

Animals around us · Learning journey

Learning with a grown-up · Ages 4–8 · Flexible participation

How do animals grow and live in their surroundings?

Start with visible features, compare two life cycles, then connect animals to needs, surroundings and food.

Use the butterfly and frog posters side by side for one comparison session. Continue into habitats and camouflage as later core discoveries, then return to animal needs before exploring the food chain.

Teacher sequence

Animal Coverings: Compare two pictured coverings without treating them as removable clothing.

When we explore habitats, which needs remain important even when animals have different coverings?

All About Insects: Count six legs attached to the middle body region and distinguish antennae from legs.

Compare the adult butterfly and caterpillar in the Butterfly Life Cycle poster. Which stage does our adult-insect description concern?

A Butterfly's Life Cycle: Put the four pictured stages in order and identify one body change.

Compare this cycle with the frog cycle. Name one similarity in the sequence and one difference in the pictured bodies.

A Frog's Life Cycle: Describe the pictured changes in legs and tail across a common pond-frog cycle.

Use the Habitat poster to connect the tadpole to a place with water. What need does that setting meet?

Animal Habitats: Identify a pictured animal need and a feature that helps meet it.

Look at the Camouflage poster. How does the background change what is easy to notice?

Animal Camouflage: Point to a color, pattern or outline that helps explain blending in.

Return to the original scene. Which clue would you offer someone else without giving away the whole discovery?

A Simple Food Chain: Trace the pictured food-to-eater arrows and explain one connection.

Connect the chain to a habitat. What else does an animal need besides the food shown here?

What to listen for

Ask learners to choose one animal and explain a feature, a change during growth or a habitat need using a pictured clue.

Animal Coverings

What can an animal's covering help us notice?

Learning aim: Compare two pictured coverings without treating them as removable clothing.

A five-minute conversation

Begin with familiar animals in the picture and compare their coverings. Read the labels and connect them to their examples: fur helps keep many mammals warm, birds have feathers, many fish have scales, and a turtle's shell is part of its body. Use the pictures for comparison without handling animals.

Remember: Choose one comfortable way to notice or describe a detail. What do you already wonder about this picture?

Start here: Find Ollie's feathers or ask for a description of them.

Explore further: Explain why a turtle's shell is different from a coat someone can take off.

What covers Ollie's wings?

Answer cue: Feathers; Ollie is an owl, a kind of bird.

Which pictured covering helps keep many mammals warm?

Answer cue: Fur.

Can a turtle take off its shell like a coat?

Answer cue: No. The shell is part of its body.

Keep the idea clear

These are examples, not a rule that every animal has only one kind of covering or that all fish have scales.

Try: Compare two animal pictures

Materials: The poster and an adult; optional paper and drawing materials. Describing or pointing is enough.

1. Choose two animals from the poster or a familiar book.
2. Describe a visible covering on each; an adult can supply the description.
3. Record one similarity or difference and check the relevant poster label.

What this can show: Use fur, feathers, scales or shell where appropriate. Do not infer every feature or need of an animal from its covering.

Return to it: When we explore habitats, which needs remain important even when animals have different coverings?

Animal Coverings · In the classroom

A 20-minute classroom lesson

Prepare: Read the poster, answer cues and misconception note. Prepare only the materials named in the activity; keep a picture-only or described option available.

Words to explore

covering — What covers the outside of an animal's body.

feathers — The covering found on birds.

3 min · Reconnect and wonder: What can an animal's covering help us notice? Invite an initial idea; record it without marking it right or wrong.

4 min · Look together: Find Ollie's feathers or ask for a description of them. Introduce covering using the poster.

8 min · Investigate or represent: Use "Compare two animal pictures." Let pairs take turns noticing and recording, with adult help and the activity's stated boundaries.

5 min · Explain and return: Ask the core check: What can an animal's covering help us notice? Accept pointing, words, signing or a drawing. If the learner is ready, offer this optional extension: Explain why a turtle's shell is different from a coat someone can take off.

Understanding check: What can an animal's covering help us notice?

