

Pond Sprouts

Early Science Explorations

Duck Eggs

1



- Ducks lay eggs in nests near water.
- A duckling grows safely inside an egg.
- Mother ducks keep their eggs warm.
- Eggs protect growing ducklings until they hatch.

Vocabulary

egg

A shell that protects a growing duckling.



hatch

When a duckling comes out of an egg.



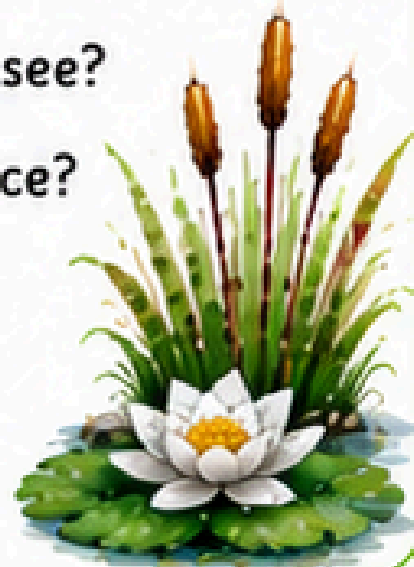
protect

To keep something safe from harm.



Look closely.

- How many eggs do you see?
- What colors do you notice?
- Can you find the nest?
- What is the nest made of?



Think About It

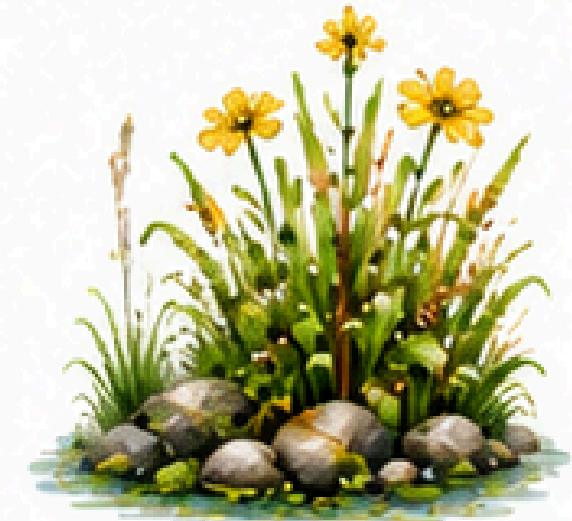
Why do eggs have hard shells?

Talk about how the shell helps keep the duckling safe while it grows.



Caregiver Discussion

- Have you ever seen a bird nest?
- What do you think it would feel like inside an egg?



NAEYC ALIGNMENT

SCI 1.1

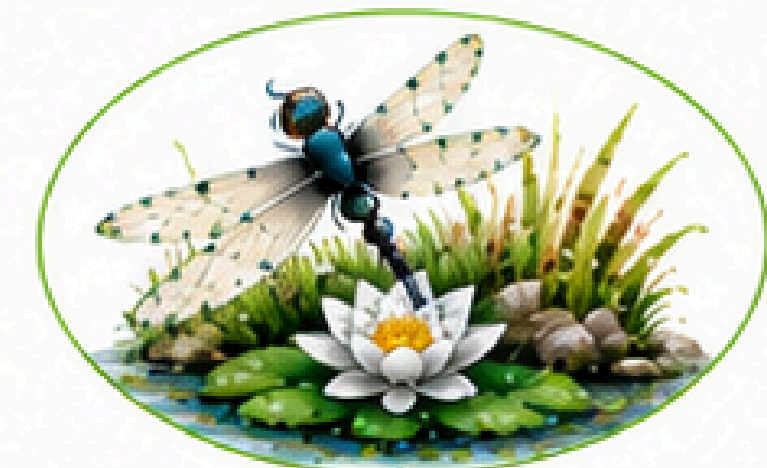
Observe living things and their life cycles.



COMMON CORE CONNECTION

RI.K.1

Ask and answer questions about key details.





Pond Sprouts

Early Science Explorations

Egg Investigation

2



Be an Egg Investigator!

Look carefully at each nest.



Compare, count, and observe.



Nest A



Nest B



Nest C



Look closely.

- How many eggs are in each nest?

- Which nest has more eggs?

- Which nest has fewer eggs?

- What do you notice about the eggs?



Think About It

Why do mother ducks lay more than one egg?



Caregiver Discussion

- Which nest would be hardest to keep warm?

- Why might some nests have more eggs than others?



NAEYC ALIGNMENT
SCI 1.1

Observe, describe, and compare living things and their parts.



COMMON CORE CONNECTION
RI.K.1

Ask and answer questions about key details.



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Early Science Explorations

Nests

3

- ✓ Ducks build nests near ponds and wetlands.
- ✓ Nests help keep eggs warm and safe.
- ✓ Ducks use grasses, leaves, and feathers to build nests.
- ✓ A good nest protects growing ducklings.

Vocabulary

nest

A home where eggs are kept safe.



shelter

A place that protects living things.



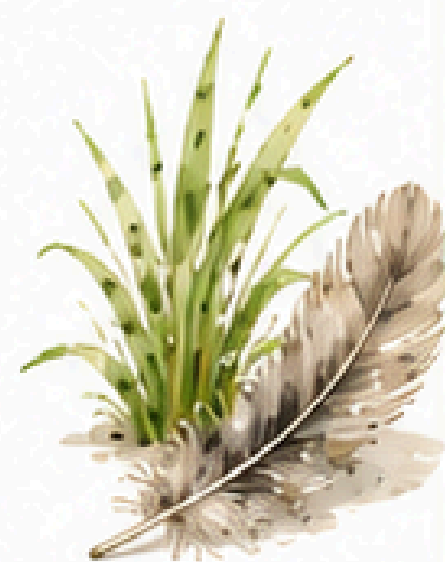
materials

Things used to build something.



Look closely.

- What do you notice in the nest?
- Can you find feathers?
- Can you find grasses?
- What colors do you see?



Think About It

Why might ducks use feathers in their nests?

Talk about how feathers can help keep eggs warm and comfortable.



Caregiver Discussion

- Have you ever seen a bird nest?
- What materials would you use to build a cozy nest?



NAEYC ALIGNMENT
SCI 1.1
Observe how animals meet their needs.



COMMON CORE CONNECTION
RI.K.1
Ask and answer questions about key details.





Build a Nest

4

Can you build a duck nest?

Look carefully at all the materials.
Which things would help a duck
build a safe nest? Which things do not belong?



Look closely.

- Which materials look soft?
- Which materials come from nature?
- Which things do not belong in a nest?
- What do you notice about the nest?



Think About It

Why do ducks use soft materials in their nests?



Caregiver Discussion

- Which material would you choose first?
- What would happen if a nest were made from hard objects?



NAEYC ALIGNMENT
SCI 1.1
Observe natural materials and how animals use them.



COMMON CORE CONNECTION
RI.K.1
Ask and answer questions about key details.





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Early Science Explorations

Hatching

5



- A duckling grows inside an egg before it hatches.
- Ducklings use a special egg tooth to crack the shell.
- Hatching can take many hours.
- After hatching, the duckling rests before exploring the world.

Vocabulary

hatch

When a duckling comes out of an egg.



shell

The hard outside covering of an egg.



duckling

A baby duck.



Look closely.

- What do you notice about the egg?
- Can you find cracks in the shell?
- What colors do you see?
- How is the duckling different from the egg?



Think About It

Why does the duckling need to break the shell?

Talk about how the shell protects the duckling while it grows, but eventually the duckling needs to come out.



Caregiver Discussion

- Have you ever seen a baby bird or animal?
- What do you think the duckling does after it hatches?



NAEYC ALIGNMENT

SCI 1.1

Observe living things and their life cycles.



COMMON CORE CONNECTION

RI.K.1

Ask and answer questions about key details.

