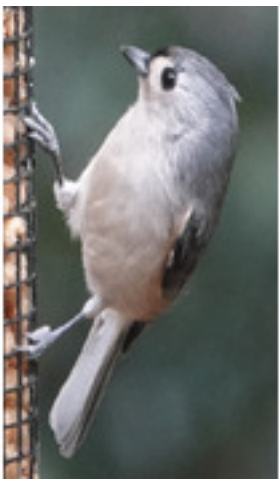


# Backyard Biologist

The first slide will ask you for your school, team and team members. 1 person should submit answers for the team. Once the section gets to 0:00, the test moves on but DOES record the answers you have clicked.

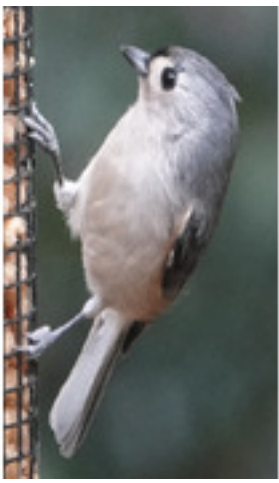
# Quiz

## Section 1



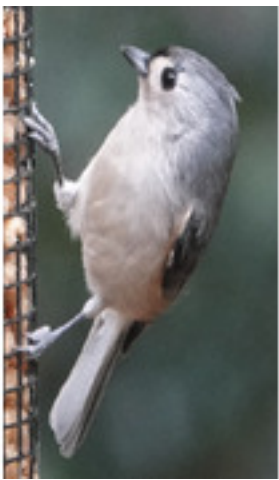
This is a Tufted Titmouse. Is this a True or False statement about these birds: They often live their lives within a few miles of their birthplace.

- ☐ True
- ☐ False



This is a Tufted Titmouse. Is this a True or False statement about these birds: They line their nest with hair pulled from living animals.

- ☐ True
- ☐ False



This is a Tufted Titmouse. Is this a True or False statement about these birds: They are found throughout North America.

- ☐ True
- ☐ False





Which of these birds is a turkey vulture? You can click the picture to make it bigger.

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4



Which of these birds is the Carolina Chickadee? You can click the picture to make it bigger.

☐ A

☐ B

☐ C



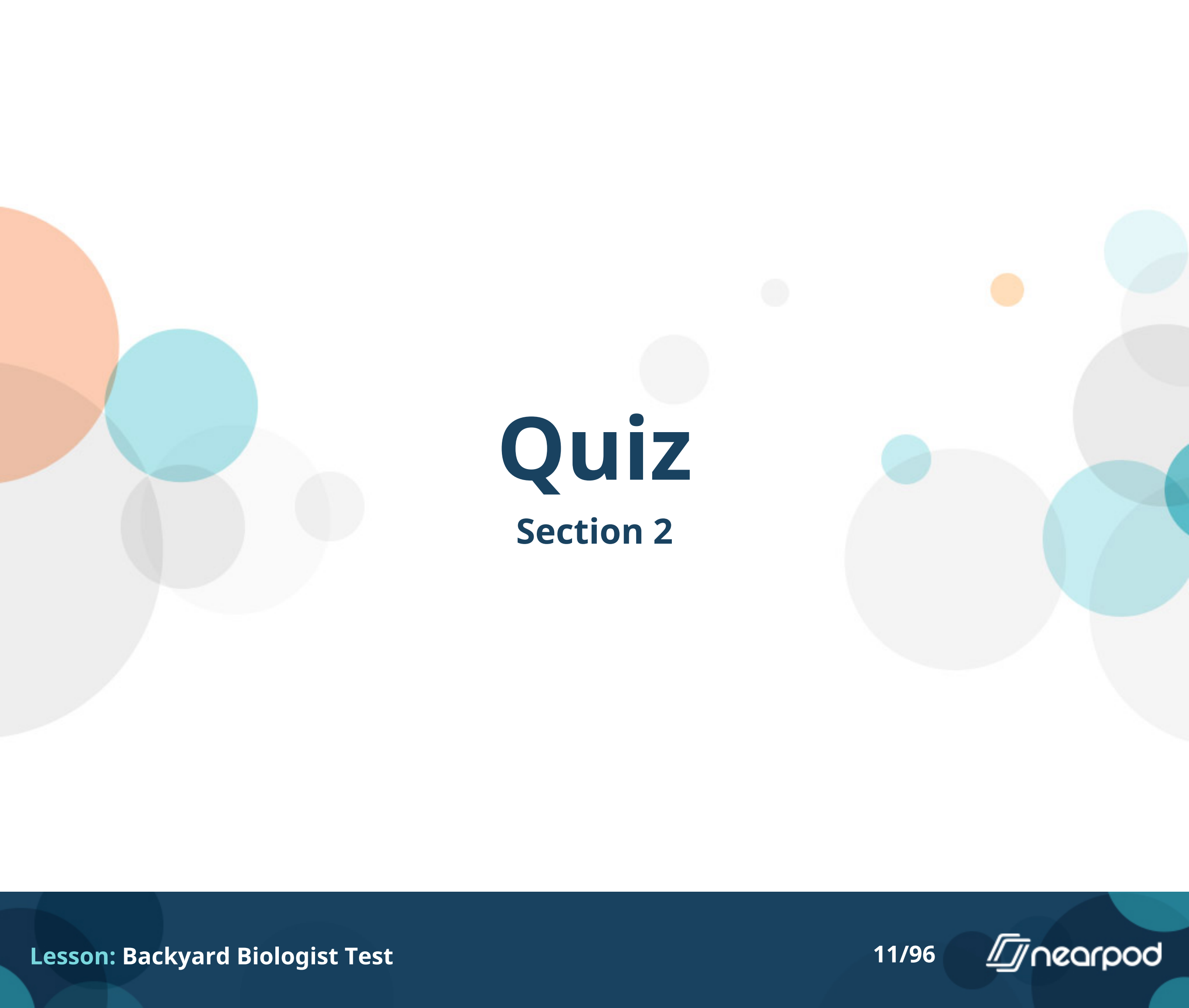
Which of these birds is the American Crow? You can click the picture to make it bigger.

☐ A

☐ B

☐ C





# Quiz

## Section 2



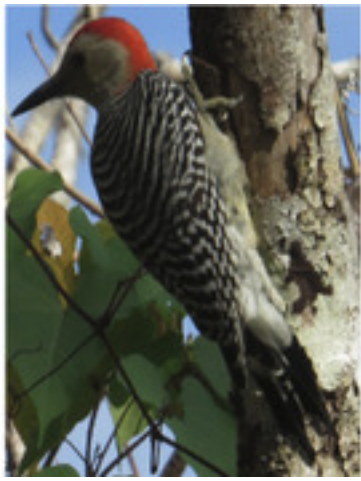
**Is this bird a male or female of its species?**