Answer guidance: A child can describe or compare the pictured fur, feathers, scales or shell. A turtle's shell is part of its body, not a removable coat. Use fur, feathers, scales or shell where appropriate. Do not infer every feature or need of an animal from its covering.

Accept pointing, speech, signing, a drawing or adult dictation. Describe the illustration and use labels/position as well as color. Offer one contrast first, and use the extension when the learner is ready.

A response to keep

My idea or question

What I noticed (date/time if useful)

What I think now / my next question

<https://kiddos.ai/learn/learning-with-gina-and-ollie/animal-coverings>

All About Insects

How can we recognize the main parts of an adult insect?

Learning aim: Count six legs attached to the middle body region and distinguish antennae from legs.

A five-minute conversation

Start with the legs before introducing new words. Invite your child to count three on one side and three on the other. Follow them inward: all six attach to the thorax. Then look for the head and abdomen, and find the two antennae extending from the head. Antennae help an insect sense its surroundings. This enlarged diagram shows an adult worker ant; it is not the ant's real size. Read "thorax" and "abdomen" for your child and let noticing matter more than remembering the names.

Remember: We compared features such as fur and feathers. Now let's describe another animal by looking at its body parts and legs.

Start here: Follow three legs on one side, then three on the other.

Explore further: Use the attachment points to explain why the antennae are not extra legs.

How many legs can you find on each side? How many altogether?

Answer cue: Three on each side makes six legs. The two feelers at the head are antennae, not extra legs.

Where do all six legs join the body?

Answer cue: The thorax, the middle leg-bearing body region. Follow each leg back to its attachment.

What can you find on the head that is not a leg?

Answer cue: Two antennae. These sensory feelers help the ant detect information about the world around it.

Keep the idea clear

The diagram shows an adult worker ant. Insect young can look very different; caterpillar prolegs are not extra adult insect legs. Not all adult insects have wings. An ant's narrow waist links its middle and rear body sections; the six legs attach to the thorax, not the waist.

Try: Build an insect diagram on paper

Materials: The poster and an adult; optional paper and drawing materials. Describing or pointing is enough.

1. Draw or describe three main body regions: head, thorax and abdomen.
2. Add three legs on each side of the thorax and two antennae on the head.
3. Check each attachment against the enlarged ant, then label the picture as an adult insect model.

What this can show: All six legs join the thorax. The adult ant is an example; young insects can look different and wings are not required for every adult.

Return to it: Compare the adult butterfly and caterpillar in the Butterfly Life Cycle poster. Which stage does our adult-insect description concern?

All About Insects · In the classroom

A 20-minute classroom lesson

Prepare: Read the poster, answer cues and misconception note. Prepare only the materials named in the activity; keep a picture-only or described option available.

Words to explore

thorax — The middle body region where an insect's legs attach.

antennae — Sensory feelers on an insect's head.

3 min · Reconnect and wonder: How can we recognize the main parts of an adult insect? Invite an initial idea; record it without marking it right or wrong.

4 min · Look together: Follow three legs on one side, then three on the other. Introduce thorax using the poster.

8 min · Investigate or represent: Use "Build an insect diagram on paper." Let pairs take turns noticing and recording, with adult help and the activity's stated boundaries.

5 min · Explain and return: Ask the core check: How can we recognize the main parts of an adult insect? Accept pointing, words, signing or a drawing. If the learner is ready, offer this optional extension: Use the attachment points to explain why the antennae are not extra legs.

Understanding check: How can we recognize the main parts of an adult insect?

Answer guidance: The adult insect has head, thorax and abdomen, six legs attached to the thorax, and two antennae on its head. All six legs join the thorax. The adult ant is an example; young insects can look different and wings are not required for every adult.

Accept pointing, speech, signing, a drawing or adult dictation. Describe the illustration and use labels/position as well as color. Offer one contrast first, and use the extension when the learner is ready.

A response to keep

My idea or question

What I noticed (date/time if useful)

What I think now / my next question

<https://kiddos.ai/learn/learning-with-gina-and-ollie/all-about-insects>

A Butterfly's Life Cycle

How does a caterpillar become an adult butterfly?