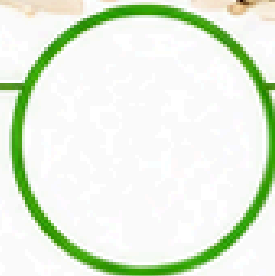
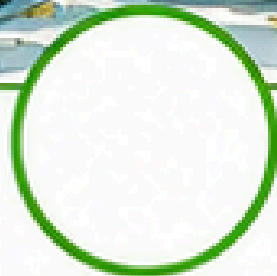




What Happens Next?

6

Look carefully at each picture.
Can you put the duck's life story in order?
What comes first? What comes last?



Look closely.

- Which egg is starting to crack?
- Can you find the duckling coming out?
- Which picture shows a swimming duckling?
- How many stages do you see?



Think About It

Why doesn't the duckling stay inside the egg forever?



Caregiver Discussion

- What changes do you notice from one picture to the next?
- Which stage do you think is the most exciting?



NAEYC ALIGNMENT

SCI 1.1

Observe life cycles and changes in living things.



COMMON CORE CONNECTION

RI.K.3

Describe connections between events and ideas.





Ducklings

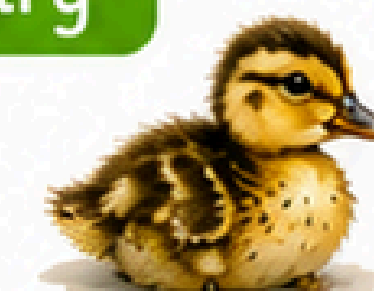
7

- Ducklings are baby ducks.
- Ducklings stay close to their mother for safety.
- They learn where to find food and water.
- As ducklings grow, they become adult ducks.

Vocabulary

duckling

A baby duck.



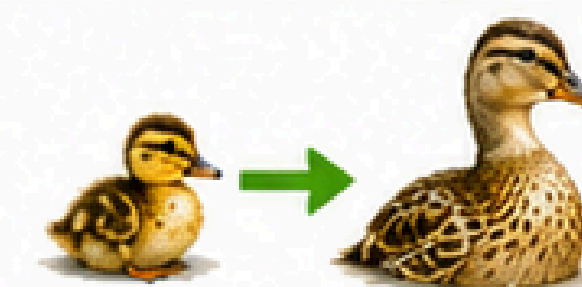
family

Animals that stay together and care for one another.



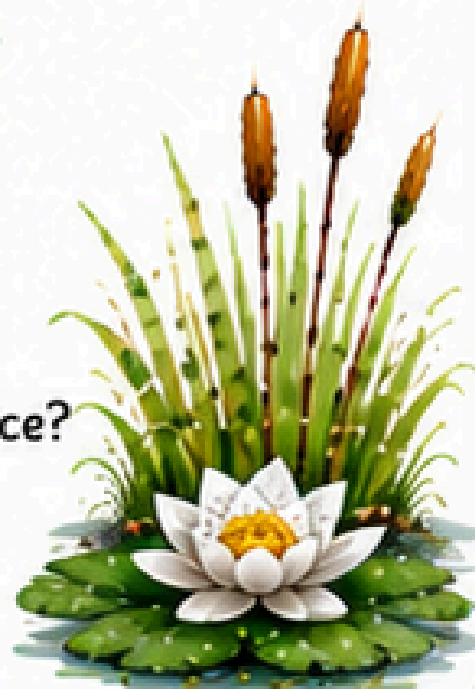
grow

To become bigger over time.



Look closely.

- How many ducklings do you see?
- Can you find the mother duck?
- What colors do you notice?
- How are the ducklings different from the mother duck?



Think About It

Why do ducklings stay close to their mother?

Talk about how mother ducks help protect and teach their ducklings.



Caregiver Discussion

- Have you ever seen baby animals following an adult?
- What are some things young animals need to learn?



NAEYC ALIGNMENT
SCI 1.1
Observe animals and their young.



COMMON CORE CONNECTION
RI.K.1
Ask and answer questions about key details.





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Early Science Explorations

Duckling Needs

8

What does a duckling need?

Look carefully at each picture.
Which things help a duckling live, grow,
and stay safe? Which things do not help?



Clean pond water



Pond plants



Insects and small food



Mother duck



Nest and shelter



Bicycle



Soccer ball



Toy truck



Television



Look closely.

- Which things provide food?
- Which things provide shelter?
- Which things help keep ducklings safe?
- Which things do not belong?



Think About It

Why do ducklings need a mother duck?



Caregiver Discussion

- Which need is most important for a duckling?
- What do all animals need to survive?



NAEYC ALIGNMENT
SCI 1.1
Observe how animals meet their needs.



COMMON CORE CONNECTION
RI.K.1
Ask and answer questions about key details.



Pond Sprouts

Early Science Explorations

Feathers

9



- Feathers help ducks stay warm.
- Feathers help keep water away from a duck's skin.
- Ducks use their feathers for flying and swimming.
- Different feathers have different jobs.

Vocabulary

feather

A covering on a bird's body.



waterproof

Water slides off waterproof feathers.



flight

Moving through the air using wings.



Look closely.

- What colors do you see in the feathers?
- Can you find water on the feathers?
- How are the feathers different?
- Which feather looks softest?



Think About It

Why are feathers useful for ducks?

Talk about how feathers help ducks stay warm, dry, and ready to fly.



Caregiver Discussion

- Have you ever found a feather outside?
- What might happen if ducks did not have feathers?



NAEYC ALIGNMENT

SCI 1.1

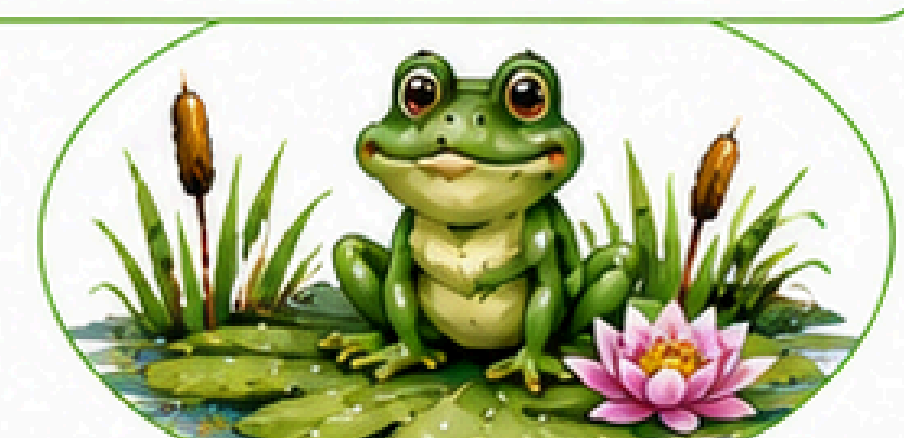
Observe animal body parts and how they help animals survive.



COMMON CORE CONNECTION

RI.K.1

Ask and answer questions about key details.





Pond Sprouts

Early Science Explorations

Feather Functions

10



What do feathers do?

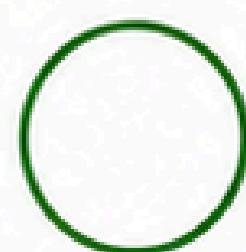
Look carefully at each picture.
Can you match the feather job
to the correct duck?



Feathers keep ducks warm.



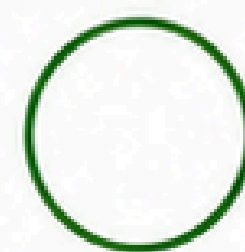
Keep Warm



Feathers help ducks
stay dry.



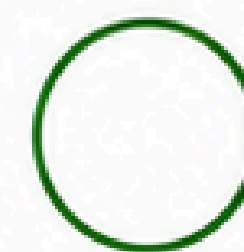
Stay Dry



Feathers help ducks
fly.



Help Fly



Look closely.

