

BLOSSOM & ROOT

ELEMENTARY SCIENCE // YEAR 3

# *Wonders of the Prehistoric World*

PARENT GUIDE



YEAR 3

Exploring the Prehistoric World





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*Blossom & Root*

Elementary Science,  
Year 3:

*Wonders of the  
Prehistoric World*

A Hands-On Secular Science Curriculum Extension Unit

Grades 1 – 6

**Blossom & Root Elementary Science  
Year 3: Wonders of the Prehistoric World**

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# Welcome to a World of Wonder

## A Relaxed, Hands-On, and Adventurous Approach to Science in the Early Grades

When I decided I wanted to homeschool my daughters, one of the most difficult tasks I faced was finding a science curriculum that suited our needs. We wanted curriculum that was completely secular, hands-on, and full of opportunities to take our learning outside. We wanted books, and lots of them! We wanted permission to explore, dig deeper, and go off to explore rabbit trails from time to time. But we also wanted structure--just enough to build concepts upon one another in a linear way without the pressure of a rigid schedule. When it came to recording our discoveries, we wanted freedom from the worksheets, tests, and time-consuming lap books that seemed to dominate most of our options--something more akin to a scientist's field journal.

When I couldn't find this particular unicorn, I decided to do what I had done for my early years and kindergarten curriculum--I created it. Since I knew we couldn't be the only family looking for such a thing, I put my heart, soul, and complete focus into crafting a solution for those families too.

I created *Wonders of the Animal Kingdom*, the third of six planned years of science curriculum, brought to you by Blossom and Root. *Wonders of the Prehistoric World* is an extension unit designed to coordinate with *Wonders of the Animal Kingdom*. It can, of course, be used independently as well. It is designed to be flexible, adaptable, inspiring, and gentle. My fondest hope is that it will provide discovery, joy, and wonder for the families that use it.

Thank you for your support of Blossom and Root. Please feel free to reach out to me at any time--I am always happy to help!

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## Options for Scheduling This Extension Unit:

### Traditional Schedule:

Aim to complete one unit per week, in order, for a 13-week period. If you do science once a week, this may mean reading from one of the suggested spines, completing one of the activity options, and ending with your child recording their experience in the student notebook. If you do science twice a week or more, you may wish to incorporate multiple books and video links, and more of the optional activities per unit.

### Relaxed Schedule:

Begin at the beginning and spend as much or as little time in each unit (or "wonder," as we call them) as desired. You can even spend an entire year on this extension unit alone. This will allow ample time for families that like to incorporate lots of field trips and projects, without added pressure to complete the entire extension unit in one semester, or over the summer term.

## Using It as an Extension of *Wonders of the Animal Kingdom*:

If you are using *Wonders of the Prehistoric World* as an extension of *Wonders of the Animal Kingdom*, you have a few options to consider:

1. Use it before beginning *Wonders of the Animal Kingdom*, which would be a more chronological approach. If you decide to do this, it might make sense to do Wonders 1 - 3 from *Wonders of the Animal Kingdom* first, then complete this extension, and then resume with Wonder 4 in *Wonders of the Animal Kingdom*. If you spend one week on every unit from both resources, this would provide 49 weeks of curriculum.
2. Complete it after *Wonders of the Animal Kingdom* (as a fun summer unit, for example.)
3. Complete it as a condensed study during the holiday or summer break, in which case you'd complete multiple wonders each week during a 3 - 4 week period.

## How to Plan Out Each Unit (the Simple Way):

A few weeks before you begin a unit, look over it and decide which books or video links you'd like to use and which projects you'd like to do. Highlight them in the parent guide here or write them into a separate planner. Note any materials you'll need to collect before beginning.

**Please note:** As this unit is more condensed, we've incorporated the Laboratory Guide into the Parent Guide, rather than publishing it as a separate PDF, as we do with our longer science curricula.

# Make It Yours

## How to Teach This Curriculum



This curriculum is designed to provide support and inspiration to the parent educator. Above all else, please make it *yours*!