- ☐ Male
- ☐ Female



**Is this bird a male or female of its species?**

- ☐ Male
- ☐ Female



**Is this bird a male or female of its species?**

- ☐ Male
- ☐ Female



**Is this bird a male or female of its species?**

- ☐ Male
- ☐ Female



**Is this bird a male or female of its species?**

- ☐ Male
- ☐ Female





**Is this bird a male or female of its species?**

- ☐ Male
- ☐ Female



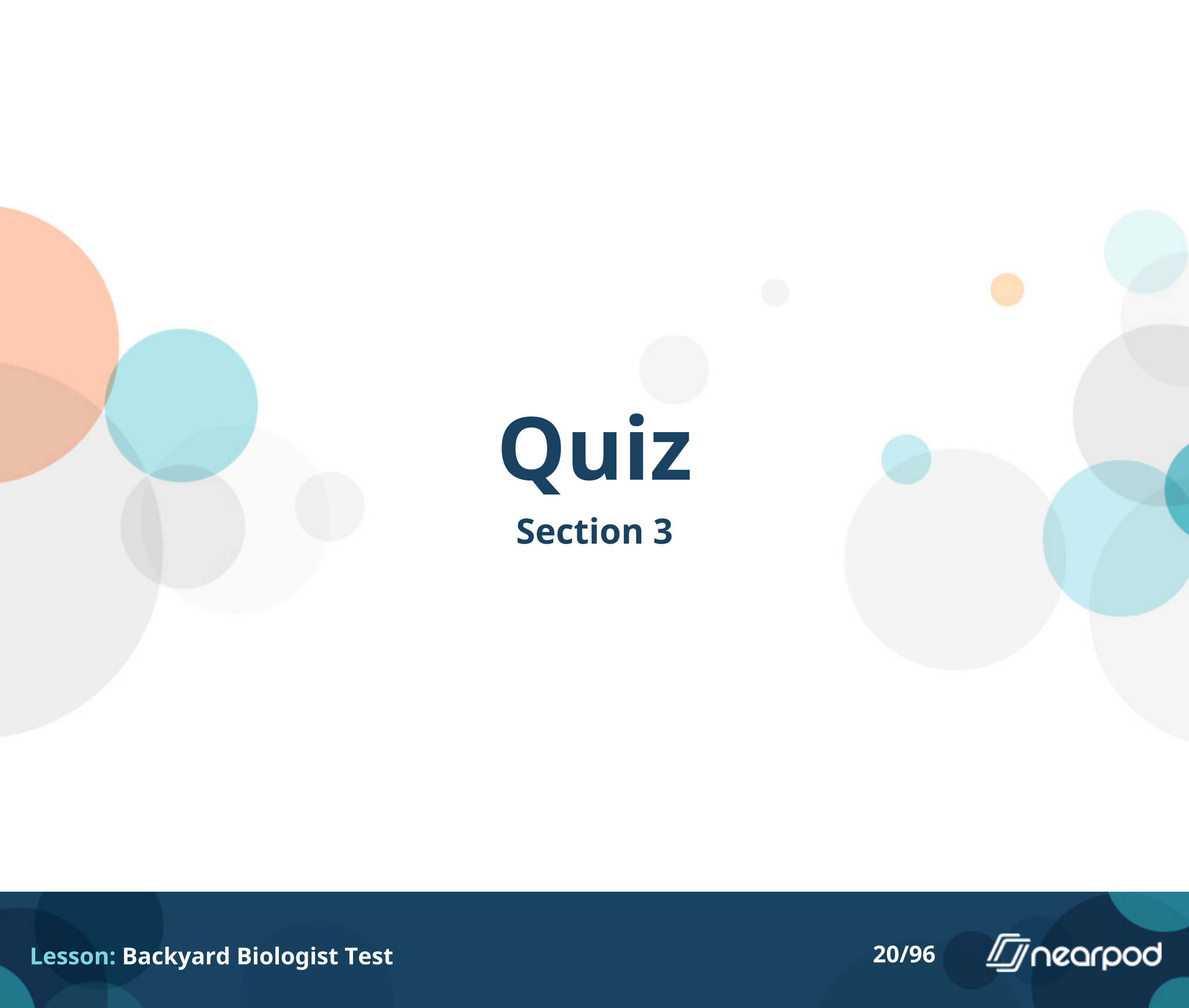
**Is this bird a male or female of its species?**

- ☐ Male
- ☐ Female



**Is this bird a male or female of its species?**

- ☐ Male
- ☐ Female



# Quiz

## Section 3



Roots are an important part of the plant and do many things to help the plant survive. Which of the following is NOT a function of a plant's roots?

- ☐ Absorb water and nutrients
- ☐ Anchor the plant to the ground
- ☐ Absorb sunlight for photosynthesis
- ☐ Store food and nutrients



**This plant has beautiful flowers. What is the purpose of these flowers?**

- ☐ To produce seeds for reproduction
- ☐ To absorb sunlight for photosynthesis
- ☐ To collect falling rainwater
- ☐ To secure the plant to the soil





**What is the name of this organism?**

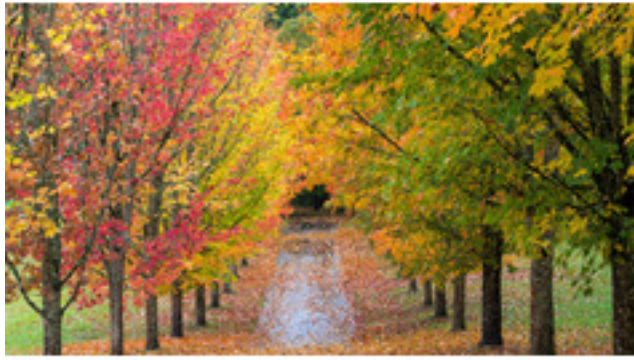
- ☐ Carolina Rose
- ☐ Flowering dogwood
- ☐ Kudzu
- ☐ Tulip Poplar



**Is this organism a NC State Symbol?**

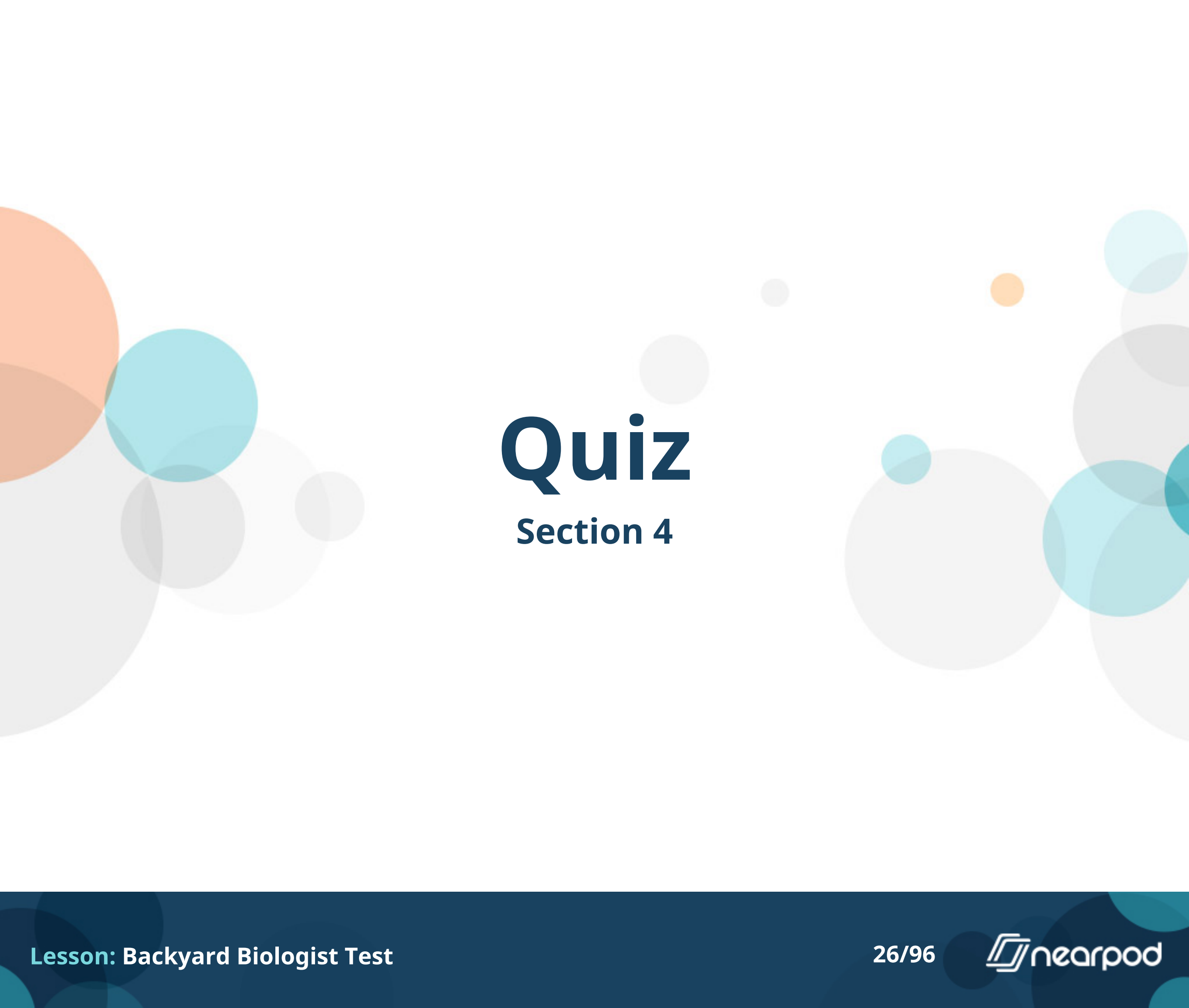
☐ Yes

☐ No



The trees in this picture have leaves that turn beautiful colors in autumn before they fall off. What are trees like this called?

