



Dinosaurs: Dinosaur Adaptations and Survival

A single lesson, cross-curriculum Curiosity Pack for Grade 4

At a Glance

Topic: Dinosaur Adaptations and Survival

Age Level: Grade 4

Session Length: 45–60 minutes

Wonder Seekers will:

- observe different dinosaur features
- investigate how adaptations helped dinosaurs survive
- compare dinosaur body structures
- record observations and discoveries
- create a way to share what they learned

Lesson Overview

This Curiosity Pack introduces Wonder Seekers to the ways scientists learn about dinosaur adaptations and survival. Learners investigate features such as teeth, claws, armour, horns, feathers, tails, and body shape while exploring how these adaptations helped dinosaurs find food, stay safe, move, and survive in different environments.

The lesson combines science, observation, creativity, and inquiry learning through hands-on investigation and flexible creative tasks.

This learning experience supports:

- observation and questioning
- comparing and classifying
- recording and organising information
- scientific thinking and investigation
- creative communication
- explaining ideas in different ways

The lesson is designed using inclusive learning principles, supporting diverse learning needs through:



- self-paced learning
- visual supports
- flexible activity choices
- movement and hands-on exploration
- multiple ways to show learning
- opportunities for discussion, drawing, building, writing, and creating

Session Length

Total learning time: 45–60 minutes

Wonder Seekers may:

- ✓ complete the lesson in one session
- ✓ pause and return later
- ✓ spend longer on favourite activities
- ✓ simplify or extend the task

Learning Focus

This Curiosity Pack explores:

- dinosaur adaptations
- survival and behaviour
- herbivores and carnivores
- prehistoric environments
- observation and scientific investigation

Learners will:

- ✓ investigate dinosaur features
- ✓ notice and compare adaptations
- ✓ organise ideas visually
- ✓ communicate discoveries through drawing, building, writing, or discussion
- ✓ create a dinosaur adaptation project

Success Looks Like

Success may look different for each Wonder Seeker.

Examples may include:

- ✓ identifying different dinosaur adaptations
- ✓ describing how adaptations helped dinosaurs survive
- ✓ comparing dinosaur features



- ✓ creating a labelled diagram, chart, or fact page
- ✓ building a model or display
- ✓ designing a dinosaur adaptation project
- ✓ sharing discoveries in a way that works for them

Exploring, noticing, comparing, and creating are all part of success.

Materials

You may want:

- paper or workbook
- pencils and coloured pencils
- pictures of dinosaurs
- books or websites about dinosaurs
- scissors
- glue or tape
- cardboard or craft paper

Optional:

- building materials (blocks, LEGO, or similar)
- modelling materials (clay, playdough, or similar)
- recycled materials
- craft materials (paper, foil, feathers, or similar)
- tablet/computer
- printer
- dinosaur toys or models (if available)

Suggested Learning Resources

National Geographic Kids – Dinosaurs

<https://kids.nationalgeographic.com>

Photographs, facts, and information about dinosaurs and prehistoric life.





DK Find Out! – Dinosaurs

<https://www.dkfindout.com>

Pictures and simple explanations about dinosaurs, fossils, habitats, and adaptations.

Online Safety Reminder

When exploring online, remember:

-  Ask an adult first
-  Use trusted learning websites
-  Keep personal information private
-  Tell an adult if something feels wrong

Stay curious and stay safe.



Australian Museum – Dinosaurs

<https://australian.museum>

Information about dinosaur discoveries, fossils, and prehistoric environments.

SciShow Kids – Dinosaurs

<https://www.youtube.com/@SciShowKids>

Short videos introducing dinosaurs, fossils, and prehistoric life.



Universal Design for Learning Supports

This Curiosity Pack supports different ways of learning by providing flexible choices for engagement, learning, and expression.

Multiple ways to engage

Learners can:

- choose which dinosaurs to investigate
- work independently or with support
- move between activities
- take movement or sensory breaks

Multiple ways to learn

Learners can:

- look at pictures
- watch short videos
- explore diagrams and illustrations
- discuss observations
- compare dinosaur features

Multiple ways to show learning

Learners can:

- draw or write ideas
- build or craft
- explain ideas verbally
- create a digital design or diagram



FOR LEARNERS



Dinosaurs: Dinosaur Adaptations and Survival

Wonder Guide



Welcome Wonder Seeker!