### **Step One: Wonder**

Each unit begins with an introduction to the wonder at hand. In this extension unit, each wonder unit typically covers a specific period of time. Together, you and your child will delve into the topic through engaging literature, videos, and guided conversations.

### **Step Two: Explore**

The next step is to explore the topic through hands-on activities, projects, demonstrations, and experiments. Our curriculum is flexible, providing several options for each wonder so that you may tailor it to your budget, time available, personal preferences, and your child's learning style.

### **Step Three: Record**

The final step is to allow your child to record their experiences. Once again, our curriculum allows for maximum flexibility. Children who are already eager, confident writers may use the student notebook to employ written narration. Others may wish to draw or color a picture of their experience, and their parent can dictate their oral narration. Still others may prefer to tape or paste in photographs taken of their adventures and activities during that unit--the choice is yours!

### **Permission to Go Off the Grid**

One of the greatest gifts of homeschooling is the ability to follow rabbit trails, and to delve deeper when inspiration calls. We fully encourage this, and promise that the curriculum will be here, waiting for you when you're ready to come back and move on to the next wonder!

# Step One: Wonder

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Setting the stage for discovery

"Wisdom begins in wonder."

Socrates

## The Main Goal

You will begin each unit (or "wonder" as we call them) by introducing the topic to your child through books, videos, and guided conversations. **The primary goal of this stage is simply to introduce the topic and inspire curiosity.**

## Options for Step One

As with the rest of this curriculum, we focus on providing multiple options for you to choose from, unit by unit:

### Category 1: For the Minimalists

If you're pressed for time, short on resources, or simply not as excited about a specific unit, stick with Category 1: For the Minimalists to introduce the topic. This category is designed to touch on the main points with as few resources, and in as little time, as possible.



### Category 2: For the Book Basket Folks

This category will provide a rich list of engaging literature to pick and choose from for your initial introduction. **You absolutely do not need to provide all of these books, every week.** This list is meant to provide *options* for families that prefer a literature-based approach to learning.



### Category 3: For the Visual Learners

Some children prefer a more visual model for receiving information, and some topics can be difficult to explain without a visual demonstration. Therefore we provide suggested video links, most of which are hosted on YouTube, to help introduce each topic. **Please screen them ahead of time to be sure they are in line with your family's values and developmental appropriateness for your child.**



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For each unit,  
choose from one  
or multiple  
categories to  
introduce the  
topic and inspire  
curiosity.

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# Step Two: Explore

Choose your own adventure

## The Main Goal

The next step for each unit is to explore the topic through hands-on activities, demonstrations, projects, and experiments. **The primary goal of this stage is to allow your child the opportunity to make discoveries about the topic at hand.**

## Options for Step Two

As with the rest of this curriculum, we focus on providing multiple options for you to choose from, unit by unit:

### Category 4: For the Outdoor Learners

This category was designed for families that prefer to do their learning outdoors. If you and your children love to explore, take field trips, and get your hands good and muddy, this is the category for you!



### Category 5: For the Table-Lab Crowd

For families that love "table science" we have designed activities that can be done indoors using (mostly) common household objects. These activities and demonstrations can bring big ideas closer to home and provide hands-on fun for children of multiple ages.



### Category 6: For the Crafts-and-Projects Families

Some families really love projects--hand-made exploration of a topic through art projects, crafts, and writing activities. For these families, we have provided suggested projects that are designed to be "on display."



## Mix and Match to Choose Your Own Adventure!

Pick and choose from any of these categories to design a unit of science for your family. If you're short on time, one activity will do--you can even stick to the "minimalist" category in step one and call it a week. If you're loving a topic, you may wish to combine multiple categories for exploration and extend your learning for several weeks.



### Exclusive to this Extension Unit: Geography

This extension unit also provides an optional geography prompt in the activities section for Wonders 6 - 10. If you plan to complete this prompt for each wonder, we highly recommend DK Smithsonian *Where on Earth?: Dinosaurs and Other Prehistoric Life* (see book list.) You will also need a large world map that can be tacked to the wall and marked up.