Learning aim: Put the four pictured stages in order and identify one body change.

A five-minute conversation

Find each of the four stages before reading the labels. A caterpillar is the butterfly's growing larval stage, and its body changes during the pupa stage inside a chrysalis. Invite your child to compare the caterpillar and adult, then trace the sequence back to eggs. The enlarged pictures help us see details.

Remember: We looked at an adult insect's body. Could its young stage look different?

Start here: Find the caterpillar and adult butterfly. Describe one difference.

Explore further: Explain why the chrysalis belongs between those two stages.

What hatches from the egg?

Answer cue: A caterpillar.

Which stage is also called a pupa?

Answer cue: The chrysalis stage.

How can the cycle start again?

Answer cue: An adult butterfly can lay eggs.

Keep the idea clear

A chrysalis is not simply a sleeping bag. The butterfly's body is changing during this stage.

Try: Sequence the change

Materials: The poster and an adult; optional paper and drawing materials. Describing or pointing is enough.

1. Draw or dictate four stage names in large spaces: egg, caterpillar, chrysalis and butterfly.
2. Mix up the order by pointing to different spaces; invite the child to show a possible sequence.
3. Check against the poster and connect the adult to new eggs.

What this can show: The chrysalis is the pupa stage during which the body changes; it is not merely a sleeping caterpillar.

Return to it: Compare this cycle with the frog cycle. Name one similarity in the sequence and one difference in the pictured bodies.

A Butterfly's Life Cycle · In the classroom

A 20-minute classroom lesson

Prepare: Read the poster, answer cues and misconception note. Prepare only the materials named in the activity; keep a picture-only or described option available.

Words to explore

caterpillar — The larval stage of a butterfly.

chrysalis — The butterfly's pupa stage.

3 min · Reconnect and wonder: How does a caterpillar become an adult butterfly? Invite an initial idea; record it without marking it right or wrong.

4 min · Look together: Find the caterpillar and adult butterfly. Describe one difference. Introduce caterpillar using the poster.

8 min · Investigate or represent: Use "Sequence the change." Let pairs take turns noticing and recording, with adult help and the activity's stated boundaries.

5 min · Explain and return: Ask the core check: How does a caterpillar become an adult butterfly? Accept pointing, words, signing or a drawing. If the learner is ready, offer this optional extension: Explain why the chrysalis belongs between those two stages.

Understanding check: How does a caterpillar become an adult butterfly?

Answer guidance: The sequence is egg, caterpillar, chrysalis and adult butterfly. The body changes during the chrysalis stage, and an adult can lay eggs. The chrysalis is the pupa stage during which the body changes; it is not merely a sleeping caterpillar.

Accept pointing, speech, signing, a drawing or adult dictation. Describe the illustration and use labels/position as well as color. Offer one contrast first, and use the extension when the learner is ready.

A response to keep

My idea or question

What I noticed (date/time if useful)

What I think now / my next question

<https://kiddos.ai/learn/learning-with-gina-and-ollie/butterfly-life-cycle>

A Frog's Life Cycle

What changes as a tadpole grows into a frog?

Learning aim: Describe the pictured changes in legs and tail across a common pond-frog cycle.

A five-minute conversation

Trace the stages slowly and compare the animal's body at each step. Notice the tail first, then the back legs, the front legs and the shorter tail of the froglet. Explain that this is a common pond-frog example. Let your child describe changes in their own words before introducing the stage names.

Remember: We followed four stages in a butterfly's life. What changes might we notice in a different animal's life cycle?

Start here: Compare the tadpole's tail with the adult's body.

Explore further: Use two stages to explain which legs appear first in this example.

Where are the eggs shown?

Answer cue: In water, surrounded by jelly.

Which legs grow first in this example?

Answer cue: The back legs.

How does the adult differ from the tadpole?

Answer cue: It has legs and no tail.

Keep the idea clear

Frog life cycles vary. Observe wildlife with an adult; leave eggs, tadpoles and frogs where they are.

