



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 4 Spring Has Sprung

Remind children that they have been learning about the four seasons—fall, winter, spring, and summer. They already have learned all about summer, fall, and winter, and now spring begins. Tell children: *During this Investigation, we will learn all about the season called spring. We will discover how the warmer weather and spring rains bring nature to life again. So let's start investigating spring!*

Oral Language/Science/ Music

Children recognize signs that spring has sprung.

Materials

- chart paper
- markers
- green construction-paper leaves (1 per child)
- tape

All About Spring

Beforehand cut a leaf from green construction paper for each child. Draw a barren tree in the center of a sheet of chart paper, and attach it to a wall.

- As children gather, give each one a leaf. Help them attach their leaves to the branches of the tree using tape.
- Explain: *When Dilly and the other InvestiGators walked in Circle Forest to their clubhouse, they noticed changes. They saw leaves growing on the trees. They saw flowers blooming and grass growing. They saw bugs and bees and birds building nests. They knew that spring had finally come.*
- Ask children to tell what they know about springtime. List their ideas on chart paper around the tree. Guide children by asking questions such as: *What animals do you see in spring? What plants do you see? What clothes do you wear? What is the weather like?*
- Teach children a song about spring to the tune of "The Farmer in the Dell." Have children hold hands and circle around while singing. When they sing the last line in each verse, have them stop and jump up and down as they sing the cheer.

The leaves are on the trees.

The grass is turning green.

Spring is here, let's give a cheer!

Hip, hip, hooray for spring!

Flowers we can see.

Here come the bugs and bees.

Spring is here, let's give a cheer!

Hip, hip, hooray for spring!

- Look for the signs of spring in the following books:

The Boy Who Didn't Believe in Spring by Lucille Clifton (also available in Spanish)

Spring by Ron Hirschi

**Mathematics/Oral
Language/Movement/Fine
Motor Skills**

Children learn about the concept of one-half while investigating butterflies.

Materials

- pictures of butterflies
- wallpaper or decorative paper
- scissors
- tape
- recorded music
- Butterfly Matchup Activity Sheet for each child

Butterfly Matchup

Beforehand cut large butterfly shapes from wallpaper or various sheets of decorative paper. You will need one per child. Use a different color or pattern for each butterfly. Cut each shape in half to use for a matching game.

- Explain to children that some of Bruno Buzzbee's neighbors are butterflies. They come in many pretty colors and can be seen fluttering in a garden. Show pictures of butterflies to show how one half is the same as the other half.
- Use one of the butterfly cutouts to demonstrate the concept of one-half. Show each half of the butterfly. Then put the halves together to make one butterfly. Ask children for their help to put together the two halves of several more butterflies.
- Give each child a butterfly half. Ask: *What colors or shapes do you see in your butterfly half?* Then display the matching halves on a table. Have children find the other half of the same butterfly.
- Have children use tape to put their butterflies together.
- Play music such as "Madame Butterfly." Have children flutter around the room with their butterflies to create their own butterfly dance.
- Reproduce the Butterfly Matchup Activity Sheet for each child. Have children color each butterfly. Remind them that each half looks the same. Have children take the activity page home to cut apart the butterfly cards and play a game. Send home a note asking a family member to cut out the four playing cards and cut them in half along the dotted lines. The game cards can then be mixed and matched or used to play "Concentration."



Children create butterflies that are good enough to eat.

Materials

- candy orange slices
- small pretzels
- canned frosting and small candies (optional)



photos © Corel (orange) and © Comstock Images (pretzels)

Yummy Butterflies

Beforehand cut a slit in each side of an orange slice candy. Prepare two for each child. Children will need two small pretzels and one orange slice for each butterfly they make.

- Explain: *Bruno Buzzbee likes a sweet treat. He has a recipe that is just right for you! Who wants to make yummy butterflies?*
- Have children count the number of orange slices and small pretzels they will need to make two butterflies.
- Show children how to press a pretzel into a slit on the orange slice to make each wing.
- As an option, children can decorate the pretzel “wings” using assorted small candies and frosting.
- Remind children that sweets are once-in-a-while foods and should not be eaten every day.
- While children are enjoying their snack, they might enjoy a story, such as:

I Wish I Were a Butterfly by James Howe

Waiting for Wings by Lois Ehlert

**Oral Language/
Mathematics/Fine Motor
Skills**

Children learn a counting rhyme about six little birds.

Materials

- bird pictures or stickers (6 per child)
- drawing paper
- glue or tape (if using pictures)
- markers

ELL

Ask children to count from one to six in their first language and then teach a native English speaker. The partner can then teach the numbers in English.

