



The InvestiGator Club™ Prekindergarten Learning System

Investigation

TEACHER'S
EDITION

Integrated Activities for Exploring, Experimenting,
and Making Discoveries

Sensational Seasons

This Investigation celebrates the uniqueness of the four seasons. Each new season brings different sights and sounds for children to explore: the howling wind and crackling of colorful leaves in fall; cold temperatures and glistening snow in winter; baby birds, bugs, and colorful blooms in spring; and the blazing sun in summer. The four seasons provide many investigating opportunities for the InvestiGators and for children, too. Let's investigate the sensational seasons!

Part 2 Fabulous Fall

Remind children that they have been learning about the four seasons—fall, winter, spring, and summer. They already have learned all about summertime; now the weather is growing cooler, and fall is approaching. Tell children: *During this Investigation, we will learn all about the season called fall. We will discover the special changes that happen during fall that make this season sensational too. Who is ready to start investigating?*

Oral Language/Science/ Music

Children get a sneak peek into fall by sharing things we see and do during this season.

Materials

- red, yellow, brown construction-paper leaves

All About Fall

Beforehand cut out several paper leaves in rich fall colors. Scatter them on the floor. Invite children to gather in a circle.

- As they gather, have them pick up a fall leaf. Talk about fall. Explain: *Fall is one season that happens after summer ends. Another name for "fall" is "autumn." Dilly and the InvestiGators love to walk through Circle Forest to see leaves changing colors and falling off trees.*
- Lead children to talk about other things they know about fall:
 - how the weather begins to change
 - the warmer clothes you wear
 - fruits that arrive in fall—apples, gourds, pumpkins
 - what animals do to prepare for winter—migrate, store food
- Tell children that they will be learning a lot about fall. Explain that as the InvestiGators walk through Circle Forest, they like to sing a song about falling leaves. Teach children the following song to the tune of "London Bridge." Have them walk and sing while tossing leaves in the air and watching them fall. In the end, have them all help to gather the leaves into one big pile.



*Autumn leaves are falling down
To the ground, to the ground.
Autumn leaves are all around.
Fall is here!*

*Pick them up to make a pile,
Make a pile, make a pile.
Pick them up to make a pile.
Hooray for fall!*

- You might want to visit your library to check out and read aloud a book about fall. For example:

Red Leaf, Yellow Leaf by Lois Ehlert
Fall Leaves Fall by Zoe Hall
Now It's Fall by Lois Lenski

Science/Oral Language/ Mathematics/Art

Children adopt a tree and observe ways it changes during fall.

Materials

- crayons
- white drawing paper
- measuring tape
- fall leaves
- string
- tape
- branches

ELL

Encourage English language learners to describe the adopted tree in their home language and share the meanings of the words with other children.

Adopt a Tree

Explain that the members of the InvestiGator Club have a very special tree in Circle Forest that they call their own. It's the big oak tree where they have built their clubhouse. Take children outside to adopt one or more trees of their own.

- Children can hug and name the tree. Have them feel the bark and talk about how it feels: *rough, prickly*.
- Demonstrate how to make a bark rubbing using a crayon and white drawing paper.
- Have children use a measuring tape to measure around the trunk. Then ask them to identify how tall the tree is by comparing it with other objects: *tallest tree in the yard; taller than a house; shorter than the light pole*.
- Back inside, have children draw a picture of their tree. Have them observe how the tree changes during the weeks of fall and draw pictures to record their observations.
- When the leaves fall off the tree, children can collect some to make a leaf mobile by attaching string to each leaf and connecting it to a branch.



Mathematics/Oral Language

Children collect, sort, and count fall leaves.

Materials

- autumn leaves from trees
- Matching Leaves Activity Sheet for each child



Count and Count Again

Explain that Chuck Wood likes to go hunting for different autumn leaves so he can sort them into groups and count them. Chuck calls on Bruno Buzzbee to go along because he knows that Bruno can fly above the trees and spot the ones that are different for his collection.