- ☐ Deciduous
- ☐ Evergreen
- ☐ Invasive
- ☐ Perrenial



# Quiz

## Section 4



**What is the name of this bird?**

- ☐ Brown-headed nuthatch
- ☐ Carolina wren
- ☐ Mourning Dove
- ☐ America Robin



True or false: This bird can drink very salty water without becoming dehydrated.

- ☐ True
- ☐ False





**True or false: These birds are close to extinction from unregulated hunting.**

- ☐ True
- ☐ False



Which of these birds is an American Robin? You can click the picture to make it bigger.

☐ A

☐ B

☐ C

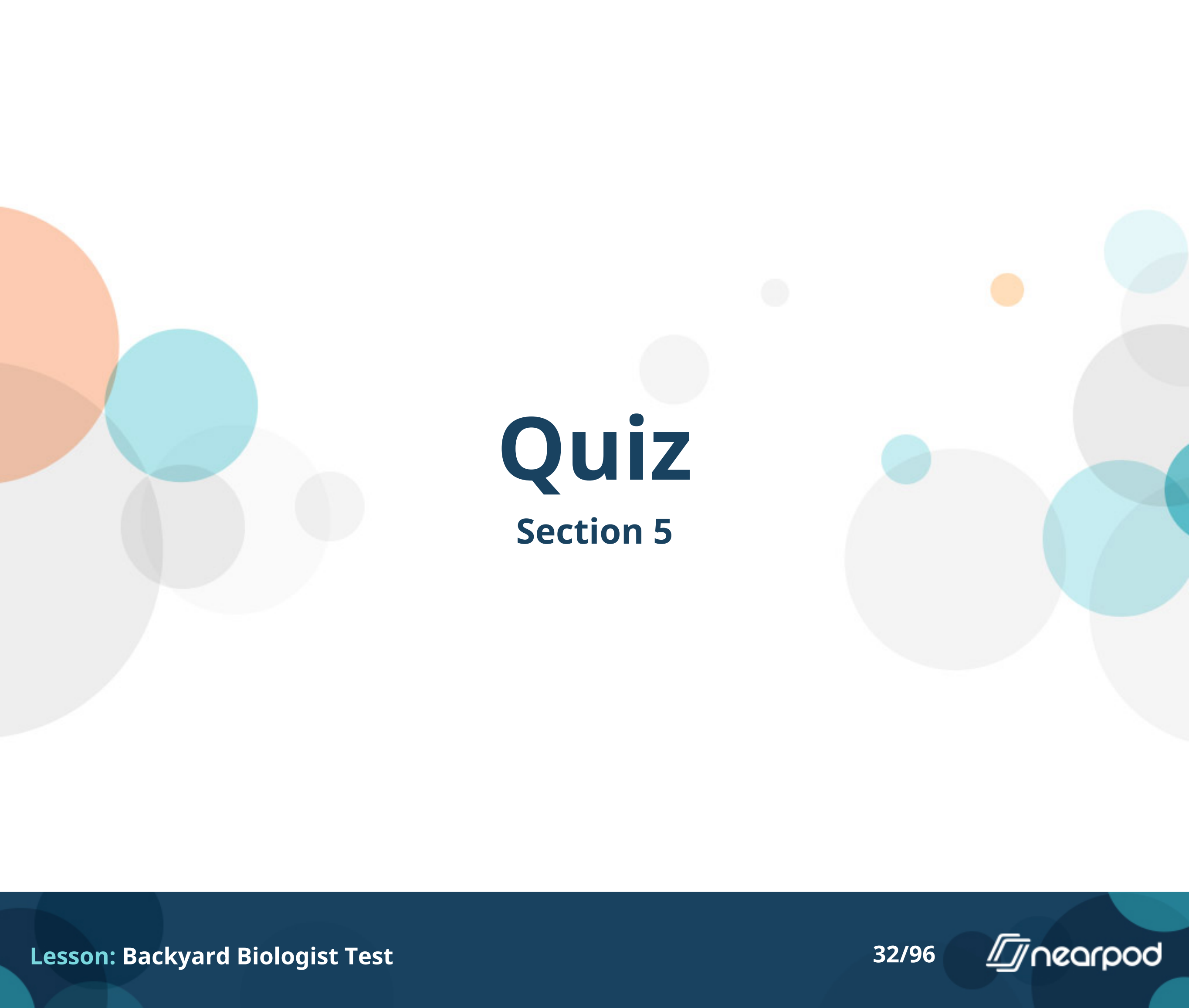


Which of these birds has a condition related to feather molt?  
You can click the picture to make it bigger.

☐ A

☐ B

☐ C



# Quiz

## Section 5



**This statement is true for which bird pictured? This bird sometimes builds several nests to confuse predators.**

☐ A

☐ B



This statement is true for which bird pictured? Pairs of this species bond for life and stay on their territory year-round.

☐ A

☐ B





This statement is true for which bird pictured? This bird is able to mimic many calls and songs of other birds.