- Which picture shows water?
- Which picture shows flying?
- Which picture shows a duck staying warm?
- What do you notice about the feathers?



Think About It

Could ducks live
without feathers?



Caregiver Discussion

- Which feather job seems most important?
- How do feathers help ducks in different seasons?



NAEYC ALIGNMENT

SCI 1.1

Observe animal body parts
and how they help animals survive.



COMMON CORE CONNECTION

RI.K.1

Ask and answer questions
about key details.



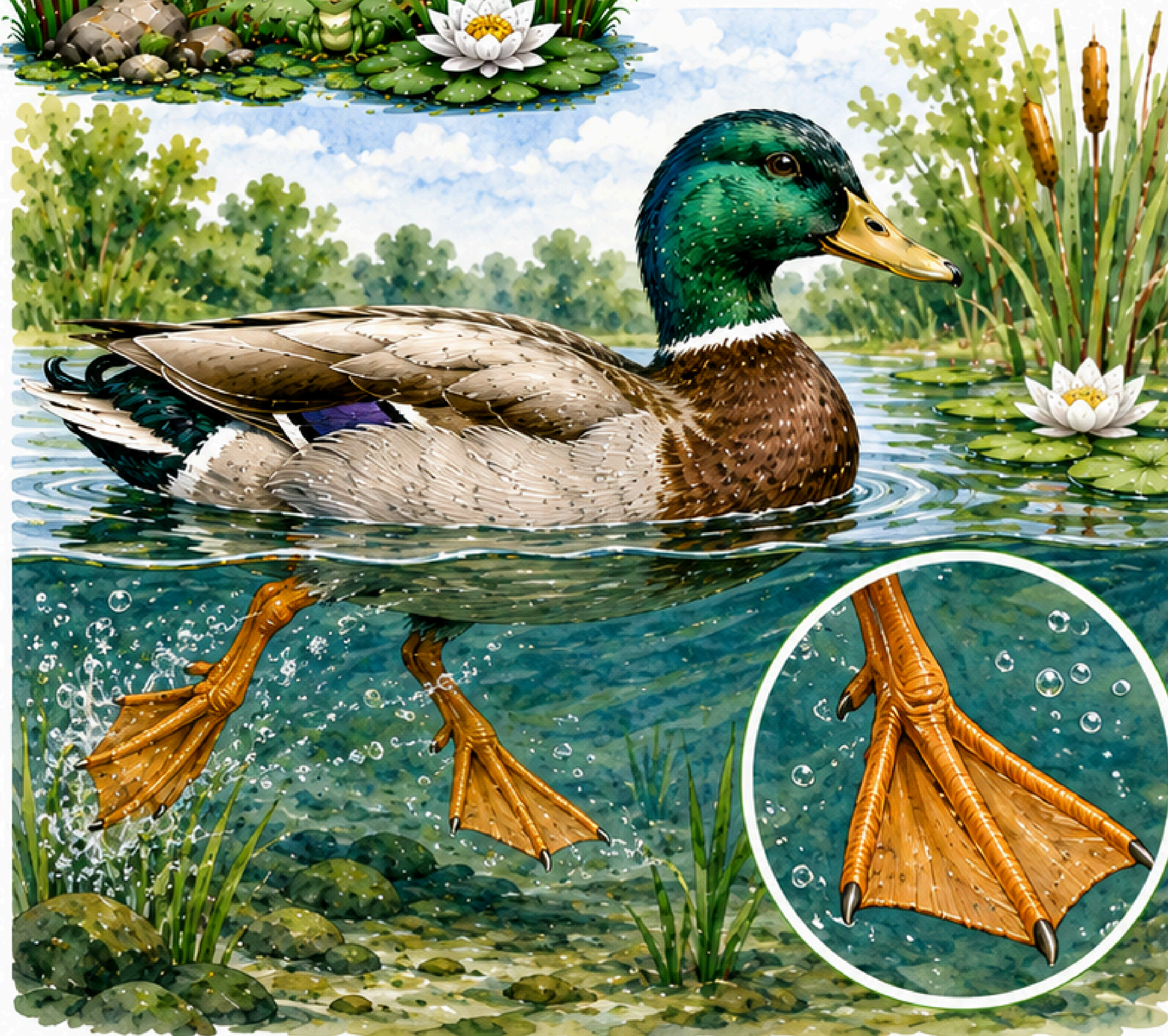


Pond Sprouts

Early Science Explorations

Webbed Feet

11



- Ducks have webbed feet.
- Webbed feet help ducks push through the water.
- A duck's feet work like paddles on a boat.
- Webbed feet help ducks swim faster and more easily.

Vocabulary

webbed

Skin stretched between the toes.



paddle

Something that pushes through water.



swim

To move through water.



Look closely.

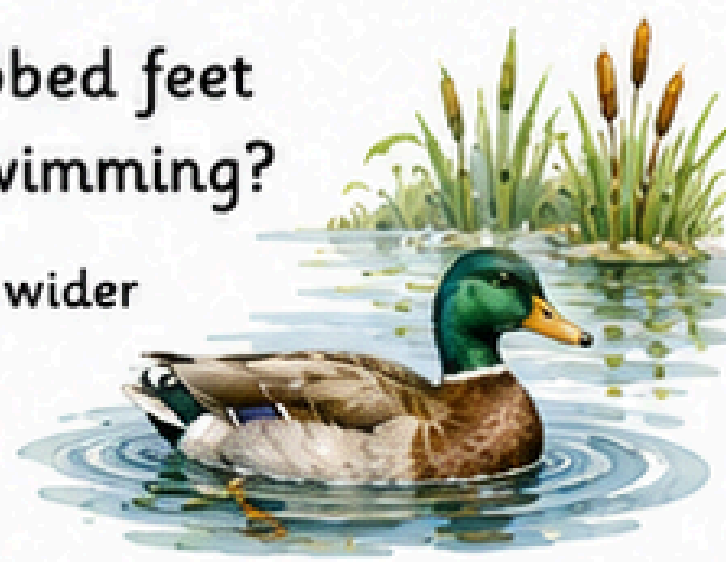
- Can you find the duck's feet?
- What do you notice between the toes?
- How are duck feet different from your feet?
- Can you find the water around the feet?



Think About It

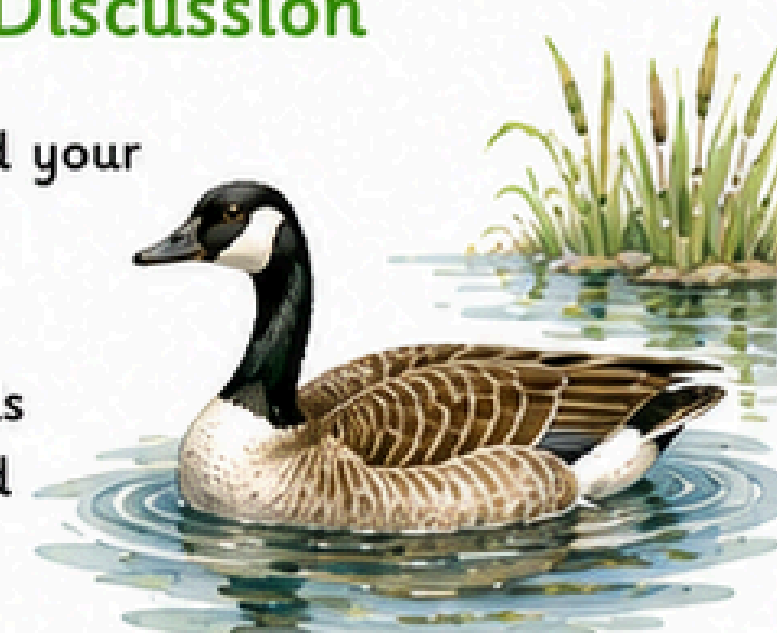
Why are webbed feet helpful for swimming?

Talk about how wider feet can push more water.