Take children outdoors to collect leaves that have fallen from different trees. They will need two or more of each kind. When back indoors:

- Ask children to count all the leaves that were collected.
- Then have children sort the leaves by matching those that are alike, and have them count again to determine the number of groups.
- Talk about likenesses and differences in the groups.
- Have children count a third time to find out how many leaves are in each group.
- Reproduce the Matching Leaves Activity Sheet for each child to provide practice in matching like shapes. Tell children to take the sheet home, cut out the leaves on the page, and then put each leaf in the matching basket. Children can use glue or tape to attach the leaves. Send a note home asking family members to help children with the activity.

Oral Language/Health

Children discover leaves they eat and make a healthful snack to enjoy.

Materials

- iceberg and red-leaf lettuce
- carrots, celery, tomatoes
- shredded cheese
- tuna salad (optional)
- salad dressing



Lettuce Leaf Rollups

Tell children that Bruno Buzzbee helps Dilly Gator tend her vegetable garden. Dilly always plants lettuce in her garden. She knows it's good for you and tastes great in a salad. One of Dilly's favorite snacks is a lettuce leaf rollup.

Show children examples of iceberg lettuce and red-leaf lettuce. You might want to offer children a sample of each to determine if they taste the same or different. Then have children follow directions for making lettuce leaf rollups.

- Give each child one big lettuce leaf.
- Offer filling choices such as shredded carrots, chopped celery, chopped tomatoes, shredded cheese, and tuna salad.
- Have children fill their lettuce leaves and add some salad dressing. Roll up, and enjoy!

Children simulate a pumpkin patch and go hunting for the perfect pumpkin.

Materials

- miniature pumpkins (1 per child)
- vine of artificial leaves
- chart paper, black marker
- markers or paints
- [Pumpkin Patch Activity Sheet](#) for each child

Pumpkin Patch

Tell children that each autumn Great Auntie Lu goes with Dilly, JT, and their friends to a local pumpkin patch. They all hunt for the perfect pumpkin to decorate. Great Auntie lets the others use her paints to decorate their pumpkins for fall. Explain: *Today you will hunt for the perfect pumpkin to decorate! Let's start investigating!*

- Simulate a pumpkin patch in the classroom or outside by placing miniature pumpkins in a vine of artificial leaves. Beforehand write each child's name on one of the pumpkins.
- Teach children the following pumpkin-hunting song to the tune of "The Farmer in the Dell." They can sing while searching for their very own pumpkin.

*A-hunting we will go,
A-hunting we will go.
To find the perfect pumpkin, oh,
A-hunting we will go.*

*It must be orange and round.
We'll hunt until it's found.
We'll find the perfect pumpkin, oh,
A-hunting we will go.*



- Once all the pumpkins have been found, talk about how pumpkins grow. Discuss what people do with pumpkins, such as carve them, make pumpkin pies, toast the seeds, and paint them to use as decoration. Create a list of children's ideas on chart paper.
- Invite children to use markers or paints to decorate their pumpkins.
- Reproduce the [Pumpkin Patch Activity Sheet](#) for each child. Tell children to take the sheet home to help Dilly find her way to the pumpkin patch. Once they solve the maze, they should help Dilly find the biggest pumpkin by coloring the one she should choose. Send a note home asking family members to help children as needed and return the completed sheet to school in one or two days.

Children become gourd experts as they compare colors, sizes, and shapes and weigh different gourds.

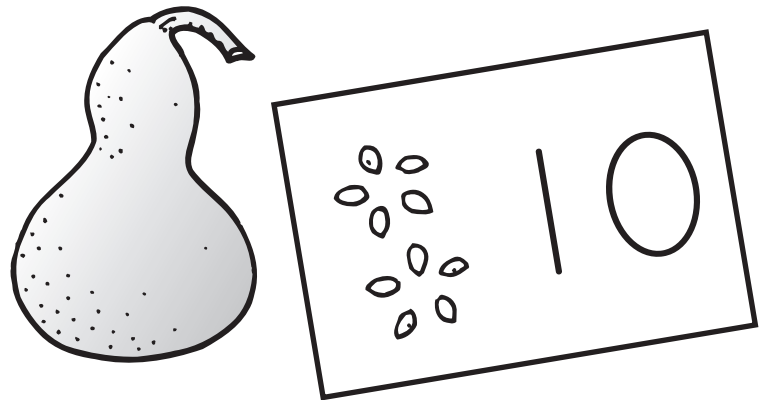
Materials

- variety of gourds
- balance scale
- classroom items to weigh
- tray
- cards, marker
- knife (teacher use only), spoon