Try: A before-and-after comparison

Materials: The poster and an adult; optional paper and drawing materials. Describing or pointing is enough.

1. Choose the tadpole and froglet, then the froglet and adult.
2. Draw, point to or describe legs and tail in each pair.
3. Record what changed and check the order against the poster. Keep pond wildlife undisturbed.

What this can show: Back legs appear before front legs in the example; the tail shortens as the froglet develops. Frog life cycles vary.

Return to it: Use the Habitat poster to connect the tadpole to a place with water. What need does that setting meet?

A Frog's Life Cycle · In the classroom

A 20-minute classroom lesson

Prepare: Read the poster, answer cues and misconception note. Prepare only the materials named in the activity; keep a picture-only or described option available.

Words to explore

tadpole — A young stage of many frogs, usually with a swimming tail.

froglet — A young frog at the transition from tadpole to adult body form.

3 min · Reconnect and wonder: What changes as a tadpole grows into a frog? Invite an initial idea; record it without marking it right or wrong.

4 min · Look together: Compare the tadpole's tail with the adult's body. Introduce tadpole using the poster.

8 min · Investigate or represent: Use "A before-and-after comparison." Let pairs take turns noticing and recording, with adult help and the activity's stated boundaries.

5 min · Explain and return: Ask the core check: What changes as a tadpole grows into a frog? Accept pointing, words, signing or a drawing. If the learner is ready, offer this optional extension: Use two stages to explain which legs appear first in this example.

Understanding check: What changes as a tadpole grows into a frog?

Answer guidance: In this example, a tadpole grows back legs, then front legs while its tail shortens. The adult has legs and no tail. Back legs appear before front legs in the example; the tail shortens as the froglet develops. Frog life cycles vary.

Accept pointing, speech, signing, a drawing or adult dictation. Describe the illustration and use labels/position as well as color. Offer one contrast first, and use the extension when the learner is ready.

A response to keep

My idea or question

What I noticed (date/time if useful)

What I think now / my next question

<https://kiddos.ai/learn/learning-with-gina-and-ollie/frog-life-cycle>

Animal Habitats

What makes a place a habitat for an animal?

Learning aim: Identify a pictured animal need and a feature that helps meet it.

A five-minute conversation

Explain that the poster visits four different places. Choose one animal and look for clues about how it lives there. Read its habitat fact, then introduce the shared needs of food, water, shelter and space. Your child can answer by pointing; a habitat does not need to resemble a human house.

Remember: Our tadpole lived in water. What else might an animal need from the place where it lives?

Start here: Choose one habitat and find its animal.

Explore further: Explain why moving an animal to a different habitat might leave a need unmet.

Which animal is shown using a desert burrow?

Answer cue: The fennec fox.

Where do the frog and tadpole belong in this poster?

Answer cue: The pond habitat.

What does an animal need from its habitat?

Answer cue: Food, water, shelter and space.

Keep the idea clear

These are separate example habitats, not one shared landscape. Animals cannot simply be moved from one to another.

Try: Design a paper habitat

Materials: The poster and an adult; optional paper and drawing materials. Describing or pointing is enough.

1. Choose one pictured animal and read its example together.
2. Draw or describe a place for it, marking food, water, shelter and space.
3. Use the poster to explain one choice, and name something you would need to learn before claiming the habitat meets every need.

What this can show: A habitat is more than a matching background. The poster gives examples; a child's design is a model, not a plan to keep wildlife.

Return to it: Look at the Camouflage poster. How does the background change what is easy to notice?

Animal Habitats · In the classroom

A 20-minute classroom lesson

Prepare: Read the poster, answer cues and misconception note. Prepare only the materials named in the activity; keep a picture-only or described option available.

Words to explore

habitat — A place where an animal finds what it needs.

shelter — A place offering protection.

3 min · Reconnect and wonder: What makes a place a habitat for an animal? Invite an initial idea; record it without marking it right or wrong.

4 min · Look together: Choose one habitat and find its animal. Introduce habitat using the poster.