Caregiver Discussion

- Have you ever used your hands like paddles in water?
- What other animals might have webbed feet?



NAEYC ALIGNMENT

SCI 1.1

Observe animal body parts and how they help animals survive.



COMMON CORE CONNECTION

RI.K.1

Ask and answer questions about key details.





Why Webbed Feet?

12

 Why do ducks have webbed feet?

Look carefully at both feet.

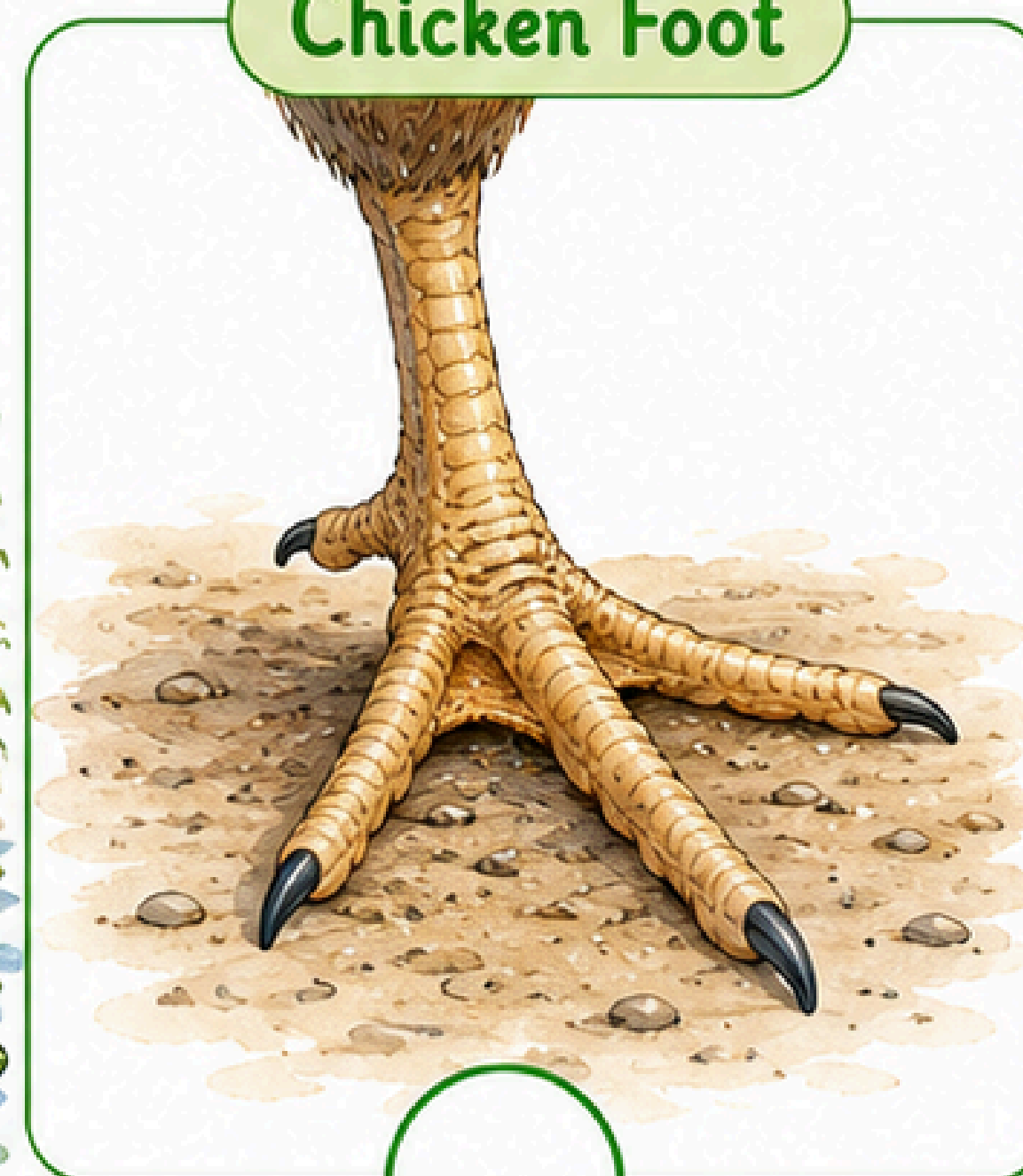
 Which foot would help an animal swim better? Why?



Duck Foot

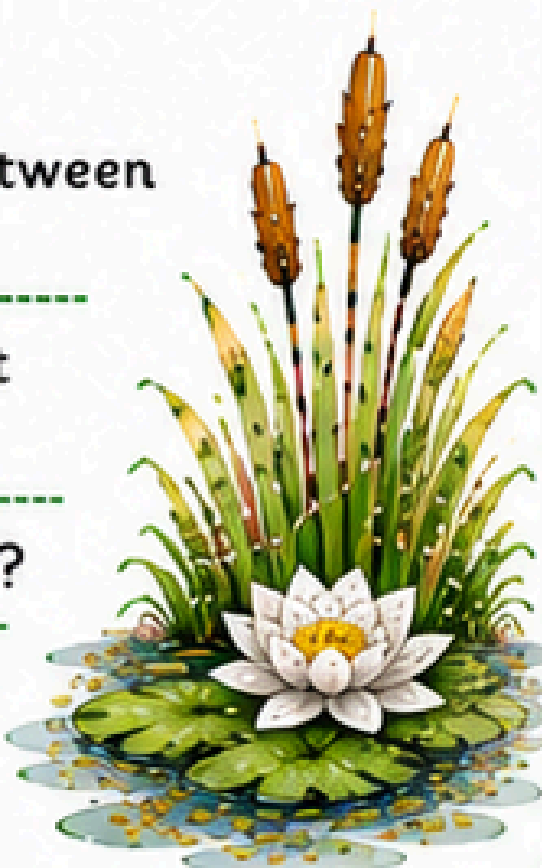


Chicken Foot



 Look closely.

-  What do you notice between the duck's toes?
-  How is the chicken foot different?
-  Which foot looks wider?
-  Which foot would push more water?



 Think About It

Why might wider feet help an animal swim?



 Caregiver Discussion

-  Have you ever used your hands like paddles in a pool?
-  What other animals might have webbed feet?



NAEYC ALIGNMENT
SCI 1.1

Observe animal body parts and how they help animals survive.



COMMON CORE CONNECTION
RI.K.1

Ask and answer questions about key details.





Pond Sprouts

Early Science Explorations

Growing Up

13

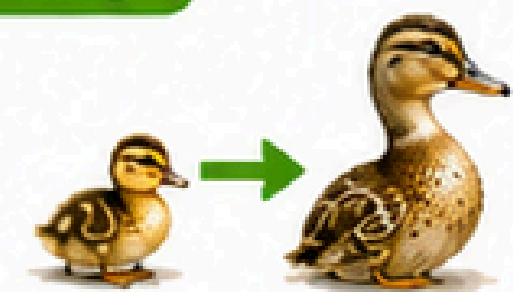


- ✓ Ducklings grow bigger as they get older.
- ✓ New feathers replace soft baby fluff.
- ✓ Young ducks learn important skills from adult ducks.
- ✓ A duckling eventually becomes an adult duck.

Vocabulary

grow

To become bigger over time.



adult

A fully grown duck.



change

To become different over time.



Look closely.

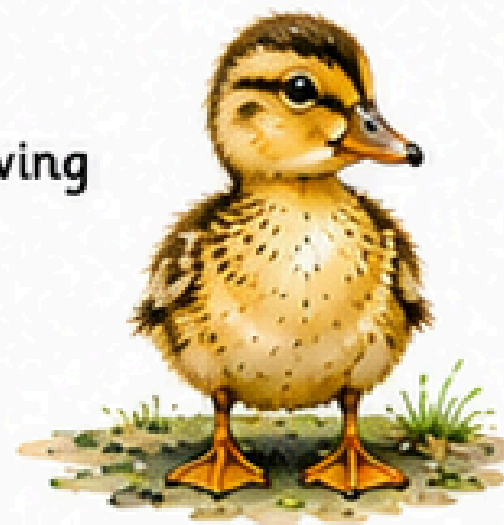
- Can you find the smallest duck?
- Can you find the largest duck?
- What looks different about their feathers?
- How are the young ducks different from the adult duck?