Gourds Galore

Tell children: *The members of the InvestiGator Club love gourds. Dilly and Rosalita paint them. JT dries out gourds to make musical instruments. Bruno helps Chuck Wood make gourd birdhouses. Manny Salamander likes to eat them.*

- Display a variety of gourds. Allow children to examine the gourds and tell what they see. Talk about colors, textures, sizes, and shapes.
- Have children take turns holding two gourds, one in each hand, to predict which is heavier. Then have them weigh the gourds using a balance scale to determine if they are correct. Children can line up the gourds from lightest to heaviest.
- Another option is to have children determine which classroom items will weigh about the same as a gourd. After weighing both objects, ask children if their predictions were correct.
- Line up the gourds on a tray. Talk about what is inside each gourd. Invite children to estimate how many seeds would be found. After agreeing on one number, write the estimate on a card. Record the number as a numeral, and draw the same number of seeds. Then cut open each gourd, scoop out the pulp inside, and count the seeds together. Record this number, and compare with the estimate. Ask: *Is the number more or less than the number you guessed?*



- After estimating and checking the number of seeds in each gourd, ask: *Which gourd has the most seeds? Which gourd has the fewest seeds?*

Children learn about legendary Johnny Appleseed and the differences in apples we have available today.




Materials

- version of “Johnny Appleseed” (see note)
- three varieties of apples (yellow Golden Delicious, green Granny Smith, red Macintosh)
- chart paper, markers
- knife (teacher use only)
- paper towels
- paint, shallow paint trays
- art paper
- Johnny Appleseed’s Trees Activity Sheet for each child
- crayons

Happy Birthday, Johnny Appleseed!

Explain: *Each fall, Great Auntie Lu tells the story about Johnny Appleseed to Dilly, JT, and their friends. Read or tell a story about Johnny Appleseed to children. Note:* If you have The InvestiGator Club Watch It Grow Investigation, you will find a version of the story on Teacher Guide page 127.

Then show a variety of apples. Choose apples of different colors: yellow Golden Delicious, green Granny Smith, and red Macintosh. Create a chart on paper, and draw yellow, green, and red apples. Your chart might look like this:

Kind of apple	Estimated number of seeds	Actual number of seeds	Apple favorites
Yellow Golden Delicious 			
Green Granny Smith 			
Red Macintosh 			

- Talk about how the seeds inside each apple make new apple trees. Refer back to the story of Johnny Appleseed. Invite children to predict how many seeds are inside each. Write their predictions on the chart. Then cut open the apples, and have children count the seeds. Record the number on the chart. Ask: *Was your prediction low or high or just right?*
- Give children a slice of each kind of apple to taste. Ask children to make a mark next to the apple on the chart to indicate which one they liked the best. Talk about reasons for their choices. Count the marks with children to find out the group’s favorite apple.
- Use apple halves to make apple prints. Pat the cut surface of the apple dry. Place paint in shallow containers. Demonstrate for children how to dip the apple halves in the paint and press them on paper to make prints.
- Reproduce the Johnny Appleseed’s Trees Activity Sheet for each child. Help children count the apples on the first tree in each row and color the same number of apples on the tree next to it.



Mathematics

It's time to put together puzzles to form apple shapes.