☐ A

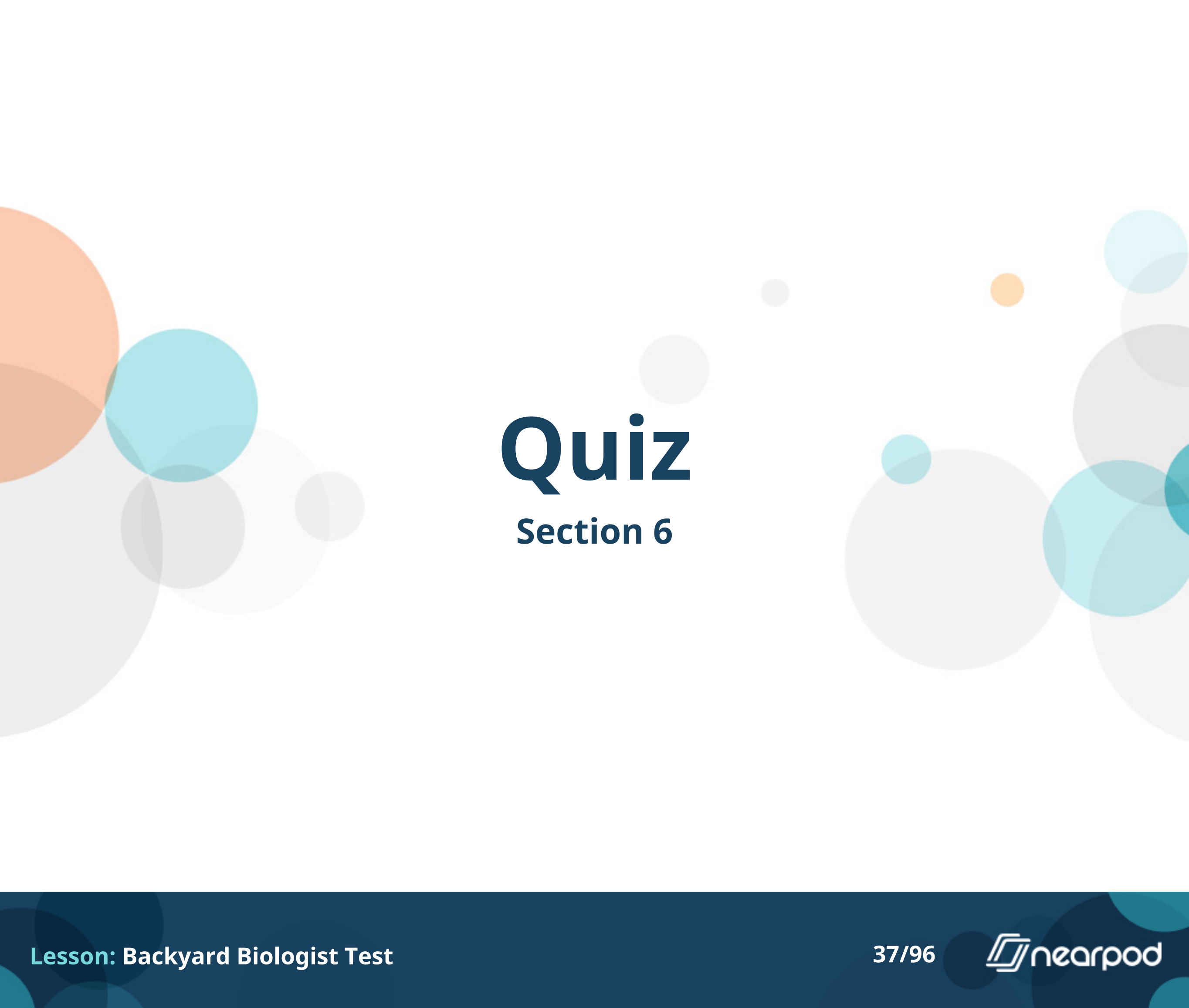
☐ B



**This statement is true for which bird pictured? This bird is found year round from central Canada to Florida.**

☐ A

☐ B



# Quiz

## Section 6



**What is the name of this organism?**

- ☐ American elm
- ☐ Bitternut hickory
- ☐ Black Cherry
- ☐ Sweet Gum



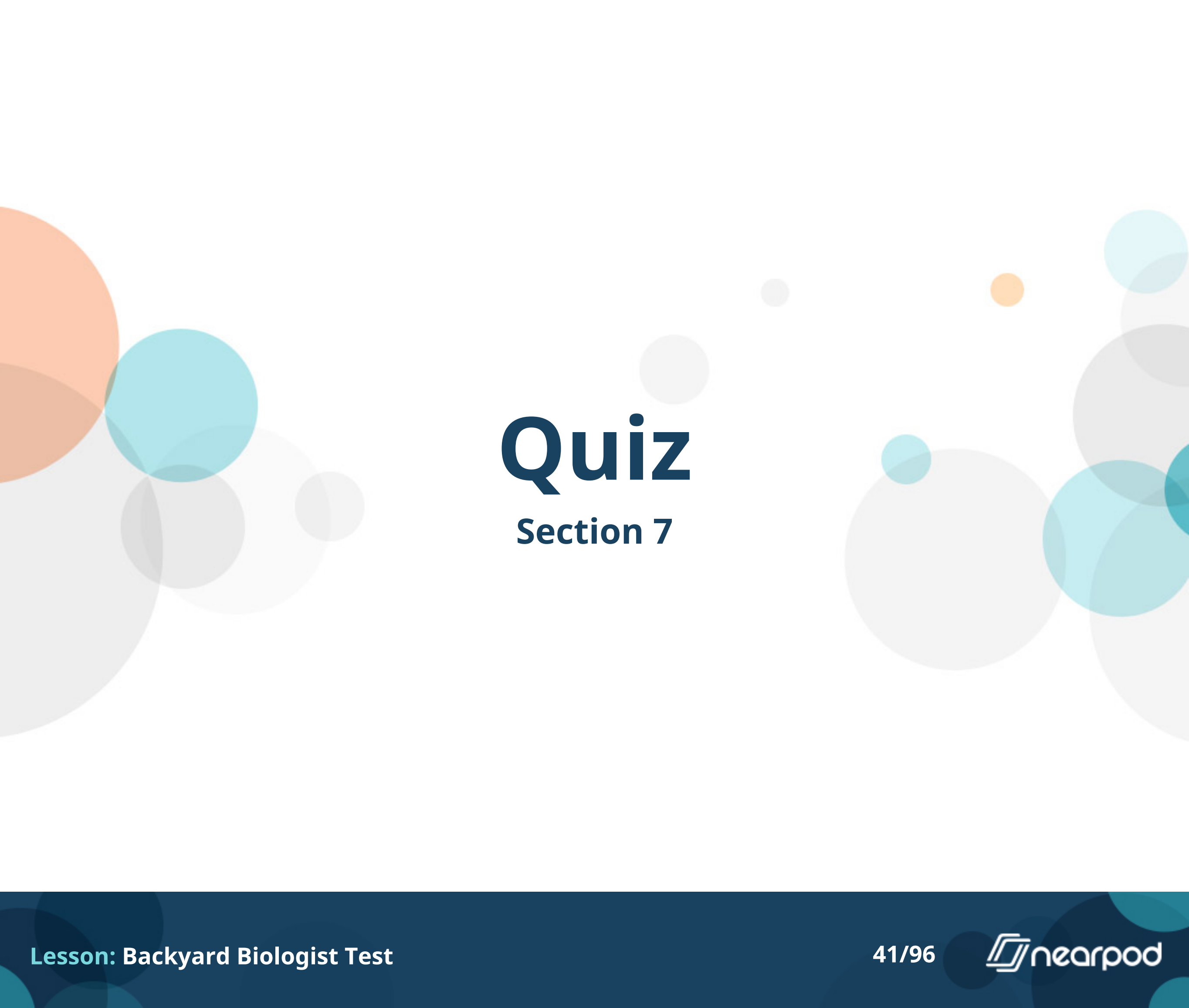
**How does this plant disperse its seeds?**

- ☐ Water dispersal
- ☐ Wind dispersal
- ☐ Animal dispersal
- ☐ Seed explosion (self dispersal)



This organism is dying off in large numbers in the US due to:

- ☐ Over-logging by humans
- ☐ Gypsy moths eating too many of their leaves
- ☐ An invasive tree species overtaking the land where these trees live
- ☐ A fungal disease carried by a beetle



# Quiz

## Section 7



You are hiking with a friend along the NC Mountains to Sea trail, which winds its way across the entire state. You come across 2 pine trees that have similar needles. Your friend is sure that they are both the same tree, but you are a Backyard Biologist, so you know they are not. This tree was located in a low, fairly swampy area of the trail. The tree you took the sample from was about 90 feet tall and the trunk was about 4 feet in diameter. This is a picture of the bark & needles. You can click to make it bigger.

- ☐ Loblolly Pine
- ☐ Eastern White Pine
- ☐ Longleaf Pine
- ☐ Shortleaf Pine





This tree was located at a higher elevation, as you were climbing one of the many steep hills on the trail. This tree was about 100 feet tall and had a trunk diameter of 2.5 feet. This is a picture of the bark and needles.

- ☐ Loblolly Pine
- ☐ Eastern White Pine
- ☐ Longleaf Pine
- ☐ Shortleaf Pine



**Which of these is NOT an economic use for these trees?**

- ☐ Furniture
- ☐ Mulch
- ☐ Erosion Control
- ☐ Christmas trees



**Are these trees deciduous or evergreen?**

- ☐ Deciduous
- ☐ Evergreen

# Quiz

## Section 8

## What is the definition of a clutch size?

- ☐ The number of eggs laid in one brood
- ☐ Storing food in safe places to eat later
- ☐ The number of days eggs in a brood take to hatch
- ☐ Holes in trees or nest boxes used by birds to raise their young

## What is the definition of Nest Cavity?

- ☐ The number of eggs laid in one brood
- ☐ Storing food in safe places to eat later
- ☐ The number of days eggs in a brood take to hatch
- ☐ Holes in trees or nest boxes used by birds to raise their young

## What is the definition of Incubation period?

- ☐ The number of eggs laid in one brood
- ☐ Storing food in safe places to eat later
- ☐ The number of days eggs in a brood take to hatch
- ☐ Holes in trees or nest boxes used by birds to raise their young