For each unit,  
choose from one  
or multiple  
categories  
to provide rich  
and engaging  
opportunities for  
discovery.

# Step Three: Record

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Documenting the journey



The presentation of the topic belongs to you, the parent educator. What your child takes from that presentation belongs to them.

## The Main Goal

The final step for each unit is to give your child a chance to document their experiences through the student notebook. **The primary goal of this stage is to allow your child to record whatever they are inspired to, concerning the topic you investigated together during the previous two steps.**

## Options for Step Three

As with the rest of this curriculum, we focus on providing multiple options for you to choose from, unit by unit:

### Oral Narration



For this option, your child will give a brief oral narration of what they have learned. You, the parent, may choose to take dictation of their words into the student notebook. They may wish to draw or color something before or after the oral narration in the student notebook. This can also be done in the form of casual conversations together.

### Written Narration



If your child is already confidently writing, and enjoys doing it, they may wish to record their own written narration, with or without a drawing, in their student notebook.

### Scrapbooking with the Student Notebook



You may wish to treat the student notebook as a scrapbook instead, allowing your child to tape or glue photographs into it that you (or they) take during your activities together. They may wish to add brochures or postcards from field trips, make drawings or notes in the margins, or have you take dictation.

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For each unit, have your child document their experiences using one of these options for the student notebook.

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# Permission to Go Off-Grid

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*"Curiosity is the wick in the candle of learning."*  
*William Arthur Ward*

Follow those rabbit trails



## **It's All About the Journey, NOT the Map!**

As you move through the following "wonders," you will naturally come across forks in the road where your child wants to stop and dig deeper or follow a rabbit trail that springs up. These side-trails can provide some of the richest learning opportunities there are--curiosity-driven, interest-led investigations--so don't ignore them if you can help it.

Many of us feel nervous about "veering off the path" of a curriculum. The thought of learning gaps and self-imposed deadlines can keep us awake at night. We are here to assure you that it is 100 percent a-okay to follow your child's curiosity. This curriculum will be here when you are ready to come back and continue on.

It is also 100 percent a-okay to hurry through a topic that is not very interesting to you, or skip it entirely. We want this curriculum to be yours, so take the liberty to mold it the way you want it and be sure to indulge in those rabbits trails! *(We love them so much that we even flag you down in places where side-voyages may feel natural! If you see the rabbit icon, it means there's an opportunity for a possible rabbit trail.)*

# *An Important Consideration*

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## Untangling the Web of the Past

### **The Challenge of Writing a Prehistory Curriculum**

Writing a curriculum about prehistoric life can be a challenging endeavor. Every discovery being made (even as you read this) can change our understanding of the past, sometimes dramatically. Materials, books, videos, and resources that are current and up-to-date now can quickly become outdated as we learn more. Because the field of paleontology moves so quickly, we plan to revisit this curriculum to make updates every 18 to 24 months. Updated editions will automatically be sent to anyone who has purchased this curriculum.

### **Submitting Errors, Typos, and Editorial Feedback**

To report typos, errors, or mistakes in this curriculum, or if you'd like to let us know about new advancements and discoveries happening in the field of paleontology, please email [kristina@blossomandroot.com](mailto:kristina@blossomandroot.com) and include "Prehistory Feedback" in the subject. We keep a log of any reported mistakes or updates to include in the next revision cycle.

Happily, new resources and books are being written all the time, and even the most thorough search won't turn up every great resource. To suggest resources or books for future editions, please email [kristina@blossomandroot.com](mailto:kristina@blossomandroot.com) and include "Prehistory Content" in the subject.

### **Tricky Pronunciations**

Due to the nature of the subject matter, there are a lot of complicated words in this curriculum. Don't let these trip you (or your child) up. You can use this website to help you break down words if you need a hand: <https://www.howtopronounce.com/>

Don't be afraid of using the "real" words for different species and time periods when teaching your child prehistory. Children are very good at learning, memorizing, and repeating complicated names when they're engaged.