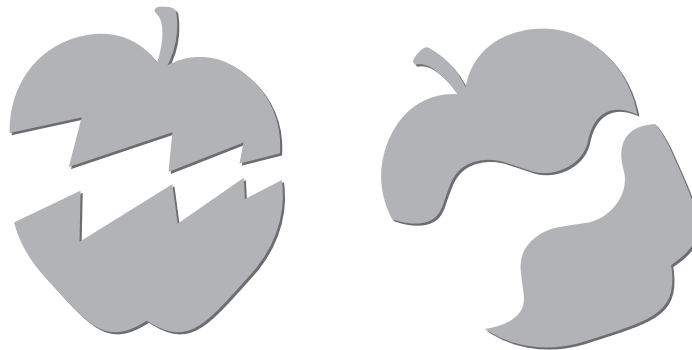
Materials

- red construction paper
- resealable bags

Puzzling Apples

Beforehand create apple puzzles by cutting six large, identical apples from red construction paper. Cut each apple into two puzzle pieces. Make each cut different: straight, curved, zigzag, looped, wavy, and so on. Place all twelve puzzle pieces in a resealable bag, and make enough sets so children can work in pairs.

- Explain to children: *Chuck Wood likes to eat red apples and put together puzzles, so Chuck has made some apple puzzles for you to put together!*
- Have children match all the apple pieces to put together the six apples. Once the puzzles are completed, ask children to count the number of apples there are.
- Go to the library with children to look for the book *The Seasons of Arnold's Apple Tree* by Gail Gibbons. Read the story aloud, or choose a favorite apple-themed story to read.



Music/Movement/Social Studies

Children don their country-western dress and have an old-fashioned square dance.

Materials

- pumpkins, gourds, cornstalks, hay or straw (see note)
- clothing for a scarecrow, newspaper if needed
- recording of square-dance music

Swing Your Partner

Remind children that JT loves all kinds of music. Use JT to get children excited about having a fall-themed square dance.

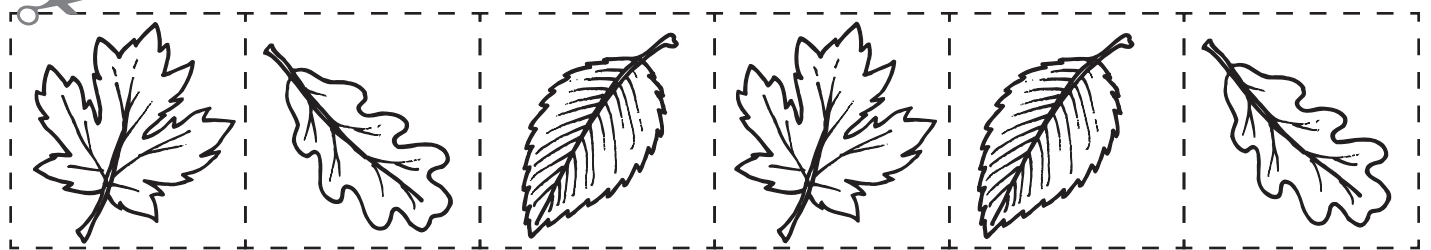
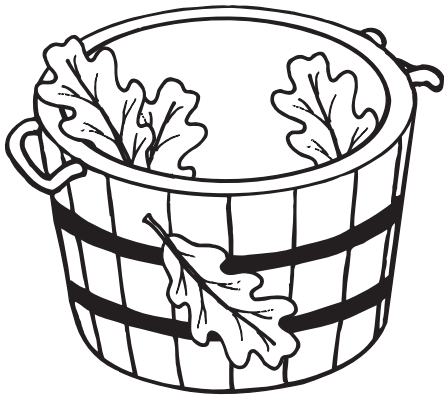
- Have children help decorate a space with pumpkins, gourds, cornstalks, and hay or straw. **Note:** Allergies to hay or straw might be an issue.
- Make a scarecrow. Stuff him with newspaper if straw or hay cannot be used.
- On the day of the square dance, invite everyone to wear any country-western gear they have—vests, jeans, boots, plaid shirts, kerchiefs, or hats.
- Teach everyone the steps to a simple square dance, or make up your own dance. Play a recording of square-dance music such as “Turkey in the Straw.”

Name _____

Matching Leaves

Cut out the leaves.

Put each leaf in the matching basket.



