		
Print 2		
Print 3		
Print 4		

Draw the print you liked best:

Bird tracks and dinosaur tracks look a lot alike!

Build It! Teacher Page

TEACHER Episode 3: Where Did the Dinosaurs Go? · 15–20 min

Set-up

Groups of 3–4, one dough slab each. Press firmly: a shell, a leaf (vein side down), a toy dinosaur foot (three toes), and a blunt stick or spoon handle pressed three times in a fan (a three-toed bird track). Cover with a cloth before the children arrive.

Safety: Check for wheat or other allergies before using homemade dough. The stick or spoon is pressed by the grown-up only. In the episode Pete uses a fork. At home, use a spoon handle or craft stick, with a grown-up. Wash hands after handling dough.

What to notice

- Shell: a fan of ridges. Leaf: a centre line with side veins.
- Toy dinosaur and bird track: both show three forward toes; children often can't tell them apart, which is the point.
- Claw marks at the toe tips help tell who made a track.

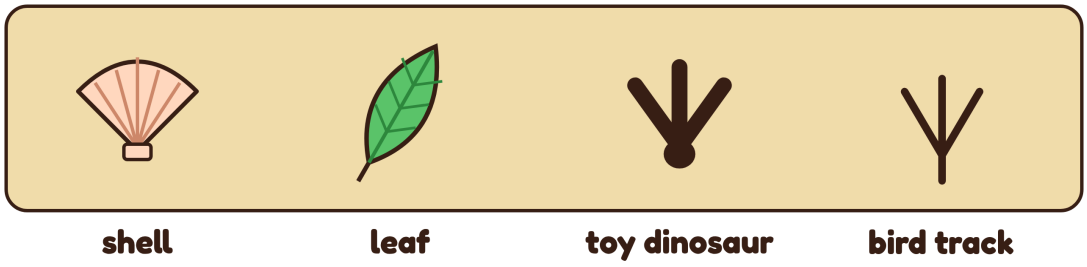
The science link: Fossil footprints (trace fossils) tell scientists how big an animal was and how it walked. Many small meat-eating dinosaurs left three-toed tracks much like birds' tracks today, one clue that birds are dinosaurs.

Questions to ask

- How did you know this one was a shell?
- Why are the dinosaur and bird tracks so alike?
- What could a scientist learn from a footprint?

Extension and at home

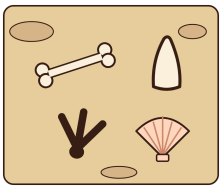
Salt dough fossils air-dry hard in 1–2 days. At home: look for bird tracks in mud or snow and compare them with the dinosaur print.



Vocabulary Cards

Episode 3: Where Did the Dinosaurs Go? · cut along the dashed lines

✂ cut



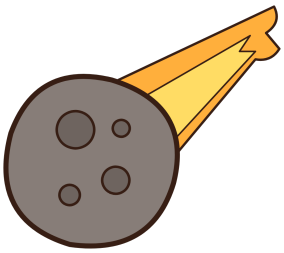
fossil

a clue left in rock from long, long ago



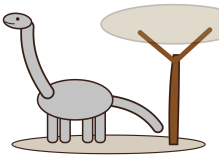
dinosaur

a kind of animal that lived long ago; birds are dinosaurs too!



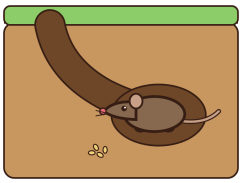
asteroid

a giant space rock



extinct

gone forever; none of that kind are left



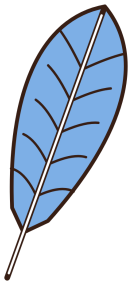
survive

to stay alive through a hard time



bird

an animal with feathers and wings; a dinosaur that lives today



feather

the soft, light covering of a bird (some dinosaurs had them too)



track

a trail of footprints an animal leaves behind

Word Wall Cards

Episode 3: Where Did the Dinosaurs Go? · big print, low ink

✂ cut

fossil
a clue left in rock from long, long ago

dinosaur
a kind of animal that lived long ago; birds are dinosaurs too!

asteroid
a giant space rock

extinct
gone forever; none of that kind are left

survive
to stay alive through a hard time

bird
an animal with feathers and wings; a dinosaur that lives today

feather
the soft, light covering of a bird (some dinosaurs had them too)

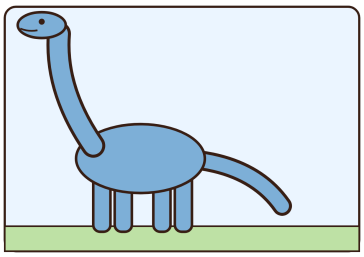
track
a trail of footprints an animal leaves behind