# Contents

## Wonder / Unit

Wonder No. 1: *Precambrian Life* (4.6 BYA – 541 MYA)

Wonder No. 2: *Cambrian and Ordovician Life* (541 MYA – 444 MYA)

Wonder No. 3: *Silurian and Devonian Life* (444 MYA – 359 MYA)

Wonder No. 4: *Carboniferous and Permian Life* (359 MYA – 252 MYA)

Wonder No. 5: *What is a Dinosaur?*

Wonder No. 6: *Triassic Life* (252 MYA – 201 MYA)

## Wonder / Unit

Wonder No. 7: *Jurassic Life* (201 MYA – 145 MYA)

Wonder No. 8: *Cretaceous Life* (145 MYA – 66 MYA)

Wonder No. 9: *Pterosaurs and Mesozoic Mammals*

Wonder No. 10: *The Marine World of The Mesozoic*

Wonder No. 11: *Paleogene and Neogene Life* (66 MYA – 2 MYA)

Wonder No. 12: *The Last Ice Age* (2.6 MYA – 11,700 YA)

Wonder No. 13: *The Rise of Humankind* (11,700 YA – Present)

**Please note:** Dates above are listed according to *Life: The First Four Billion Years* by Martin Jenkins (pages 78 – 79.) The dates in DK Smithsonian *The Dinosaur Book* (pages 8 – 9) and DK Smithsonian *Dinosaur!* (pages 8 – 9) are listed with slight discrepancies to these dates.



# Book list

Please note: Supply lists for each activity, project, demonstration, or lab suggested in this parent guide can be found on the "laboratory guide" pages for each wonder. Since the supplies you will need will depend on which activities you select for each unit, there is not one comprehensive supply list for this curriculum. Please refer to the "laboratory guide" section for supplies needed according to each option in each unit.

## Required Book / Spine:

Wonder #    Book

All            *DK Smithsonian: The Dinosaur Book* written by John Woodward  
ISBN 978-1-4654-7476-6. This book is the main spine for this curriculum. Recommended pages are in the "Minimalist" section for each lesson.

### **The following books are not required but are highly recommended (see notes):**

Most            *The Story of Life: Evolution* curated by Katie Scott  
ISBN 978-1-78370-682-2



OR

Most            *Life: The First Four Billion Years* by Martin Jenkins and Illustrated by Grahame Baker-Smith ISBN 978-1-5362-0420-9



Note: Technically this curriculum could be done without the use of this book, but since the DK book above focuses on the Mesozoic Era, it helps to round out the earlier forms of life on Earth. Recommended pages are in the "Minimalist" section for each lesson.

Note: Another option for "rounding out" alongside the DK spine, as an alternative (or companion) to *The Story of Life: Evolution*. Recommended pages are in the "Minimalist" section for each lesson.

5 - 13            *DK Smithsonian: Dinosaur!* written by John Woodward  
ISBN 978-1-4654-8176-4  
Note: This book really helps to define the Triassic, Jurassic, and Cretaceous periods of the Mesozoic era in a chronological way, and goes into greater detail on individual animals from each period. You most certainly do not need both DK dinosaur books, but this one adds a degree of depth and chronological organization that the other DK book (in the "required" section above) lacks. Where it truly shines is its specificity when it comes to individual species of the Mesozoic and Cenozoic. This book is **highly recommended** as a supplement for Wonders 5 and up. Recommended pages are in the "Book Basket" section for each lesson.

5 - 10            *Dinosaurium* curated by Chris Wormell and Lily Murray  
ISBN 978-0-7636-9900-0  
Note: This book is certainly not required, but it provides a lovely, large-scale reference for visual learners and fans of the *Welcome to the Museum* series. Recommended pages are in the "Book Basket" section for each lesson.

5 - 10            *DK Smithsonian Where on Earth?: Dinosaurs and Other Prehistoric Life* by Chris Barker and Darren Naish  
ISBN 978-1-4654-7963-1  
Note: This book is an atlas that shows where various fossils have been discovered. If you plan to complete the geography activity option for Wonders 6 - 10, this book is highly recommended.