## What is the definition of Caching?

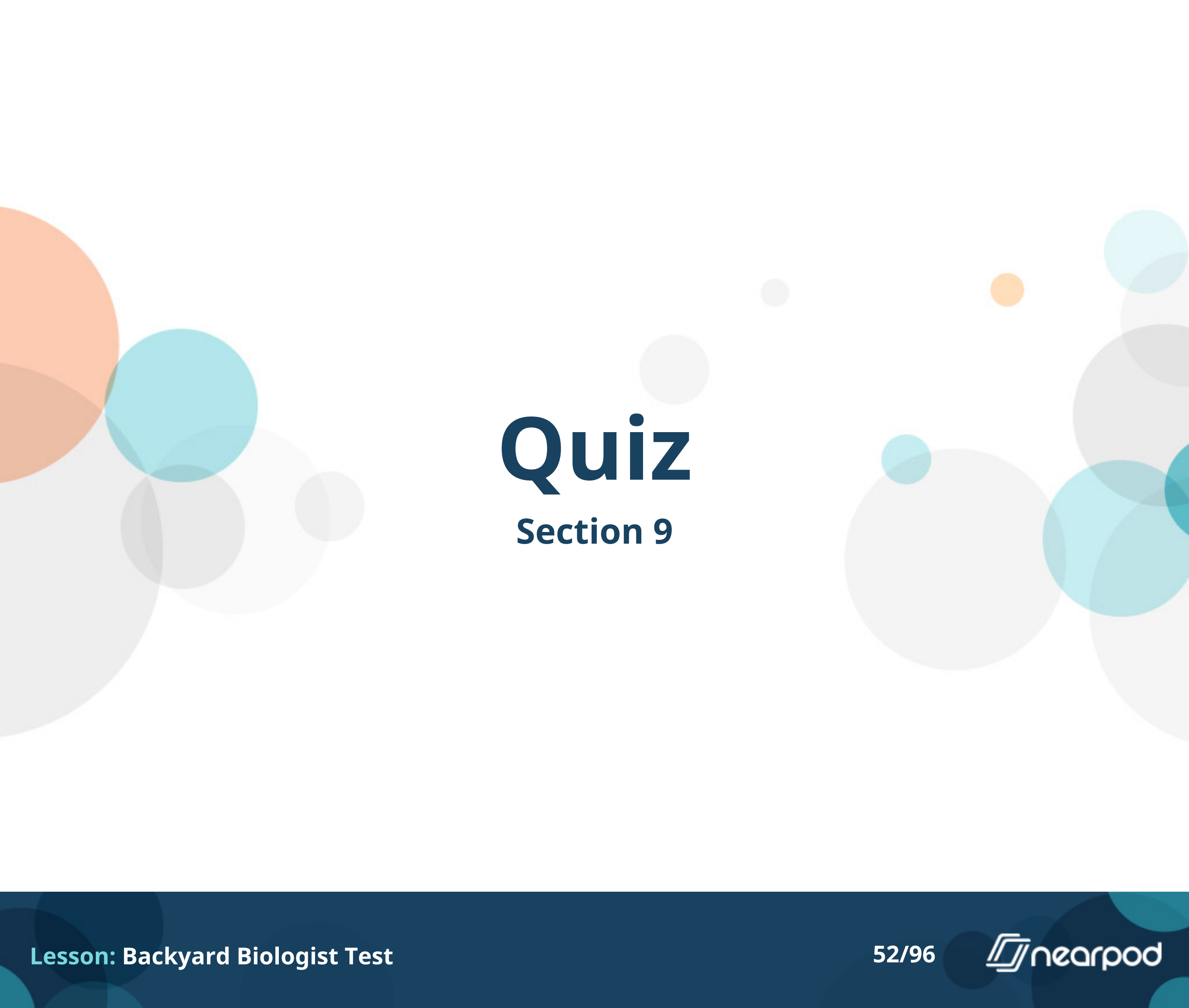
- ☐ The number of eggs laid in one brood
- ☐ Storing food in safe places to eat later
- ☐ The number of days eggs in a brood take to hatch
- ☐ Holes in trees or nest boxes used by birds to raise their young





True or False. All bird species lay eggs.

- ☐ True
- ☐ False



# Quiz

## Section 9



True for Who? These are pictures of Brown-headed Nuthatches & White-breasted Nuthatches. These birds live in open, mature Southeastern pine forests.

- ☐ True only for Brown-headed Nuthatches
- ☐ True only for White-breasted Nuthatches
- ☒ True for Both birds



True for Who? These are pictures of Brown-headed Nuthatches & White-breasted Nuthatches. Stay in their territory year round and do not migrate

- ☐ True only for Brown-headed Nuthatches
- ☐ True only for White-breasted Nuthatches
- ☒ True for Both birds



True for Who? These are pictures of Brown-headed Nuthatches & White-breasted Nuthatches. Fan their tails or flick their wings when agitated.

- ☐ True only for Brown-headed Nuthatches
- ☐ True only for White-breasted Nuthatches
- ☒ True for Both birds



True for Who? These are pictures of Brown-headed Nuthatches & White-breasted Nuthatches. Females birds incubate the eggs.

- ☐ True only for Brown-headed Nuthatches
- ☐ True only for White-breasted Nuthatches
- ☒ True for Both birds



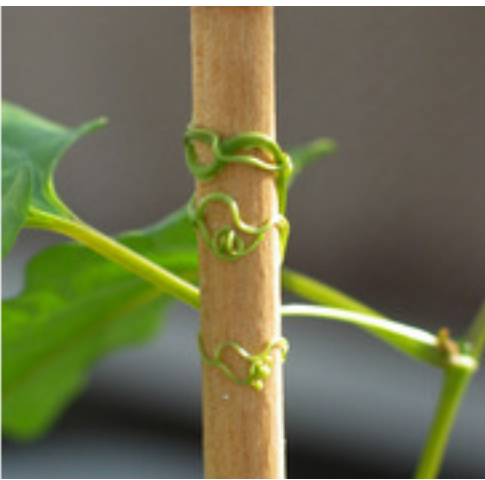
True for Who? These are pictures of Brown-headed Nuthatches & White-breasted Nuthatches. Males and Females look the same.

- ☐ True only for Brown-headed Nuthatches
- ☐ True only for White-breasted Nuthatches
- ☒ True for Both birds

# Quiz

## Section 10





This plant has grown by wrapping itself around a stick. This is an example of:

- ☐ gravitropism
- ☐ phototropism
- ☐ thigmotropism
- ☐ hydrotropism



This plant has been turned on its side and then starts to grow up again. This is an example of:

- ☐ gravitropism
- ☐ phototropism
- ☐ thigmotropism
- ☐ hydrotropism



This plant has grown towards the sunlight coming in the window. This is an example of:

- ☐ gravitropism
- ☐ phototropism
- ☐ thigmotropism
- ☐ hydrotropism



**These plant roots have grown towards the water. This is an example of:**

- ☐ gravitropism
- ☐ phototropism
- ☐ thigmotropism
- ☐ hydrotropism



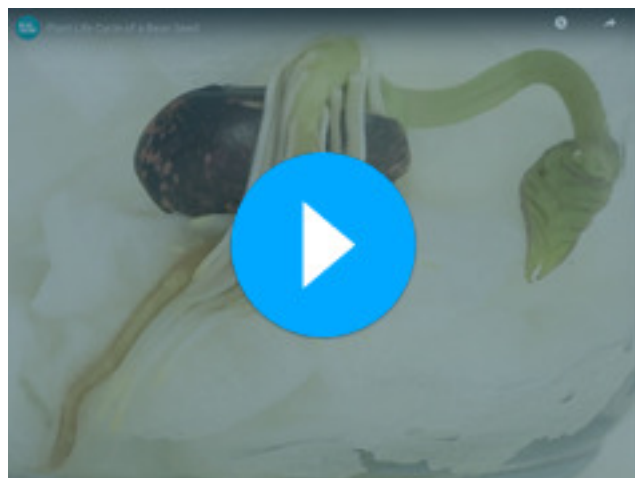
These bean seed was placed in a bag to sprout. Every few days, it was rotated and the root changed the direction it was growing. This is an example of:

- ☐ gravitropism
- ☐ phototropism
- ☐ thigmotropism
- ☐ hydrotropism



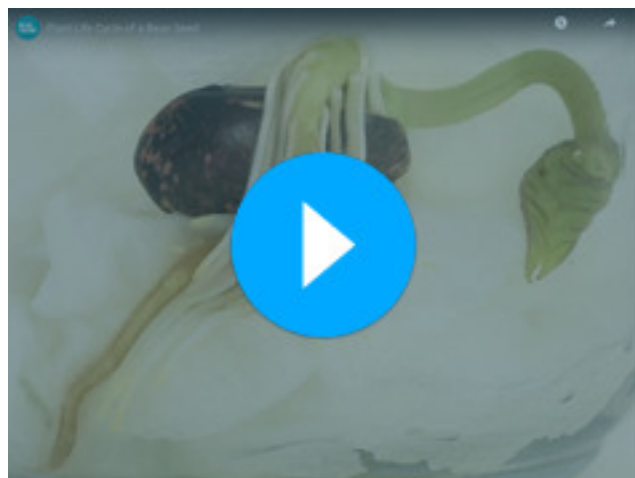
# Quiz

## Section 11



Click on the video to see a bean seed sprout. What is the first part of the plant to come out of the seed?