Dinosaurs came in many different shapes and sizes. Some had long necks, some had sharp teeth, some had armour, and some may have had feathers. Scientists study these features to learn how dinosaurs survived in the environments where they lived.





Adaptations are features that help living things survive. Adaptations can help animals find food, stay safe, move, and live successfully in different environments.

In this Curiosity Pack, Wonder Seekers explore dinosaur adaptations through observation, comparison, and investigation. Looking closely at dinosaur features can help Wonder Seekers notice how different dinosaurs were suited to different ways of life.

During the Wonder Journey, Wonder Seekers may:








-  explore different dinosaurs
-  observe and compare adaptations



-  sort and organise information
-  investigate survival features
-  create a dinosaur adaptation project
-  record discoveries in different ways

The activities guide Wonder Seekers through different parts of the journey. Ideas are explored by observing dinosaur features, noticing patterns, comparing adaptations, and creating something that shares discoveries from the investigation.

Ideas may be shown in many ways:

-  drawing
-  writing short notes
-  creating charts or tables
-  building a model
-  making or crafting
-  creating digitally
-  explaining ideas aloud

Activities may be completed in order or Wonder Seekers may begin with the part that feels most interesting. Taking breaks, asking questions, noticing details, and making discoveries are all part of the Wonder Journey.






Wonder Investigation

Scientists often compare dinosaurs to learn how they were the same and how they were different. Different dinosaurs had different body features that helped them survive in prehistoric environments.


Adaptations are features that help living things find food, stay safe, move, and survive. Adaptations can include body parts such as teeth, claws, horns, armour, tails, or feathers. Different dinosaurs had different adaptations depending on where they lived and how they survived.

Looking closely at dinosaur adaptations can help Wonder Seekers notice how different species were suited to different ways of life. Observing these features can also help scientists build understanding about how dinosaurs lived millions of years ago.

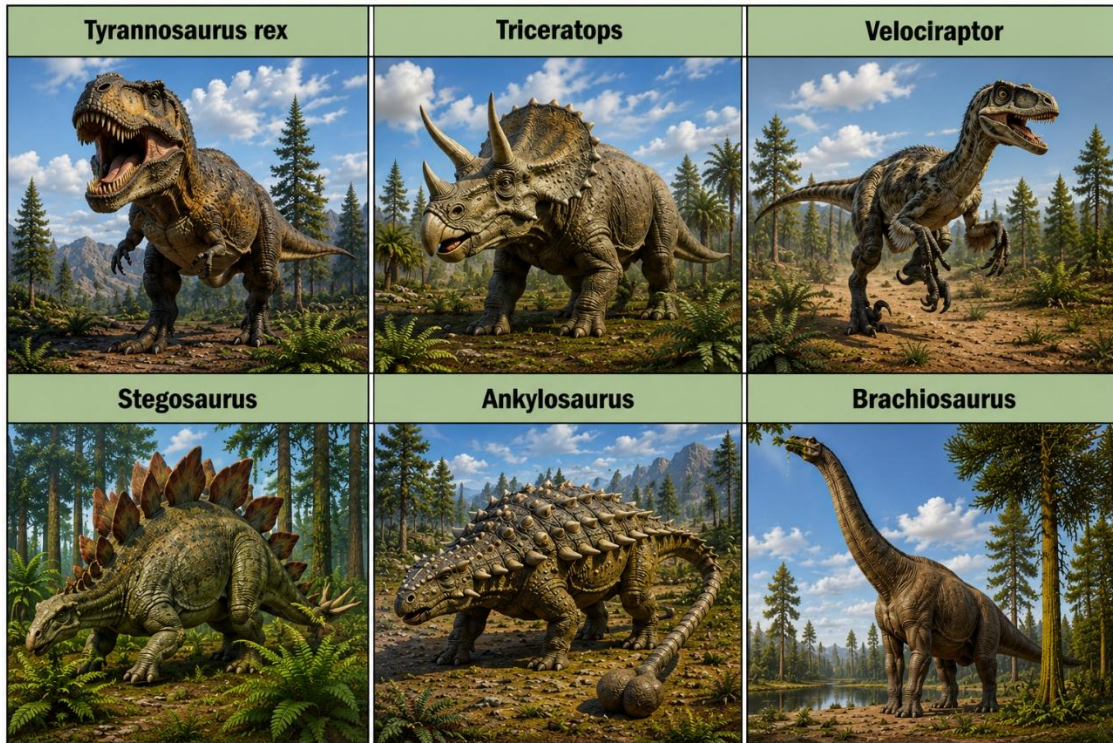
Dinosaurs to explore may include:

-  Tyrannosaurus rex
-  Triceratops
-  Velociraptor
-  Stegosaurus
-  Ankylosaurus



 Brachiosaurus


or another dinosaur of interest.



Dinosaur Adaptation Investigation

Wonder Seekers may choose one dinosaur to investigate closely or compare two or more dinosaurs.

Pictures, books, videos, fact cards, diagrams, or dinosaur models may be used to help with the investigation.

 As Wonder Seekers explore, they sometimes look closely at features that may have helped the dinosaur survive.

Features that may be noticed include:


- teeth
- claws
- horns
- armour
- spikes
- tails
- feathers
- body size
- neck length
- leg shape



- body covering


Some Wonder Seekers notice:

- which dinosaurs may have hunted for food
- which dinosaurs may have eaten plants
- which dinosaurs had protection from predators
- which dinosaurs were large or small
- which dinosaurs may have moved quickly
- how different dinosaurs were suited to different environments

 Wonder Seekers sometimes compare what they notice.

Ideas to explore may include:

- Which dinosaur had the strongest protection?
- Which dinosaur had features for hunting?
- Which dinosaur had features for eating plants?
- Which adaptations seem most unusual?
- Which dinosaurs look similar?
- Which adaptations may have helped the dinosaur survive?

 When ideas are noticed, some Wonder Seekers like to record what they discover by drawing, writing, sorting, or organising information.

- Ideas may be recorded by:
- drawing the dinosaur
- labelling adaptations
- writing short notes
- creating a comparison chart
- making an adaptation table
- recording interesting facts
- creating a labelled diagram
- sorting adaptations by purpose

Looking closely at dinosaur adaptations can help Wonder Seekers understand how body features are connected to survival. Some Wonder Seekers notice that different dinosaurs needed different adaptations depending on the food they ate, the environments they lived in, and the challenges they face.


Wonder Studio

Wonder Seekers sometimes bring together discoveries from the investigation.



Creating a project can help organise ideas and show learning about dinosaur adaptations and survival. Projects provide opportunities to combine observations, comparisons, and discoveries from the investigation.

During the Wonder Journey, Wonder Seekers explored how different dinosaur features may have helped dinosaurs find food, stay safe, move, and survive in prehistoric environments. The Wonder Studio provides an opportunity to bring these discoveries together.

 Wonder Seekers sometimes create:



a poster



a fact page



a comparison chart



a model



a crafted display



a digital project

Projects may include discoveries such as:

- dinosaur name
- habitat
- adaptations
- diet
- survival features
- labels or facts
- comparisons
- interesting observations



When ideas are noticed, some Wonder Seekers like to record their plans by drawing, writing, sketching, building, or talking about their ideas.

Some Wonder Seekers create simple projects that focus on one dinosaur. Others create more detailed projects that compare several dinosaurs or adaptations.

Different ways of creating are all part of the Wonder Journey. Different Wonder Seekers may choose different ways to share their discoveries about dinosaur adaptations and survival.



Reflection

How did this Curiosity Pack feel?



Loved it



Interesting



Okay



Challenging



Wonder Seekers may think about:

- Which dinosaur adaptation was most interesting?
- What features helped dinosaurs survive?
- What surprised you?
- Which dinosaur would you like to learn more about?
- What would you like to explore next?

You may reflect by:

- talking
- drawing
- writing
- building
- recording a short explanation