# Wonder No. 4: Carboniferous & Permian Life

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(359 MYA – 252 MYA\*)

Welcome to Wonder No. 4: Carboniferous and Permian Life

In this unit, you'll explore the swampy Carboniferous Period, filled with enormous arthropods, and the drier and cooler Permian Period, which gave rise to two important groups of land animals: sauropsids and synapsids.

**There are 7 "big picture" messages to focus on during this unit:**

**1) The Carboniferous Period lasted from 359 million years ago to about 299 million years ago. During this period, the climate had become tropical and humid. Because of the evolution of roots, trees were able to grow very large beginning in this period. These giant trees created dense swamps and produced an enormous amount of oxygen. Because of the oxygen-rich atmosphere, arthropods began to grow to colossal proportions. And since birds and reptiles had not evolved yet, there was no one to prey upon them. Thus the Carboniferous was marked by enormous arthropods living in and around vast swamplands and rainforests.**

**2) During the Carboniferous, the first flying insects evolved. These were the first flying animals on the planet!** One was *Meganeura*, which resembled a giant dragonfly. Its wingspan was around 65 to 75 cm, or nearly 30 inches! On the ground, you might find *Arthropleura*, a massive (poisonous) millipede that grew to two meters (or six and a half feet) long! Can you imagine a millipede as long as an adult human creeping along the swamp floor, or a dragonfly with an wingspan as big as your stretched-out arms, hovering overhead?

**3) Tetrapods began to spend significant time on land during the Carboniferous, evolving into the very first amphibians and, toward the end of this period, the first reptiles.** Unlike the first amphibians, who had to lay their soft-shelled eggs in water, reptiles could lay their harder-shelled eggs on land. This meant that they could venture further inland, away from the water's edge.

**4) The Permian Period lasted from 299 million years ago to around 252 million years ago. Toward the end of the Carboniferous, the climate became cooler and drier. The swamps and rainforests began to decrease. This change in climate is believed to have been caused by the shifting of the continents on the Earth's surface into one large continent called Pangea.** Because so much land was locked together, the interior could not receive the moisture from the seas that the coastal areas did. Thus, the areas near water were still lush and wet, but there were now dry, desert-like areas too.

\*Please note: Dates above are listed according to *Life: The First Four Billion Years* by Martin Jenkins (pages 78 – 79.) The dates in DK Smithsonian *The Dinosaur Book* (pages 8 – 9) and DK Smithsonian *Dinosaur!* (pages 8 – 9) are listed with slight discrepancies to these dates.