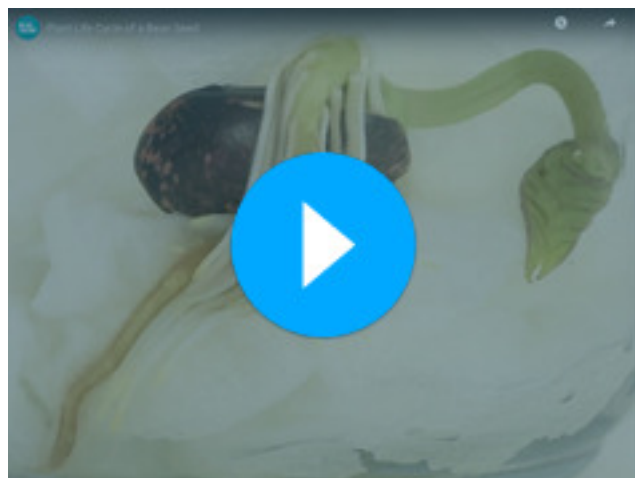
- ☐ Roots
- ☐ Stems
- ☐ Leaves



Click on the video to see a bean seed sprout. What part of the plant says "I'm free!"

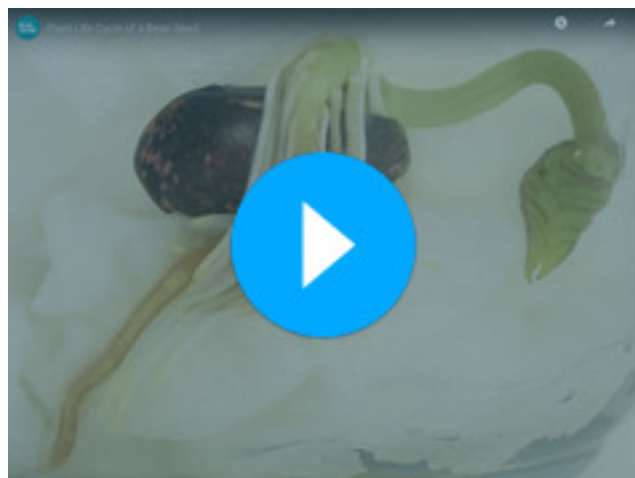
- ☐ Roots
- ☐ Stems
- ☐ Leaves





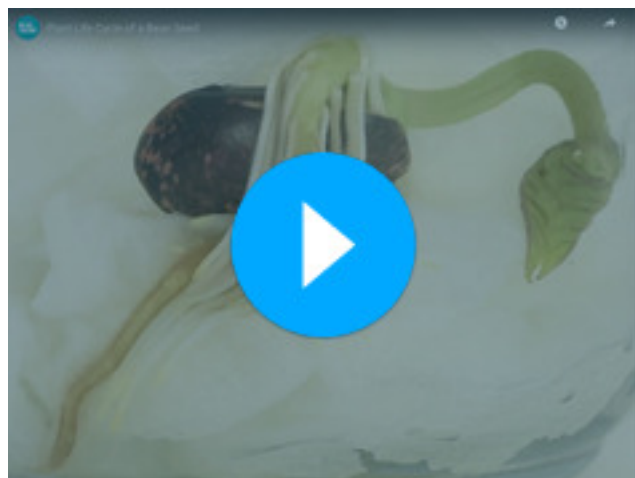
Click on the video to see a bean seed sprout. Which part of the plant is responsible for support?

- ☐ Roots
- ☐ Stems
- ☐ Leaves



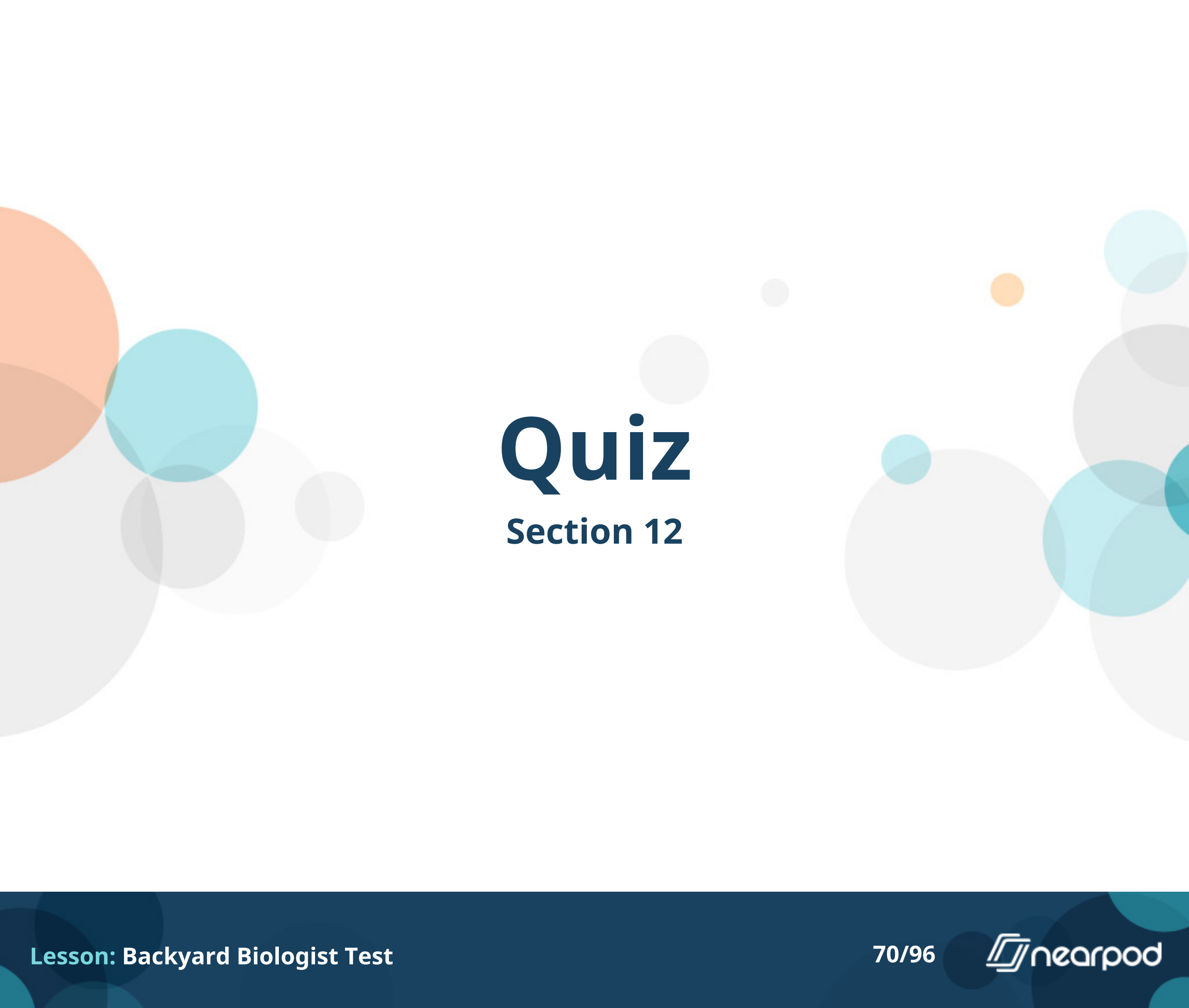
Click on the video to see a bean seed sprout. Which part of the plant is responsible for most of the photosynthesis to help the plant make food?

- ☐ Roots
- ☐ Stems
- ☐ Leaves



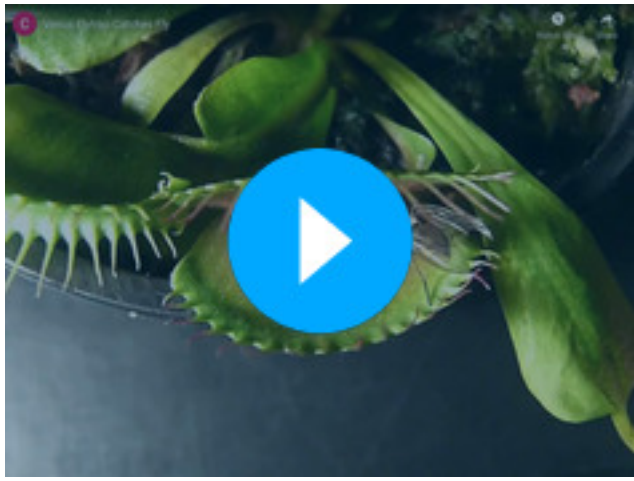
Click on the video to see a bean seed sprout. What had to be added to the bean to get it to sprout?