Think About It

Why do animals change as they grow?

Talk about how growing helps animals learn new skills and survive.



Caregiver Discussion

- What things can you do now that you could not do when you were younger?
- How do baby animals change as they grow up?



NAEYC ALIGNMENT

SCI 1.1

Observe how living things grow and change.



COMMON CORE CONNECTION

RI.K.1

Ask and answer questions about key details.





Growing Up Detective

14

What changed?

Look closely at each set of pictures.

Find the ways ducks change as they grow.



Size

Small Duck → Large Duck



Feathers

Soft Fluff → Adult Feathers



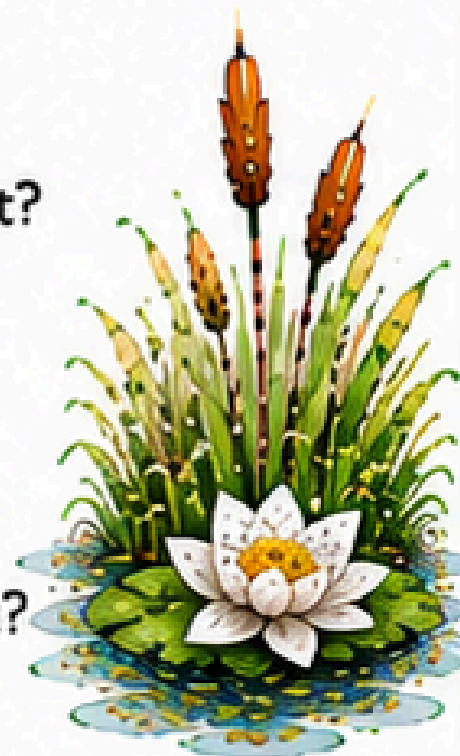
Color

Baby Colors → Adult Colors



Look closely.

- Which duck is the youngest?
- Which duck is the oldest?
- Which duck has the most feathers?
- Which duck is the smallest?



Think About It

How can you tell which duck is older?



Caregiver Discussion

- What are some ways this duck has changed as it grew?
- What changes do you think will happen next?



NAEYC ALIGNMENT
SCI 1.1
Observe changes in living things over time.



COMMON CORE CONNECTION
RI.K.1
Ask and answer questions about key details.





Pond Life

15



- A pond is home to many different plants and animals.
- Ducks, frogs, fish, insects, and snails can all live near a pond.
- Pond plants provide food and shelter for many animals.
- Animals in a pond depend on one another to survive.

Vocabulary

pond

A body of water where plants and animals live.



habitat

A place where a living thing lives.



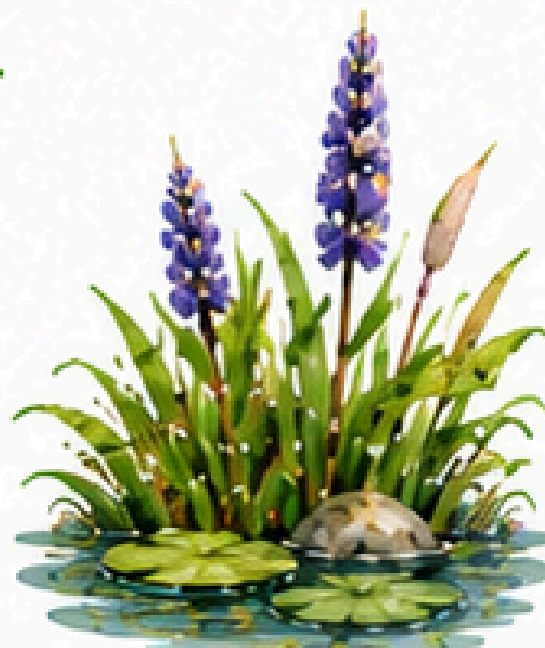
shelter

A safe place to hide or rest.



Look closely.

- How many animals can you find?
- Can you find something that swims?
- Can you find something that flies?
- What plants do you see near the water?



Think About It

Why do so many animals live near ponds?

Talk about how ponds provide water, food, and places to hide.



Caregiver Discussion

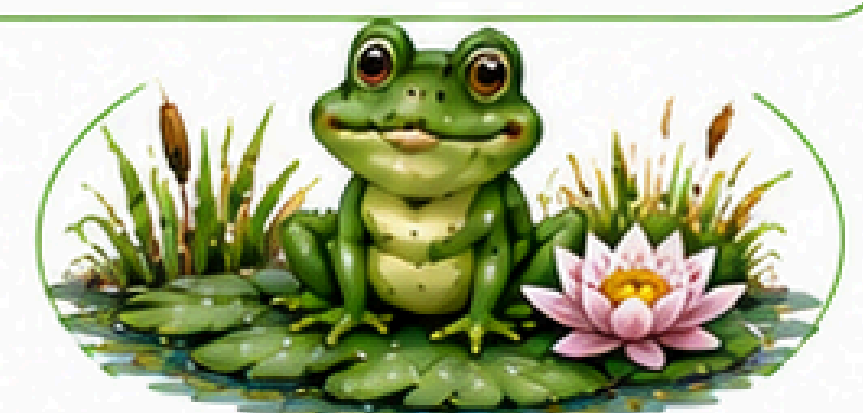
- What animals have you seen near water?
- What would happen if a pond dried up?



NAEYC ALIGNMENT
SCI 1.1
Observe living things and their habitats.



COMMON CORE CONNECTION
RI.K.1
Ask and answer questions about key details.





Pond Habitat Search

16



Can you find everything in the pond habitat?

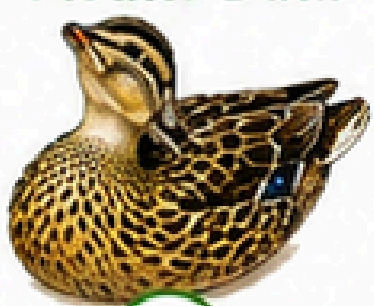
Look carefully. Some things are easy to spot.



Some are hiding!



Mother Duck



Duckling



Frog



Fish



Snail



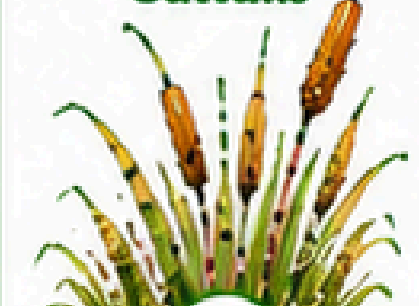
Dragonfly



Water Lily



Cattails



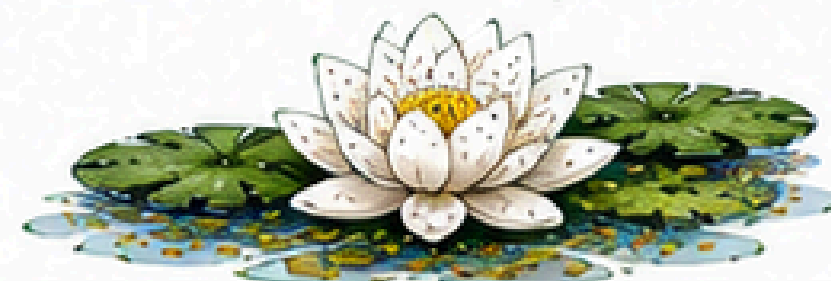
Look closely.

- Which animals live in the water?
- Which animals live above the water?
- Which animal is easiest to find?
- Which animal is hardest to find?