Exit Ticket: Kindergarten

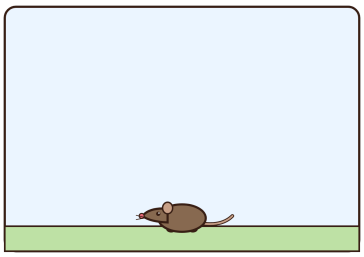
STUDENT Episode 3: Where Did the Dinosaurs Go? · read each one aloud

Name: _____

1. Who could live through the dark, cold time? Circle it.

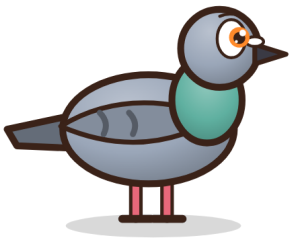


giant dinosaur

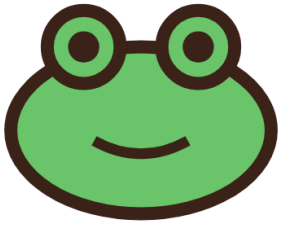


tiny animal

2. Which one is a dinosaur that lives today? (circle one)



pigeon



frog

3. Draw a fossil you would like to find.

Exit Ticket: Grades 1–2

STUDENT Episode 3: Where Did the Dinosaurs Go?

Name: _____

1. Match the word to what it means.

fossil •	• gone forever
asteroid •	• a clue left in rock from long ago
extinct •	• a giant space rock

2. True or false? Circle T or F.

People rode dinosaurs long ago.	**T**	**F**
Birds are dinosaurs.	**T**	**F**
Some small animals survived when the big dinosaurs died out.	**T**	**F**
The dinosaurs lived on Earth for only a little while.	**T**	**F**

3. Why could tiny animals survive when the big dinosaurs could not? Draw or write.

Exit ticket: K

1. tiny animal
2. pigeon
3. Any fossil drawing (bone, tooth, footprint, shell, leaf). Ask: “What clue does it give?” No wrong answers.

Build It! expected results

Shell: fan of ridges. Leaf: centre line with veins. Toy dinosaur and bird track: both three toes; the claw marks and size are the best clues.

Exit ticket: Grades 1–2

1. Match

- fossil → a clue left in rock from long ago
- asteroid → a giant space rock
- extinct → gone forever

2. True or false

a. False. Big dinosaurs were gone more than 60 million years before the first people.
b. True. Birds are the one dinosaur family still here.
c. True.
d. False. Dinosaurs lived on Earth for a very, very long time.

3. Explain

Small animals needed less food and could hide in burrows; they ate seeds or bugs when plants stopped growing. Accept either idea for full marks.

Discussion: model answers (after watching)

3. A clue in rock from long ago, like bones, teeth or footprints.
4. Dust and smoke filled the sky; it got dark and cold, and plants stopped growing.
5. Tiny animals needed less food and could hide in burrows; big dinosaurs needed lots of food.
6. People never met the big dinosaurs; they were gone more than 60 million years before the first people.
7. Birds have feathers, hollow bones and three toes, like some dinosaurs. Birds are dinosaurs.

Quick rubric. Got it: explains why small animals survived and that birds are living dinosaurs. Getting there: one of these. Not yet: replay the big secret (3:51) together.

A note from school HOME

Today we watched Maye & Pete, Episode 3: Where Did the Dinosaurs Go? We learned that fossils are clues in rock, that a giant space rock made the world dark and cold about 66 million years ago, that some small animals survived, and that birds are dinosaurs!

Ask at dinner: Which birds can we spot today? Can you see their three toes?

Try it: Fossil fun (10 min): press a shell, a leaf or a toy's foot into play dough, and let a family member guess who made each print. **Grown-ups: check for wheat allergies before using dough. Dough is not for eating. Wash hands after.**

Watch together: mayeandpete.com

Have a question your child wonders about? A grown-up can send it to us at mayeandpete.com. Please don't include your child's name or other personal details.