8 min · Investigate or represent: Use “Design a paper habitat.” Let pairs take turns noticing and recording, with adult help and the activity’s stated boundaries.

5 min · Explain and return: Ask the core check: What makes a place a habitat for an animal? Accept pointing, words, signing or a drawing. If the learner is ready, offer this optional extension: Explain why moving an animal to a different habitat might leave a need unmet.

Understanding check: What makes a place a habitat for an animal?

Answer guidance: A habitat provides an animal with food, water, shelter and space. Accept a correctly linked example, such as the fennec fox’s burrow providing shelter. A habitat is more than a matching background. The poster gives examples; a child’s design is a model, not a plan to keep wildlife.

Accept pointing, speech, signing, a drawing or adult dictation. Describe the illustration and use labels/position as well as color. Offer one contrast first, and use the extension when the learner is ready.

A response to keep

My idea or question

What I noticed (date/time if useful)

What I think now / my next question

<https://kiddos.ai/learn/learning-with-gina-and-ollie/animal-habitats>

Animal Camouflage

What makes an animal harder to notice against a background?

Learning aim: Point to a color, pattern or outline that helps explain blending in.

A five-minute conversation

Give your child time to search before offering clues. Begin with the moth on the bark, then look among the leaves for the toad. If either is hard to find, offer one location or shape clue and discover it together. Compare each animal with its background: similar colors and patterns can make the outline less obvious. That is camouflage. The animals are still there; they have not become invisible. You can point, describe, sign or listen together, and finding just one is enough.

Remember: We thought about an animal's surroundings. How might those surroundings affect how easy the animal is to notice?

Start here: Take your time finding the moth or toad. Ask for one clue whenever you want.

Explore further: Imagine the moth against plain white paper. Explain which clue might become easier to see.

What helped you notice the moth or the toad?

Answer cue: Accept any visible clue: an outline, an eye, a body shape or a change in pattern. The moth is on the trunk; the toad is among the leaves.

Which colors or patterns match each animal's surroundings?

Answer cue: The moth's gray-brown pattern resembles bark. The toad's earthy brown coloring resembles the leaf litter.

Does camouflage make the animal disappear?

Answer cue: No. The animal is still present. Its colors and patterns can make it harder to notice against that background.

Keep the idea clear

This picture shows blending in, not a decision to change color. Camouflage need not hide an animal perfectly. Offer a clue without making finding the animal a test; there is no speed target. Observe real wildlife without touching or disturbing it.

Try: Change the imagined background

Materials: The poster and an adult; optional paper and drawing materials. Describing or pointing is enough.

1. Find or have an adult describe one of the poster's animals.
2. Draw or imagine the same animal against a very different background.
3. Compare the two scenes and explain which details may stand out. Finding quickly is not the goal.

What this can show: The animal remains present. Its colors and patterns can make it harder to spot; this picture does not show it choosing to change color.

Return to it: Return to the original scene. Which clue would you offer someone else without giving away the whole discovery?

Animal Camouflage · In the classroom

A 20-minute classroom lesson

Prepare: Read the poster, answer cues and misconception note. Prepare only the materials named in the activity; keep a picture-only or described option available.

Words to explore

camouflage — Features that make an animal harder to notice in its surroundings.

pattern — An arrangement of colors or shapes.

3 min · Reconnect and wonder: What makes an animal harder to notice against a background? Invite an initial idea; record it without marking it right or wrong.

4 min · Look together: Take your time finding the moth or toad. Ask for one clue whenever you want. Introduce camouflage using the poster.

8 min · Investigate or represent: Use “Change the imagined background.” Let pairs take turns noticing and recording, with adult help and the activity’s stated boundaries.

5 min · Explain and return: Ask the core check: What makes an animal harder to notice against a background? Accept pointing, words, signing or a drawing. If the learner is ready, offer this optional extension: Imagine the moth against plain white paper. Explain which clue might become easier to see.

Understanding check: What makes an animal harder to notice against a background?