Think About It

Why do different animals live in the same pond?



Caregiver Discussion

- Which animal would be hardest to find in real life?
- How do all these animals share the same habitat?



NAEYC ALIGNMENT
SCI 1.1
Observe living things and their habitats.



COMMON CORE CONNECTION
RI.K.1
Ask and answer questions about key details.





Pond Sprouts

Early Science Explorations

Staying Safe

17



- Ducklings stay close to their mother to help them stay safe.
- Ducks use tall grasses and reeds to hide from danger.
- Staying together helps duck families watch for predators.
- Safe habitats provide food, water, and shelter.

Vocabulary

predator

An animal that may hunt other animals for food.



shelter

A safe place to hide or rest.



protect

To help keep something safe.



Look closely.

- Can you find the mother duck?
- Can you find the ducklings?
- What places could help ducks hide?
- What animals do you see nearby?



Think About It

Why do ducklings stay close together?

Talk about how groups can help animals stay safe and find help when needed.



Caregiver Discussion

- What helps you feel safe?
- What places in nature might help animals hide from danger?



NAEYC ALIGNMENT
SCI 1.1
Observe how animals meet their needs and stay safe.



COMMON CORE CONNECTION
RI.K.1
Ask and answer questions about key details.





Pond Sprouts

Early Science Explorations

Safe or Not Safe?

18

Which situations look safe for ducklings?

Look carefully at each picture.

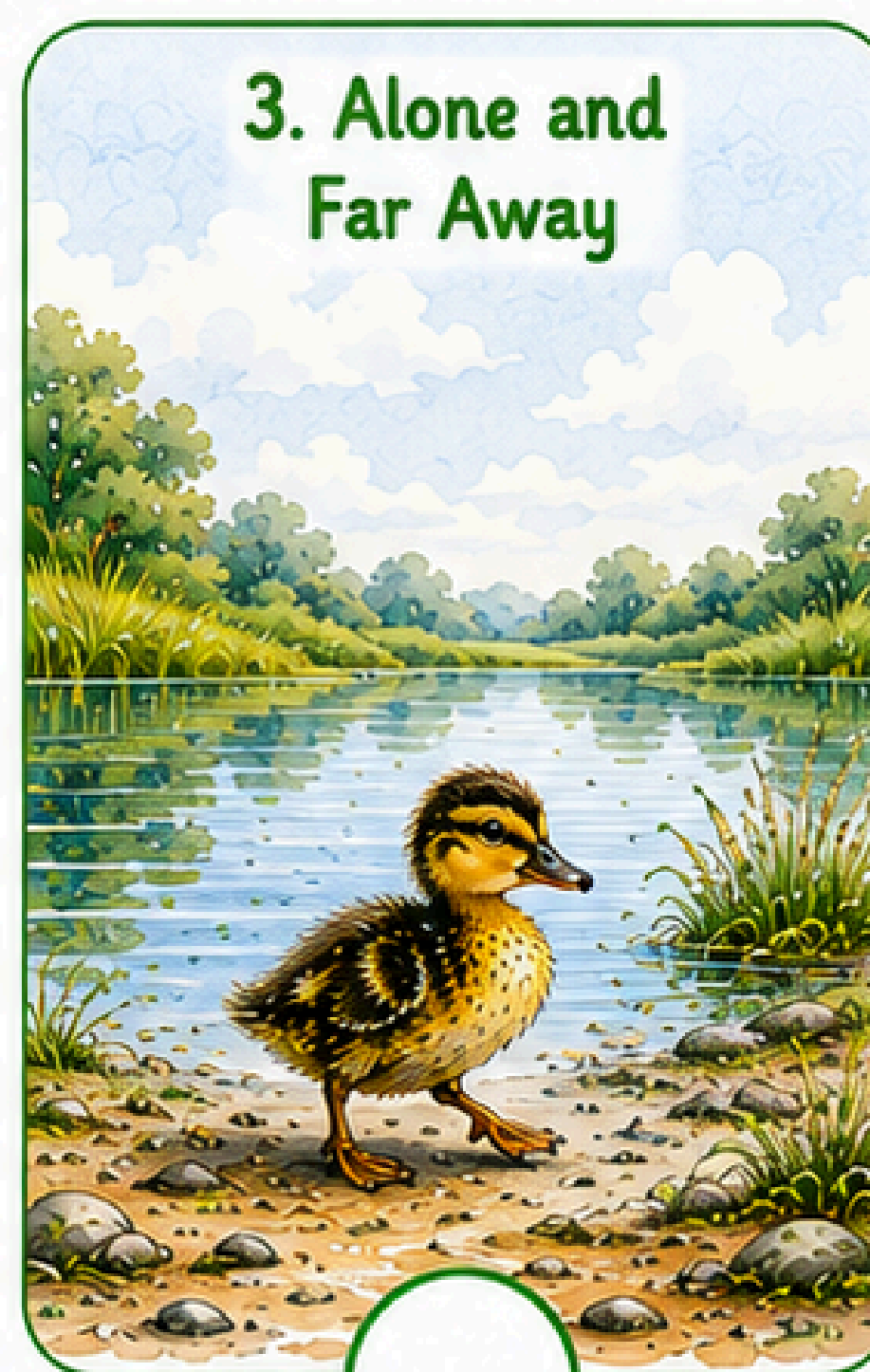
Which ducklings are making safe choices?
Which ducklings might be in danger?