✂ cut

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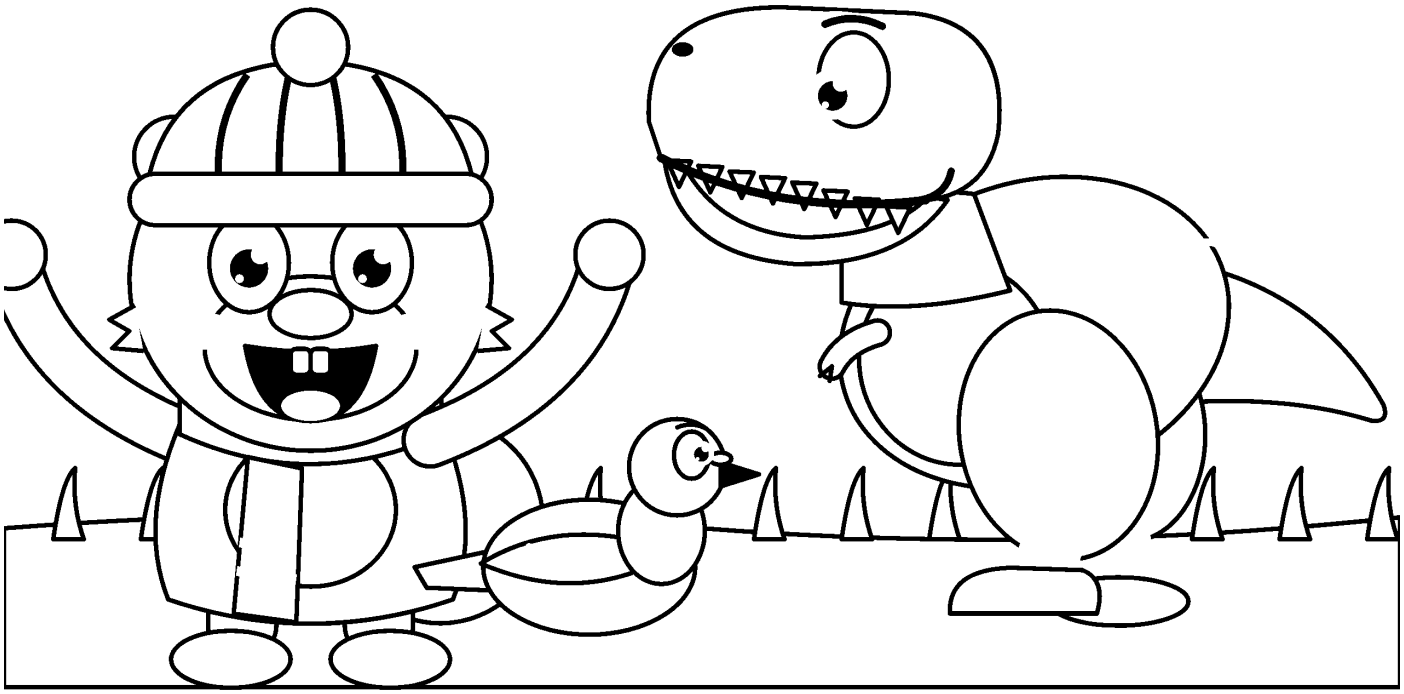
TINY T. REX?!