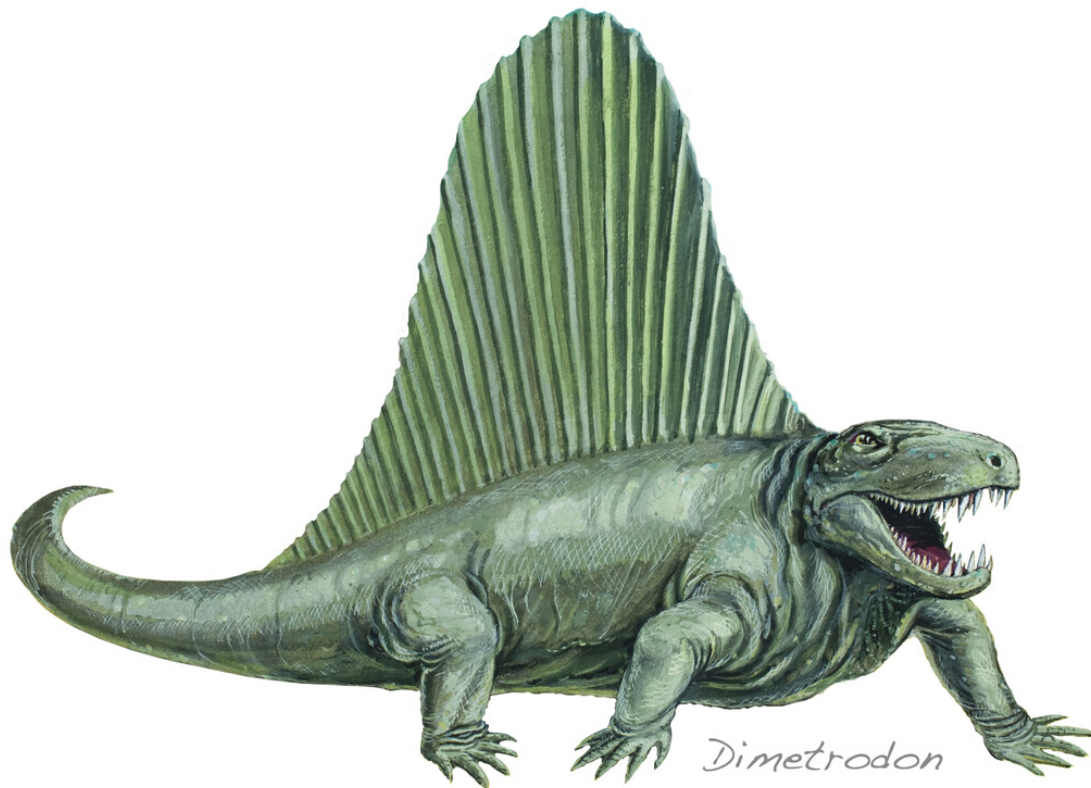
# Wonder No. 4: Carboniferous & Permian Life

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**5) This change in climate meant that new animal species evolved that were better adapted for life on the drier, cooler land of the interior. Two groups of tetrapods emerged during the late Carboniferous and soon dominated the Permian Period. They were the sauropsids (believed to be the ancestor of reptiles and birds) and the synapsids (believed to be the ancestor of modern mammals.)** One sauropsid you might have seen during the Permian was the *Pareiasaurus*, a bulky herbivore (plant-eater) and one of the first large reptiles. A synapsid you might have seen was *Dimetrodon*, a 4.5 meter (nearly 15-foot long) beast with razor-sharp teeth and a large sail-like structure on its back. It was an ancestor of modern mammals.

**6) The drier conditions of the Permian also meant that trees and plants had to adapt.** No longer could all trees depend on wet conditions to distribute their spores and make new plants. As a result, the first gymnosperms (seed-bearing plants like conifers and cycads) emerged, and many of the plants that had dominated the Carboniferous swamps went extinct.

**7) The Permian Period ended with what was likely the worst mass extinction event in history, killing 90% or more of all ocean species and 2/3 of all tetrapods on Earth.** Though we aren't exactly sure what happened, one idea scientists have is that it was caused by a dramatic and sudden rise in global temperature, due to extensive volcanic activity above and below ground, which released huge amounts of volcanic gases into the atmosphere. Few animals survived, but the ones that did would give rise to the lifeforms of a whole new era: The Mesozoic Era.





# Wonder No. 4: Carboniferous & Permian Life

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## 1. For the Minimalists:

Discuss the "big picture messages" for the week, and read the recommended pages below:

- From *DK Smithsonian The Dinosaur Book*: pages 44 – 57
- From *The Story of Life: Evolution* by Katie Scott: pages 36 – 45
- From *Life: The First Four Billion Years* by Martin Jenkins: "March of the Tetrapods," "Productive Times," "Continents on the Move," and "Disaster!" (pages 38 – 47)

## 2. For the Book Basket Folks:

*When the Whales Walked and Other Incredible Evolutionary Journeys* by Dougal Dixon (read throughout this entire extension unit, at your own pace); *Animals of a Bygone Era: An Illustrated Compendium* by Maja Säfström

## 3. For the Visual Learners (always screen first):

**From PBS Eons, Season 1** (Note: These short videos were not made for children and do occasionally include complex topics, or content that may not be appropriate for younger children, including occasional adult references. ALWAYS screen first to determine whether or not it is suitable for your child.)