Investigation: Sensational Seasons/Part 2

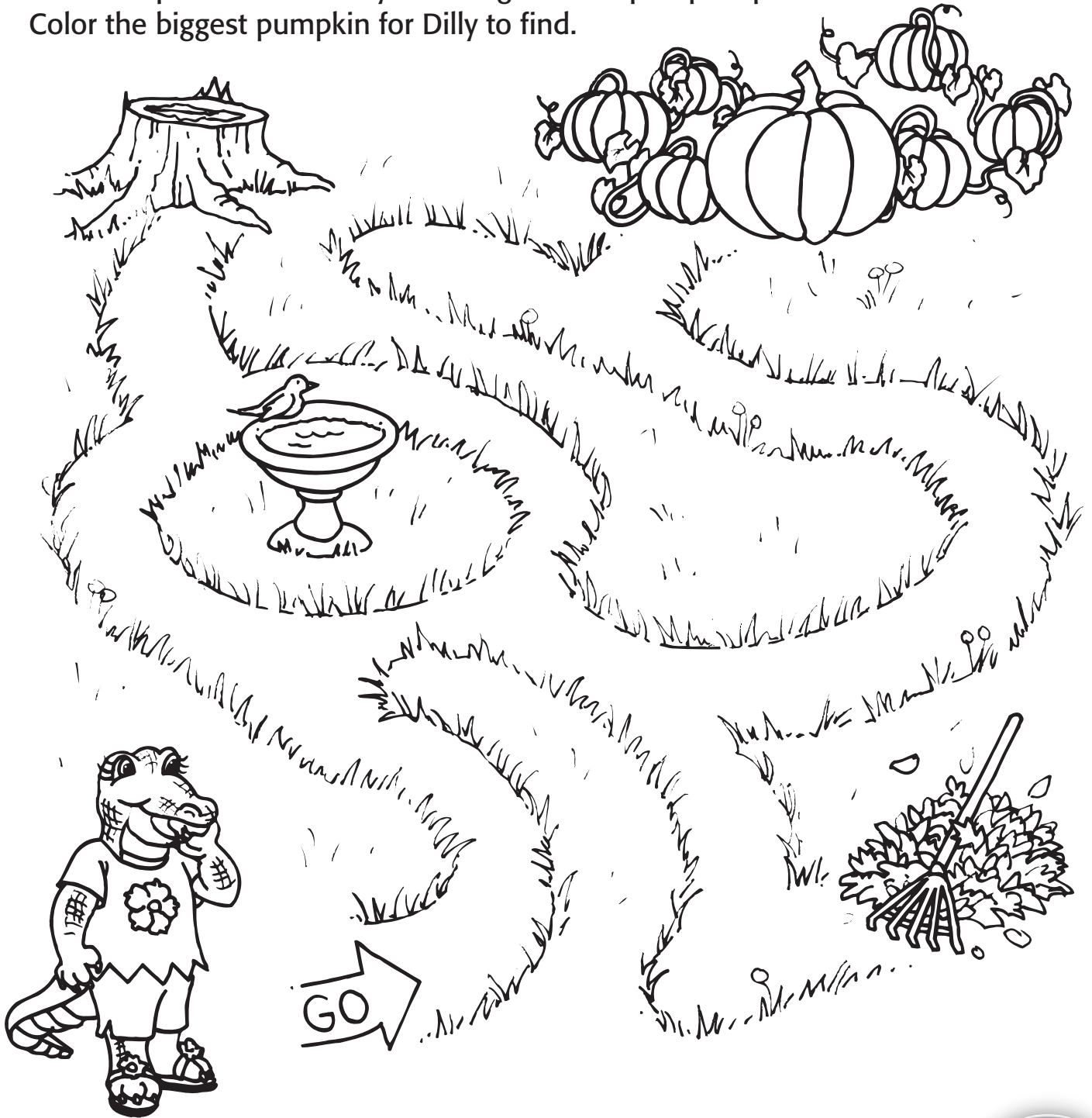
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Name _____

Pumpkin Patch

Color the path to show Dilly how to get to the pumpkin patch.
Color the biggest pumpkin for Dilly to find.