Answer guidance: Matching colors or patterns can make an animal harder to notice against a particular background. The animal is still there. The animal remains present. Its colors and patterns can make it harder to spot; this picture does not show it choosing to change color.

Accept pointing, speech, signing, a drawing or adult dictation. Describe the illustration and use labels/position as well as color. Offer one contrast first, and use the extension when the learner is ready.

A response to keep

My idea or question

What I noticed (date/time if useful)

What I think now / my next question

<https://kiddos.ai/learn/learning-with-gina-and-ollie/animal-camouflage>

A Simple Food Chain

How do these food arrows connect the living things?

Learning aim: Trace the pictured food-to-eater arrows and explain one connection.

A five-minute conversation

Begin at the grass and look for the sunlight connection. Grass uses sunlight to make its food. Then trace the food arrows: rabbits eat grass, and foxes can eat rabbits. Each food arrow points from the food toward the eater, following energy through the chain. Let your child guide the route with a finger or words while you read. This is one example of how living things are connected, rather than a list of everything each animal eats.

Remember: We noticed animals within their surroundings. They also need food; how can a picture show who eats what?

Start here: Find the grass and follow its arrow to the rabbit.

Explore further: Explain why this single chain does not mean a fox eats only rabbits.

What helps the grass make its food?

Answer cue: Sunlight. Follow the sunlight connection down to the grass; the grass does not eat the Sun.

Why does the food arrow point from grass to rabbit?

Answer cue: The rabbit eats grass. Food arrows point from food to eater, following energy.

Does the poster mean that foxes eat only rabbits?

Answer cue: No. Rabbits are one example of a fox's food. The poster tells us that animals can eat other foods, too.

Keep the idea clear

Some children find animal feeding relationships surprising. Explain calmly that wild animals need food, without adding a chase or injury story. These are ordinary unnamed animals used as examples; Gina and Ollie are the observers.

Try: Tell the arrow story

Materials: The poster and an adult; optional paper and drawing materials. Describing or pointing is enough.

1. Name or describe grass, rabbit and fox in the poster.
2. Draw or gesture an arrow from grass to rabbit and from rabbit to fox.
3. Explain each arrow as food to eater; add sunlight as what helps grass make food.

What this can show: The arrows follow energy from food to eater. The grass does not eat the Sun, and this is only one possible feeding path.

Return to it: Connect the chain to a habitat. What else does an animal need besides the food shown here?

A Simple Food Chain · In the classroom

A 20-minute classroom lesson

Prepare: Read the poster, answer cues and misconception note. Prepare only the materials named in the activity; keep a picture-only or described option available.

Words to explore

food chain — One path connecting living things through feeding.

energy — What living things need to grow and do things.

3 min · Reconnect and wonder: How do these food arrows connect the living things? Invite an initial idea; record it without marking it right or wrong.

4 min · Look together: Find the grass and follow its arrow to the rabbit. Introduce food chain using the poster.

8 min · Investigate or represent: Use “Tell the arrow story.” Let pairs take turns noticing and recording, with adult help and the activity’s stated boundaries.

5 min · Explain and return: Ask the core check: How do these food arrows connect the living things? Accept pointing, words, signing or a drawing. If the learner is ready, offer this optional extension: Explain why this single chain does not mean a fox eats only rabbits.

Understanding check: How do these food arrows connect the living things?

Answer guidance: The arrows run from grass to rabbit and rabbit to fox because they point from food to eater. Sunlight helps grass make food. The arrows follow energy from food to eater. The grass does not eat the Sun, and this is only one possible feeding path.

Accept pointing, speech, signing, a drawing or adult dictation. Describe the illustration and use labels/position as well as color. Offer one contrast first, and use the extension when the learner is ready.

A response to keep

My idea or question

What I noticed (date/time if useful)

What I think now / my next question

<https://kiddos.ai/learn/learning-with-gina-and-ollie/simple-food-chain>

Our discovery record

Use words, marks, a drawing or an adult's notes. Keep this page with you; nothing needs to be uploaded.

Date / time (if useful): _____

My question or idea

What I noticed

What I think now

What I want to explore next

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