- Episode 3, "The Tully Monster & Other Problematic Creatures": <https://www.pbs.org/video/the-tully-monster-other-problematic-creatures-l6n6md/>
- Episode 9, "Dimetrodon: Our Most Unlikely Ancestor": <https://www.pbs.org/video/dimetrodon-our-most-unlikely-ancestor-qi4jdi/>
- Episode 12, "The Age of Giant Insects": <https://www.pbs.org/video/the-age-of-giant-insects-mn9nez/>
- Episode 13, "History's Most Powerful Plants": <https://www.pbs.org/video/historys-most-powerful-plants-wzkbgt/> (also in Wonder 13)
- Episode 30, "From the Cambrian Explosion to the Great Dying": <https://www.pbs.org/video/from-the-cambrian-explosion-to-the-great-dying-8aaeuj/> (appropriate for Wonders 2 – 4)
- Episode 49, "When Insects First Flew": <https://www.pbs.org/video/when-insects-first-flew-w8ic3p/>

## From Other Sources:

- From National Geographic on YouTube, "Ancient Predator Had a Killer Jaw": <https://www.youtube.com/watch?v=hOFxOw9tkC4>
- *Ancient Earth*, Season 1, Episode 1, "The Permian." Available at time of publication of this guide on Curiosity Stream (paid subscription required)
- *Ancient Earth*, Season 2, Episode 1, "What Killed These Giant Insects?" Available at time of publication of this guide on Curiosity Stream (paid subscription required)

# Wonder No. 4: Carboniferous & Permian Life

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## From the Laboratory Guide:

### 4. For the Outdoor Learners: Meganeura Wings

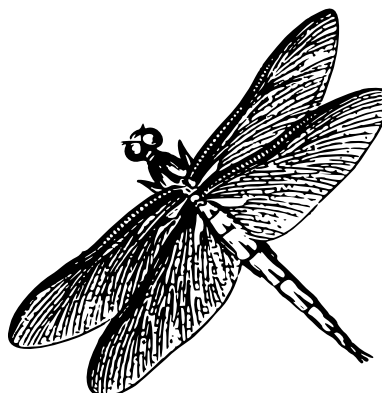
Meganeura resembled a present-day dragonfly with giant proportions, thanks to the oxygen-rich atmosphere it lived in. This activity is best done indoors or at a picnic table after gathering natural materials (responsibly.)

#### What You'll Need:

- An area to responsibly gather natural materials to press into your wings (leaves, flower petals, etc.) OR kite paper / tissue paper
- Clear contact paper
- Old wire hangers or sculpting armature wire (or similar wire from the hardware store)
- A measuring tape
- Scissors
- Craft felt or upcycled clothing material
- Elastic or ribbon to make straps
- Needle and thread (or glue gun, if you prefer--adult use only)

#### What You'll Do:

- Make your Meganeura wings, similar to a dragonfly's wings, out of old wire hangers or sculpting armature (or similar wire.) You'll need to use your measuring tape to make sure you make them big enough. Meganeura's wingspan was around 65 cm, or 25.6 inches.
- Spread out sheets of contact paper beneath each formed wing, sticky-side up. Fold the edges of the contact paper up over the edge of each wing, to secure it in place.
- Begin creating your design by sticking natural objects (leaves, flower petals, grasses, etc.) to the contact paper. (You can also use kite paper or tissue paper instead.)
- When your design for each wing is finished, carefully place a second sheet of contact paper on top of each wing, and fold the edges over to seal it. Carefully smooth out any bubbles. You may need to help your child with this step--it can be tricky!
- Put your wings together, using craft felt or up-cycled clothing materials and either needle and thread or hot glue to secure them in place. Build up some padding where the wings will rest against your child's back. Attach straps (ribbons or elastic) that will fit over your child's arms and secure in place with needle and thread. Hot glue might not work well for elastic straps.
- Try on your new wings and imagine Meganeura swooping through the swamps!