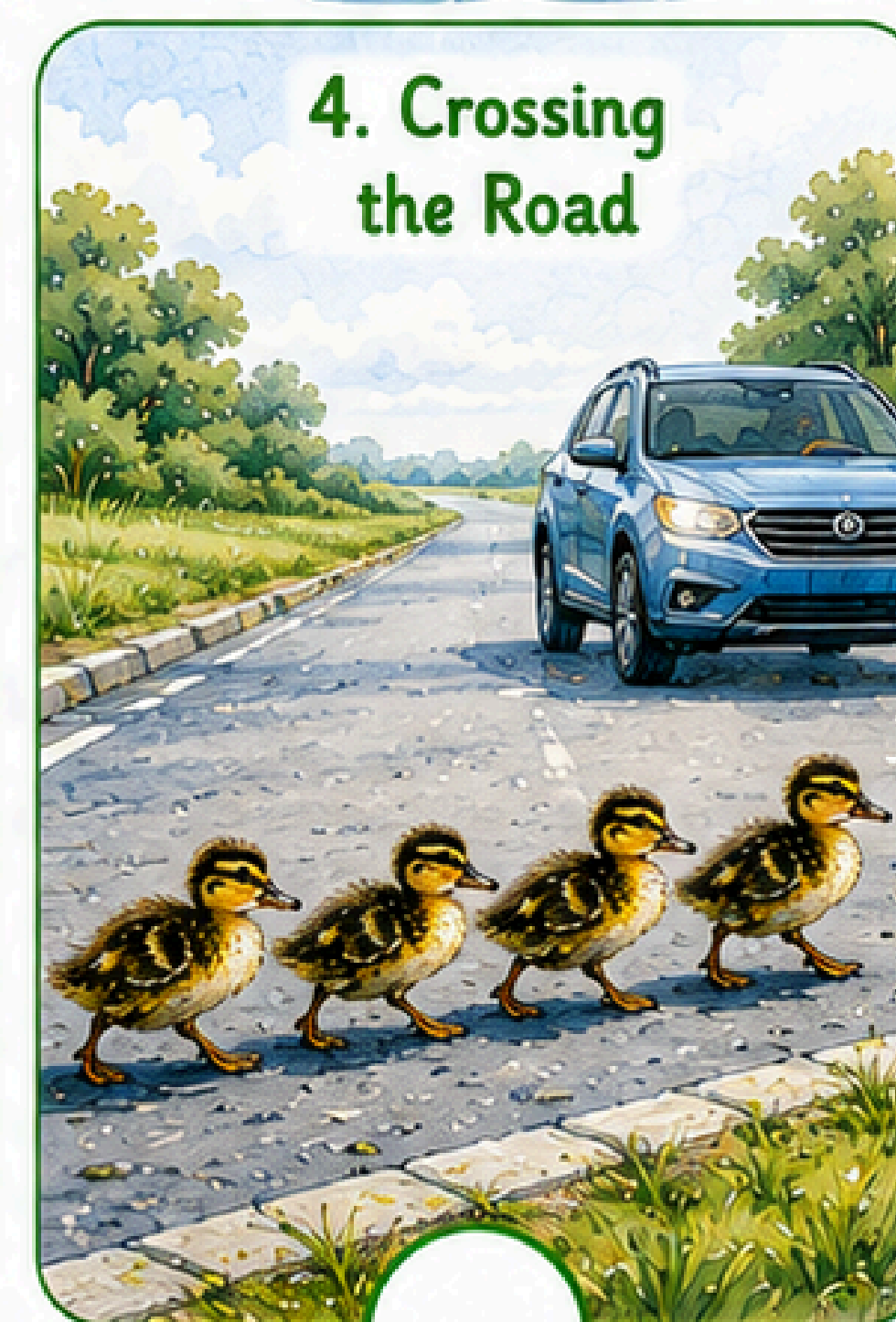
1. Swimming with Mom



2. Hiding in the Reeds



3. Alone and Far Away



4. Crossing the Road

Look closely.

- Which ducklings are near their mother?
- Which ducklings have a place to hide?
- Which ducklings are alone?
- What clues help you decide?



Think About It

Why is it safer for ducklings to stay together?



Caregiver Discussion

- What helps animals stay safe?
- What helps children stay safe?



NAEYC ALIGNMENT
SCI 1.1

Observe how animals meet their needs and stay safe.



COMMON CORE CONNECTION
RI.K.1

Ask and answer questions about key details.





Pond Sprouts

Early Science Explorations

Duck Homes

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🍃 Ducks live near ponds, lakes, rivers, and wetlands.

🍃 A duck's home provides food, water, and shelter.

🍃 Different ducks can live in different habitats.

🍃 Healthy habitats help ducks raise their young.

Vocabulary

habitat

A place where a living thing lives.



shelter

A safe place to rest or hide.



wetland

A wet area where many plants and animals live.



Look closely.

- What animals can you find in the habitat?
- Can you find water?
- Can you find shelter for ducks?
- What plants do you see?



Think About It

What makes a good duck home?

Talk about why ducks need water, food, and places to stay safe.



Caregiver Discussion

- What things do ducks need in their homes?
- How is a duck's home different from your home?



NAEYC ALIGNMENT

SCI 1.1

Observe habitats and how animals meet their needs.



COMMON CORE CONNECTION

RI.K.1

Ask and answer questions about key details.





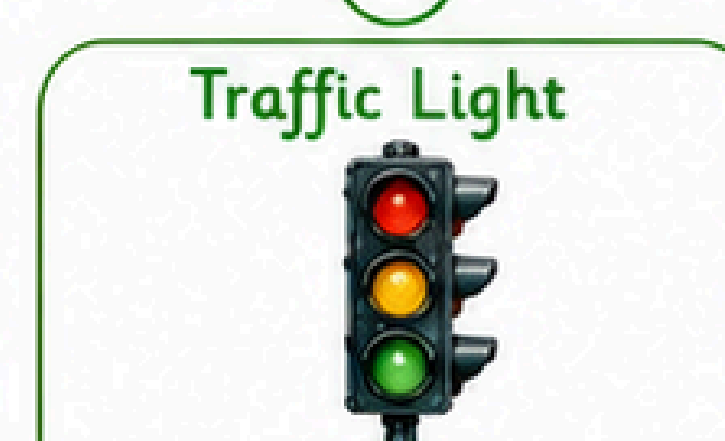
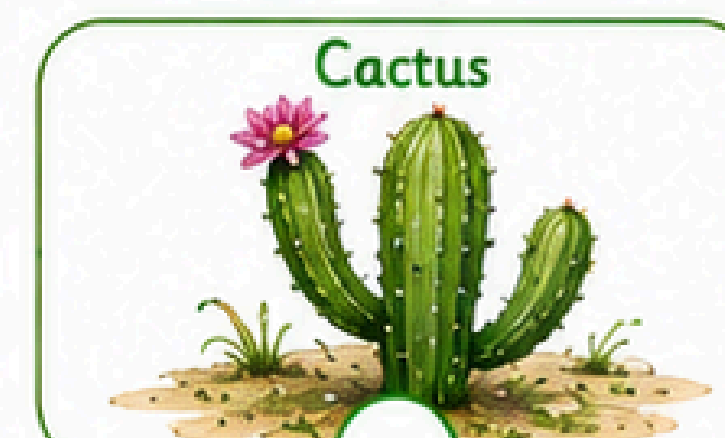
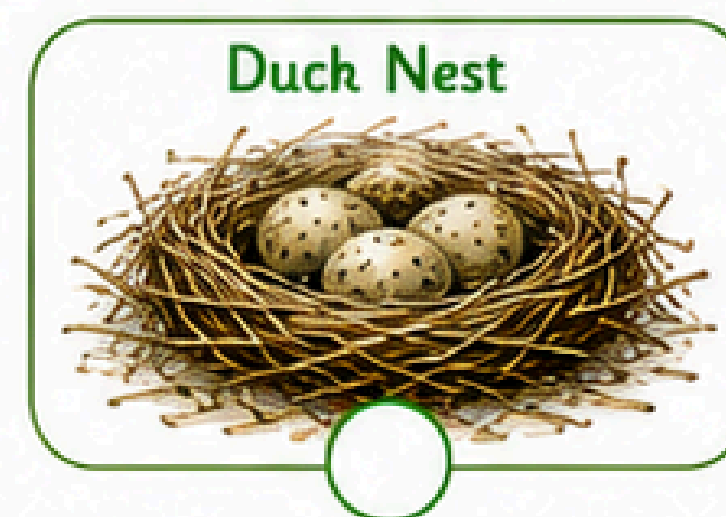
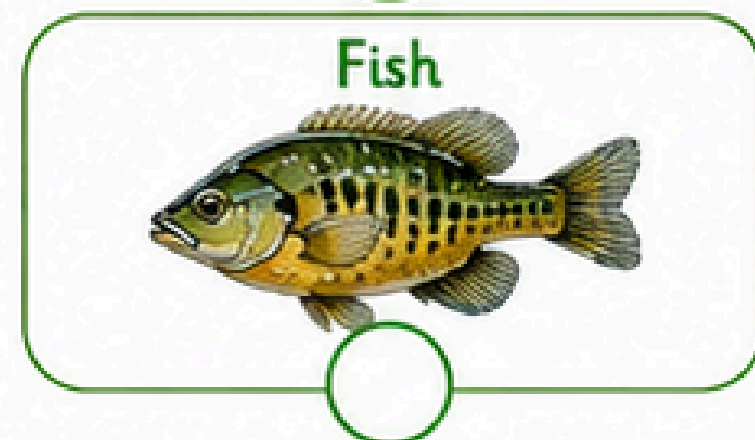
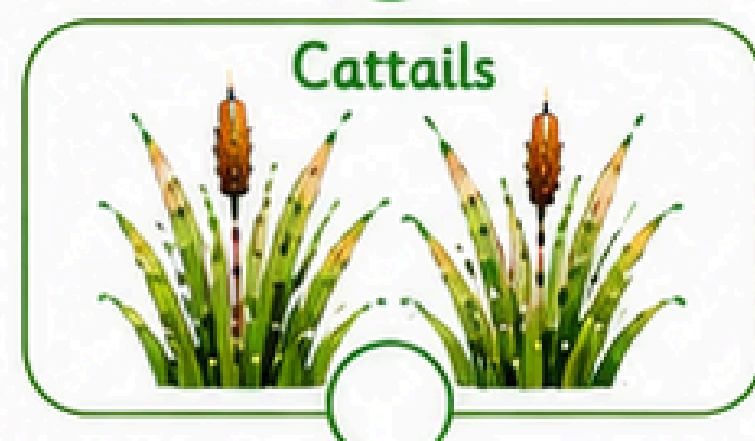
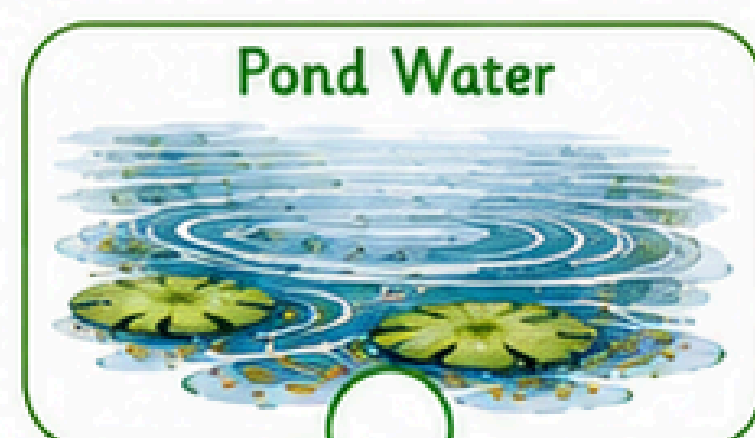
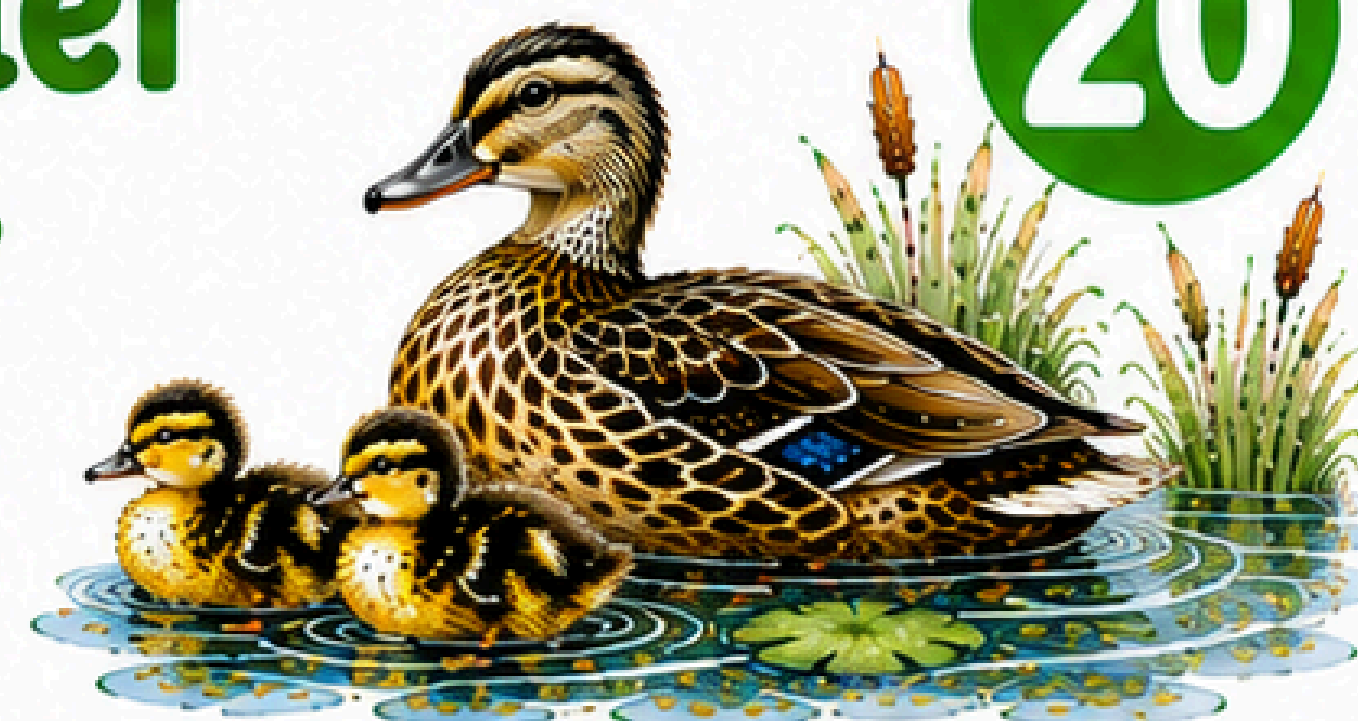
Habitat Builder