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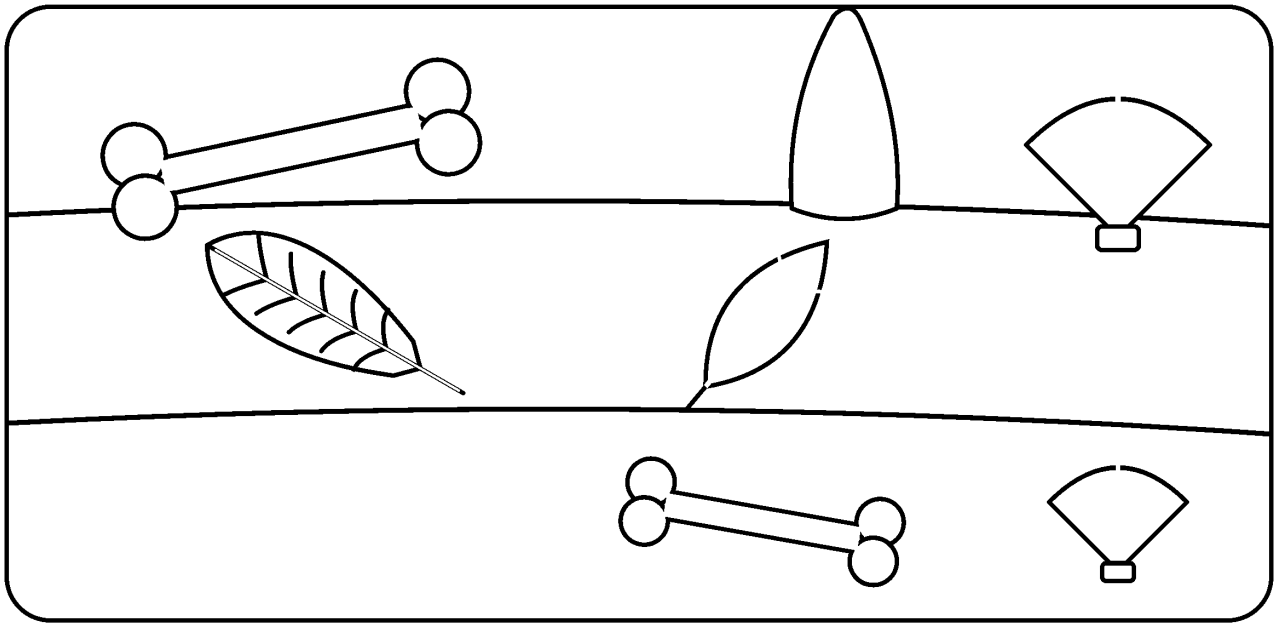
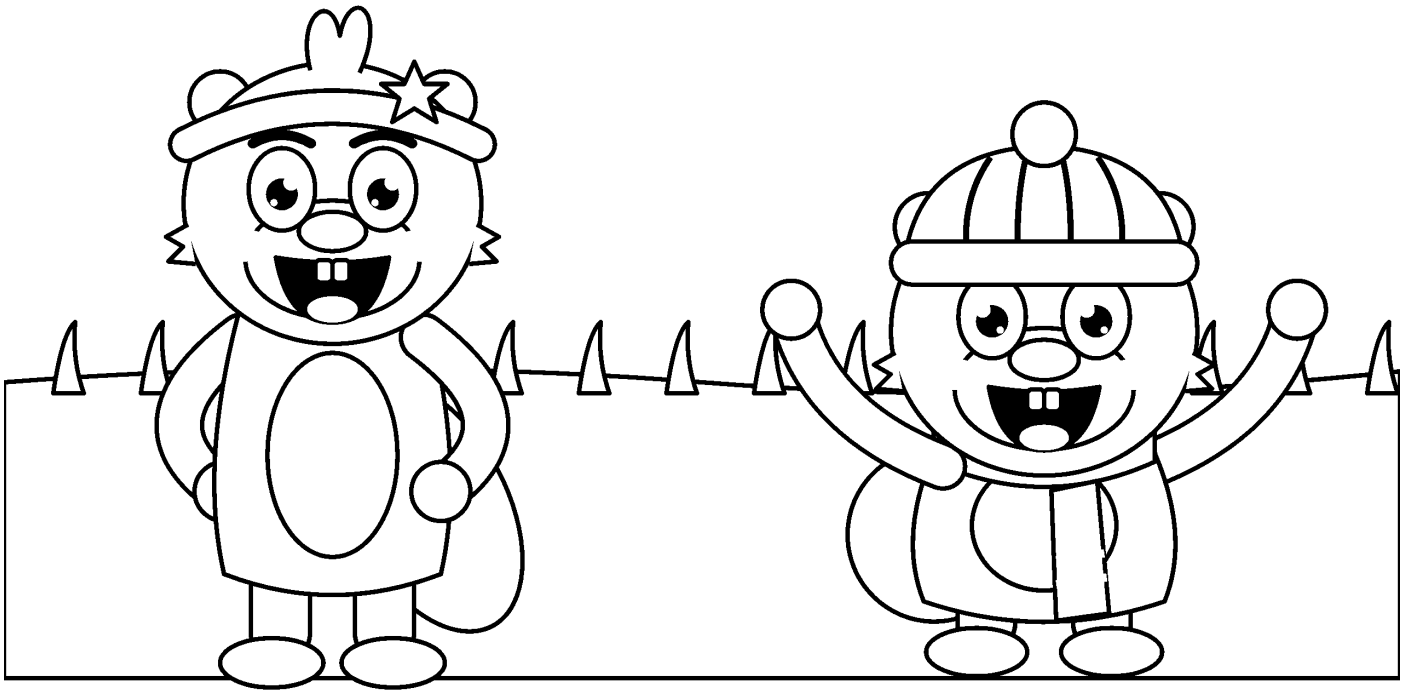
FOSSIL FINDERS





mayeandpete.com

Big Idea Explorer

This certificate is for

_____

who learned about **fossils** and found out that birds are dinosaurs!

Episode 3: Where Did the Dinosaurs Go? · Date: _____

Big ideas, little by little

✂ stickers: print on plain paper or sticker paper and cut out

Big Idea Explorer	Fossil Finder	Birds are dinosaurs!	I solved a Mystery Fossil
Mix-ups are how we learn	Little by little	Tiny wins!	Track Detective
Thank you, tiny animals!	I asked a big question	Fos-sil!	Maye & Pete Fan