# Wonder No. 4: Carboniferous & Permian Life

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## From the Laboratory Guide, cont.:

### 5. For the Table-Lab Crowd: Pangea Salt Dough Map

What You'll Need:

- a large piece of foam core or cardboard
- a pencil
- flour
- salt
- water
- 2 tablespoons of cream of tartar
- Paint and paint brushes

What You'll Do:

On a large piece of poster board or cardboard, mark the outlines of Pangea, using the reference map on page 10 of *DK The Dinosaur Book* (or Google image search.) Build the salt-dough structures on the map. To make salt-dough, have your child mix together 4 cups of flour, 2 cups of salt, 2 cups of water, and 2 tablespoons of cream of tartar, using their hands. They can press the salt-dough onto the map, building it up for texture. Allow salt dough to set / dry completely over several days, then paint your map. Label your map with the name "Pangea."

### 6. For the Crafts-and-Projects Families: Carboniferous and Permian Models

What You'll Need:

- Modeling materials (modeling beeswax, air dry clay, Model Magic, or play dough)
- Craft objects or objects gathered responsibly from outdoors for models (toothpicks, googly eyes, pipe cleaners, sticks, pebbles, shells, leaves, etc.)
- Materials for binding (craft glue, tape, stapler, hot glue gun for adult use only, etc.)
- Materials for labeling your creations (index cards or paper scraps, markers or pencils)
- The images on the following pages for inspiration (you may also use the recommended books that you have on hand, or a Google image search to find pictures to work from)

What You'll Do:

Create a model of a Carboniferous and / or Permian animal of your choosing. Some options include Dimetrodon, Meganeura (image not included in this guide), or Eryops.

## From the Student Notebook:

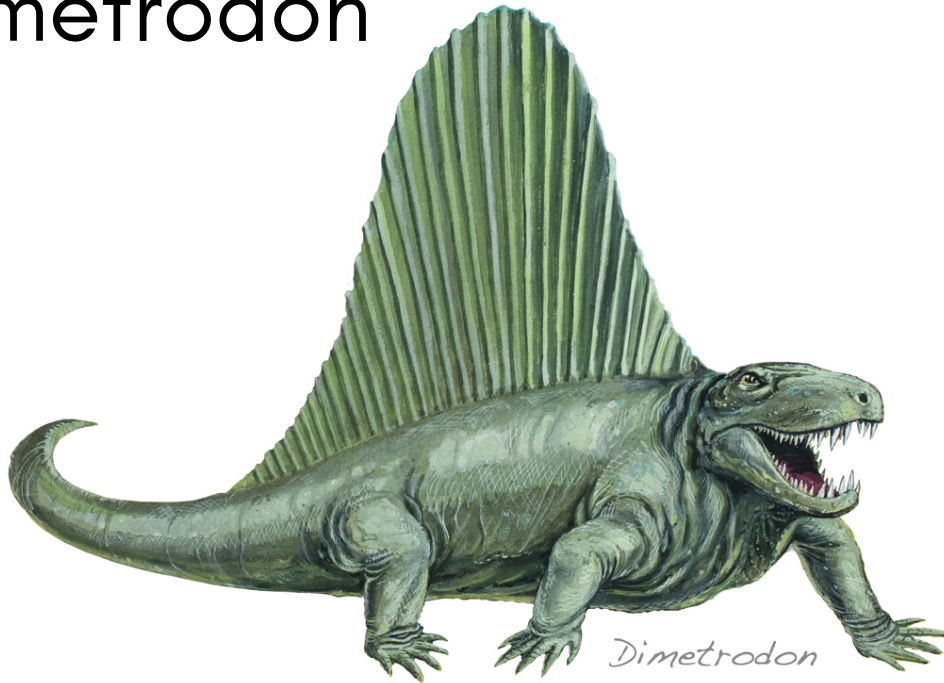
Complete Wonder No. 4 Entries



# Wonder No. 4: Carboniferous & Permian Life

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## Dimetrodon



Dimetrodon, a synapsid of the Permian Period

## Eryops



Eryops, a tetrapod and early amphibian of the Carboniferous Period