- ☐ Air
- ☐ Nutrients
- ☐ Sunlight
- ☐ Water



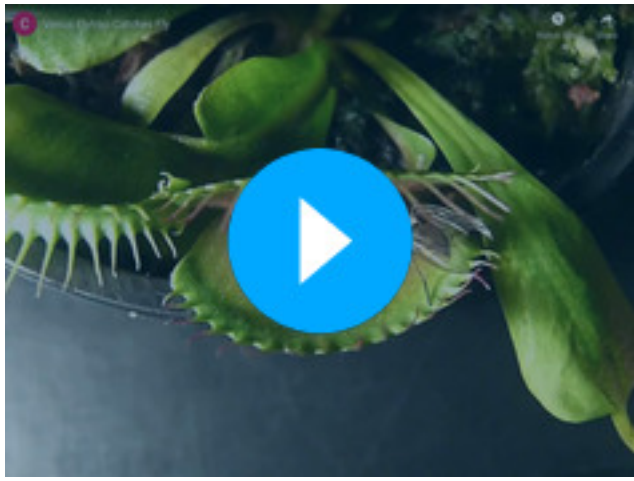
# Quiz

## Section 12



Click on the video. What plant is shown in this video?

- ☐ Carolina lily
- ☐ Eastern Poison Ivy
- ☐ Kudzu
- ☐ Venus Fly Trap



Click on the video. This plant is what State Symbol?

- ☐ NC State Carnivorous Plant
- ☐ NC State Fruit
- ☐ NC State Pine Tree
- ☐ NC State Wildflower



**What plant is shown in this picture?**

- ☐ Carolina lily
- ☐ Eastern Poison Ivy
- ☐ Kudzu
- ☐ Venus Fly Trap



**What plant is shown in this picture?**

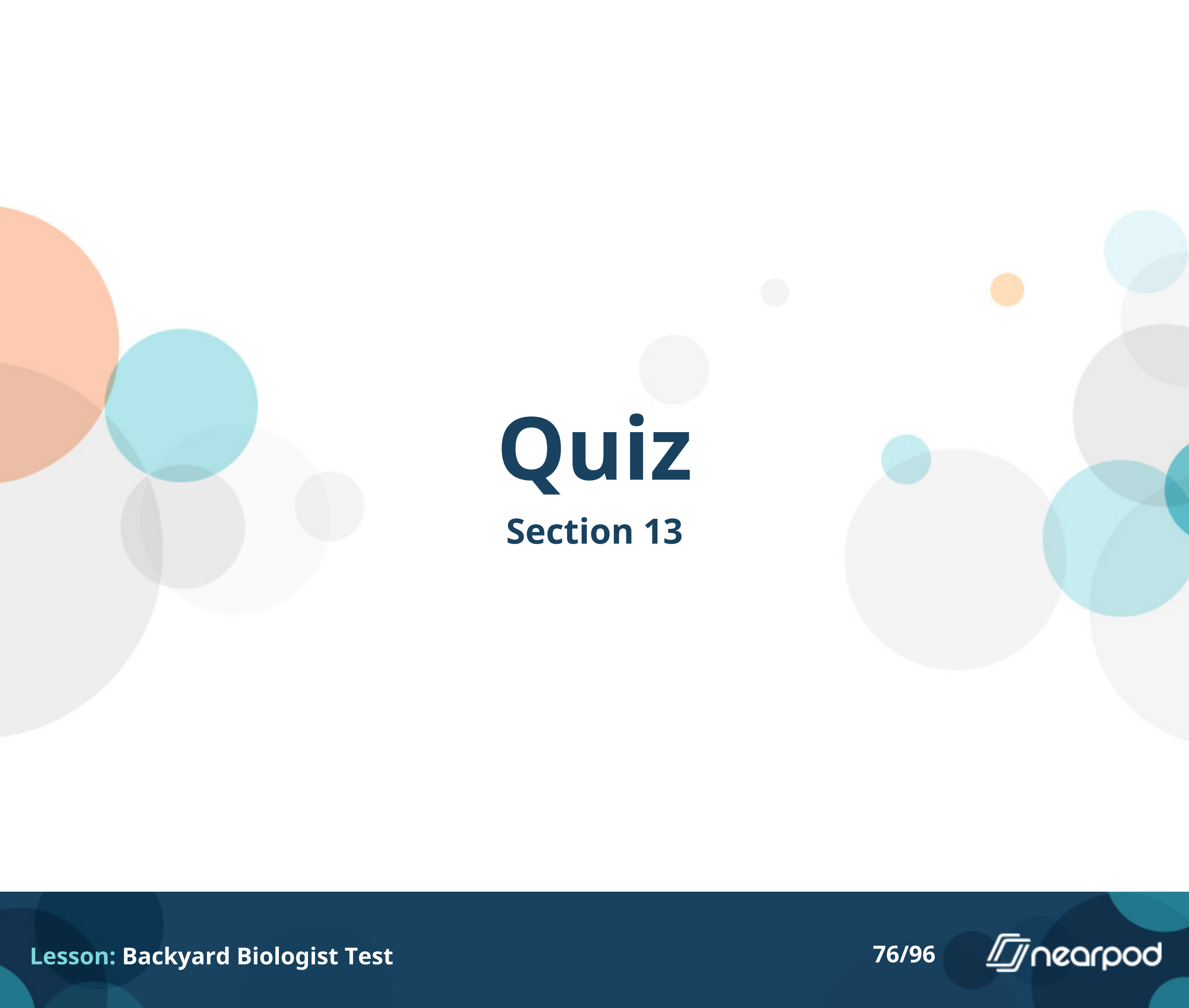
- ☐ Carolina lily
- ☐ Eastern Poison Ivy
- ☐ Kudzu
- ☐ Venus Fly Trap





**What plant is shown in this picture?**

- ☐ Eastern Poison Ivy
- ☐ Kudzu
- ☐ Scuppernong grape
- ☐ Trumpet Creeper



# Quiz

## Section 13



You are working on a museum exhibit and your partner trips and drops the display box, spilling things everywhere! Can you match up the specimens here with the tree that they came from? You can click the picture to make it bigger. Which one is White Oak?