20

Can you build a duck habitat?

Look carefully at each picture.

Which things belong in a duck's home?
Which things do not belong?



Look closely.

- Which things provide water?
- Which things provide shelter?
- Which things are living things?
- Which things do not belong near a pond?



Think About It

Why do ducks need ponds and plants?



Caregiver Discussion

- What is the most important part of a duck habitat?
- What might happen if the pond disappeared?



NAEYC ALIGNMENT

SCI 1.1

Observe habitats and how animals meet their needs.



COMMON CORE CONNECTION

RI.K.1

Ask and answer questions about key details.





Pond Sprouts

Early Science Explorations

All About Ducks

21



- Ducks hatch from eggs and grow into adults.
- Ducks use feathers and webbed feet to help them survive.
- Ducks need food, water, shelter, and family.
- Ducks share ponds with many other living things.

Vocabulary

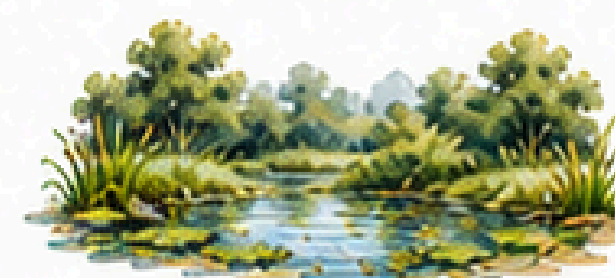
survive

To stay alive and healthy.



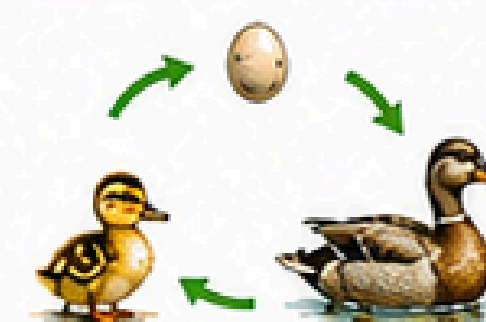
habitat

A place where a living thing lives.



life cycle

The stages of growing and changing.



Look closely.

- Can you find a duckling?
- Can you find an adult duck?
- Can you find feathers?
- What other pond animals can you find?



Think About It

What do ducks need to survive?

Talk about how ducks need food, water, shelter, and safe places to live.



Caregiver Discussion

- What was the most interesting thing you learned about ducks?
- How do ducks and people both need homes, food, and water?



NAEYC ALIGNMENT
SCI 1.1
Observe living things and how they meet their needs.



COMMON CORE CONNECTION
RI.K.1
Ask and answer questions about key details.





Duck Expert Challenge

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Can you find them all?

Look carefully at the pond.

Find each item in the picture below!



Eggs	Nest	Duckling	Adult Duck	Feather	Webbed Feet	Frog	Fish	Dragonfly	Snail	Water Lily	Cattails

Look closely.

- Which animal is easiest to find?
- Which animal is hardest to find?
- How many ducklings can you find?
- What living things share the pond?



Think About It

What do ducks need to survive?



Can you find food?



Can you find water?



Can you find shelter?

Caregiver Discussion

- What was your favorite thing you learned about ducks?
- What makes a pond a good home for ducks?



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