Investigation: Sensational Seasons/Part 2

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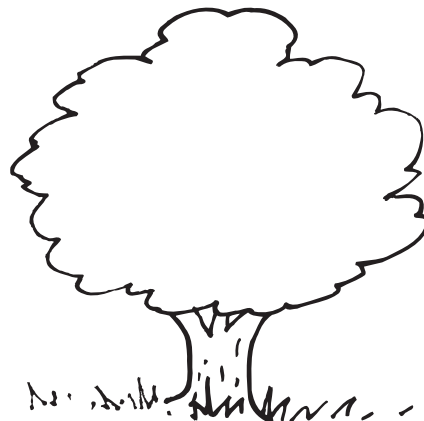
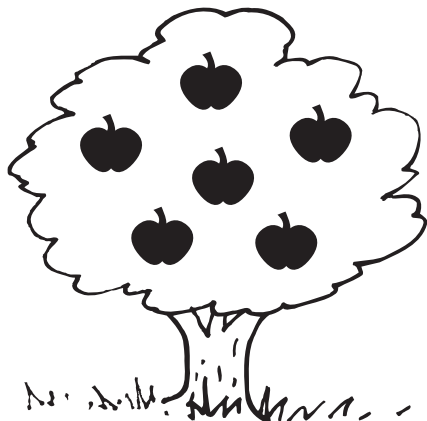
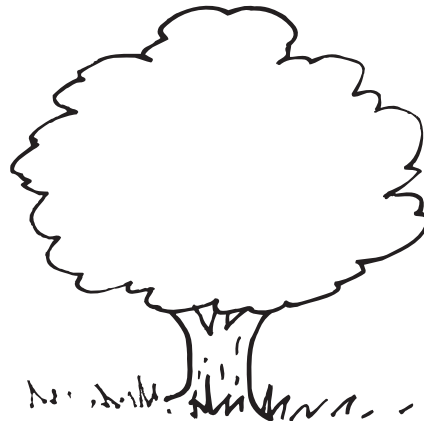
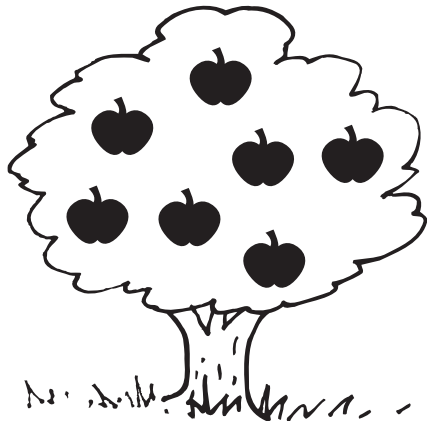
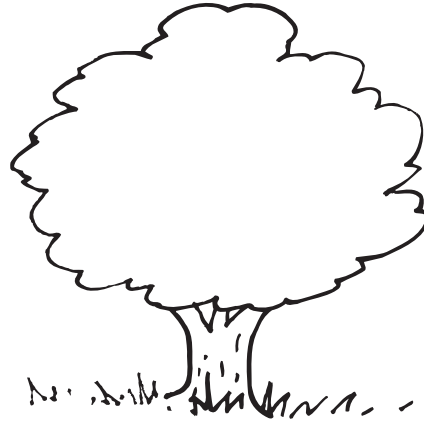
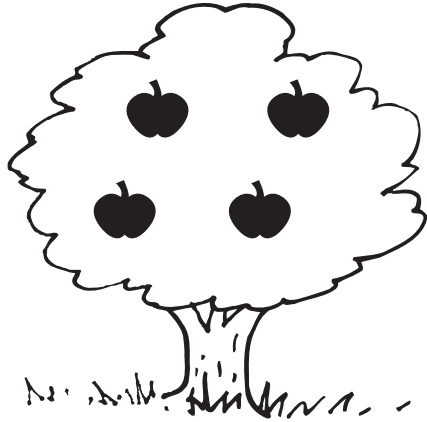


Name _____

Johnny Appleseed's Trees

Count the apples in the first tree in each row.

Color the same number of apples on the second tree.



Investigation: Sensational Seasons/Part 2

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