☐ A

☐ B

☐ C

☐ D



**Which one is Sweet Gum?**

☐ A

☐ B

☐ C

☐ D



**Which one is Eastern White Pine?**

☐ A

☐ B

☐ C

☐ D



**Which one is Bitternut Hickory?**

☐ A

☐ B

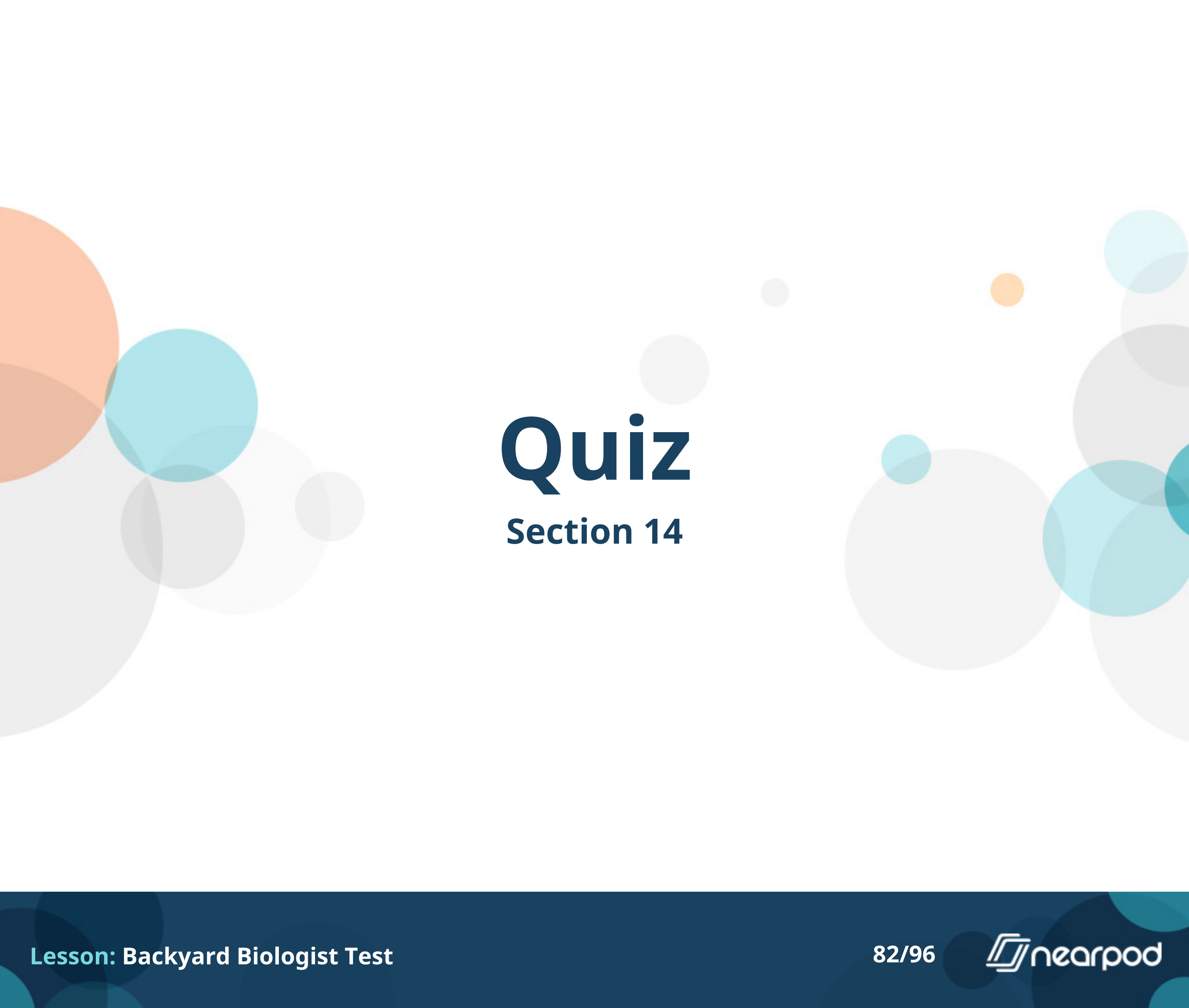
☐ C

☐ D



**These are all what part of the plant?**

- ☐ Flower
- ☐ Leaf
- ☐ Root
- ☐ Seed



# Quiz

## Section 14





These are the same type of plant. The one on the right was most likely grown without enough:

- ☐ Fertilizer
- ☐ Soil
- ☐ Sunlight
- ☐ Water



This plant fell over and the roots look rotten. What did it get too much of?

- ☐ Fertilizer
- ☐ Soil
- ☐ Sunlight
- ☐ Water



These pictures are of the same crop planted in the same field.  
What did the crops on the right get more of?

- ☐ Fertilizer
- ☐ Soil
- ☐ Sunlight
- ☐ Water



**Identify this plant.**

- ☐ Carolina Lily
- ☐ Carolina Rose
- ☐ Sunflower
- ☐ Butterfly Weed



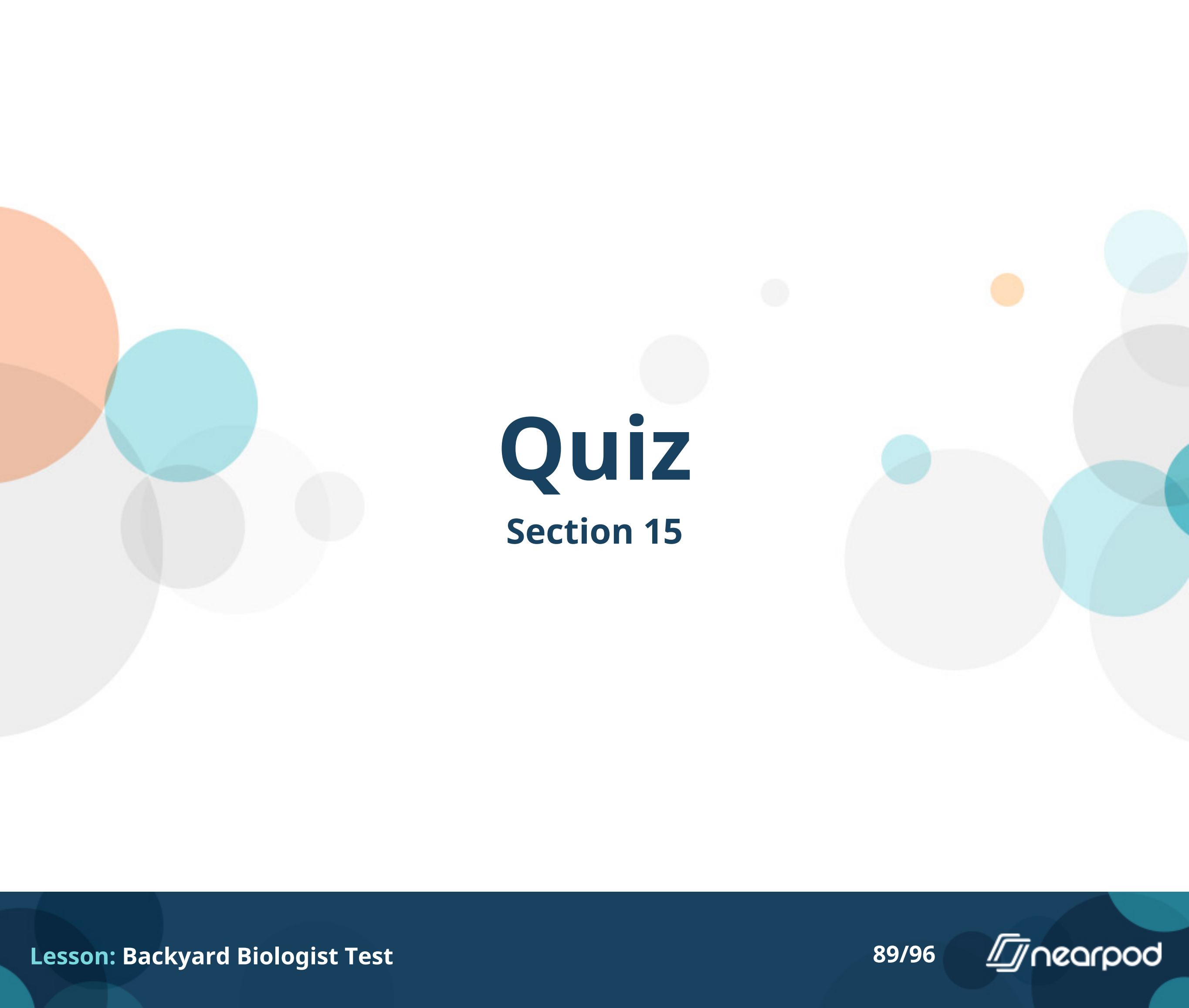
**Identify this plant.**

- ☐ Carolina Lily
- ☐ Carolina Rose
- ☐ Sunflower
- ☐ Butterfly Weed



**This plant is an important for source for which of these animals?**

- ☐ Eastern Bluebird
- ☐ Gypsy Moth
- ☐ Monarch Butterfly
- ☐ Northern Cardinal



# Quiz

## Section 15



**Identify this bird.**

- ☐ Blue Jay
- ☐ Downy Woodpecker
- ☐ Eastern Towhee
- ☐ House finch





**Identify this bird.**

- ☐ Blue Jay
- ☐ Downy Woodpecker
- ☐ Eastern Towhee
- ☐ House finch



**Identify this tree.**

- ☐ American Elm
- ☐ Red Maple
- ☐ Southern Live Oak
- ☐ Tulip Poplar



**Identify this tree.**

- ☐ American Elm
- ☐ Red Maple
- ☐ Southern Live Oak
- ☐ Tulip Poplar



**Identify this plant.**

- ☐ Carolina Rose
- ☐ English Ivy
- ☐ Pink Lady's Slipper
- ☐ Trumpet Creeper



**Identify this plant.**

- ☐ Carolina Rose
- ☐ English Ivy
- ☐ Pink Lady's Slipper
- ☐ Trumpet Creeper