Six Little Birds

Gather a small group of children together at a table. Tell children that JT Gator and Chuck Wood were having a contest. They wanted to see who could count the most birds. JT counted four birds. (Place four bird pictures or stickers in the center of the table.) Chuck counted five birds. (Place five bird pictures or stickers down.) Ask: *Who counted the most birds, JT or Chuck?*

- Tell children they will learn a counting rhyme about little birds. Place all the bird pictures or stickers in the center of the table. You will need six per child.
- Recite the following rhyme. Each time children hear the words *little bird* they are to pick up one of the bird pictures or stickers.

The first little bird is sitting in the tree.

The next little bird is looking down at me.

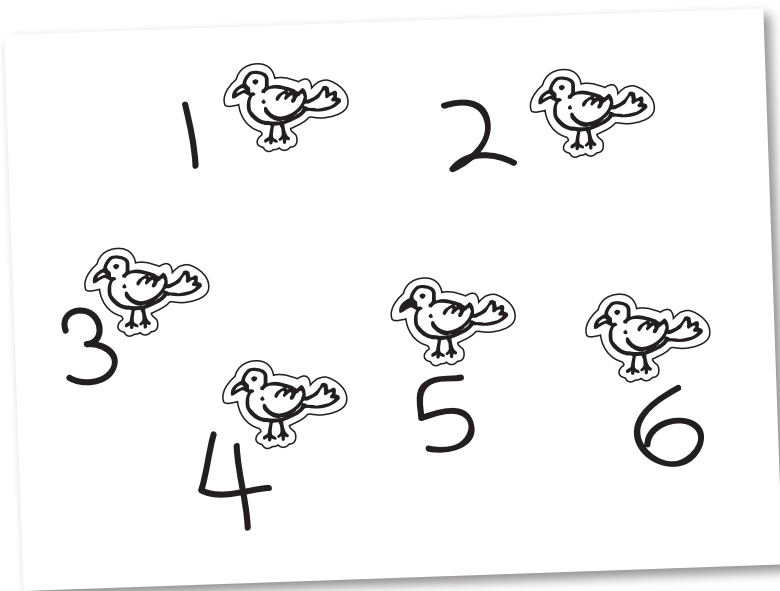
I see a little bird fly to the garden gate.

Another little bird wants a worm but is too late.

Then I see a little bird sit on a branch to rest.

The last little bird flies back to its nest.

- Ask children to count the number of little birds they have. Point out that they have counted more birds than either JT or Chuck Wood!
- Provide children with a sheet of drawing paper. Then recite the rhyme again, inviting children to stick one bird on the paper each time they say the words *little bird*.
- Help children use a marker to number their little birds with numerals 1 to 6.



Children put on their bird-watching spectacles to look for likenesses and differences in birds.

Materials

- two identical sets of colored bird pictures
- bird-watching spectacles
- Be a Bird Watcher Activity Sheet for each child

For 3-year-olds

To help children sort, show them one bird and give them two choices to find the one of the same color or size or with the same beak shape.



Bird-Watching

Beforehand place one set of bird pictures around the room. You also will need a pair of bird-watching spectacles for each child. Use super-sized glasses or an old pair of sunglasses with the lenses removed. Add a feather on each side of the frame.

- Gather a small group of children for this bird-watching activity. Explain: *Dilly and Rosalita like to go bird-watching together. They see seagulls on Triangle Beach where Dilly lives. They see sparrows and pigeons in the city where Rosalita lives. And they see bluebirds, robins, and redbirds in Circle Forest where their clubhouse is. Let's see what birds you can see today.*
- Talk with children about why people go bird-watching.
- Then show children the second set of pictures. Ask them to name characteristics they see, such as color, size, or beak shape.
- Have them put on their bird-watching spectacles to search for birds. When one is found in the classroom, have the child bring it to the group and place it next to its match.
- When all the birds have been found, invite children to work together to sort the pictures by beak shape, foot shape, type, color, or size. Ask about each group: *Why do these birds go together?*
- Reproduce the Be a Bird Watcher Activity Sheet. Have children take home the chart to fill in by watching for birds each day for three days. Send home a note asking families to help children count the number of birds they see and record it on the chart by placing a mark for each bird. A family member can help children count and write the number of marks for each day. Once the chart is completed, have children return it to school to compare bird counts.
- Look for these bird books in your library:
What Makes a Bird a Bird? by May Garelick
Feathers for Lunch by Lois Ehlert



Reinforce number recognition by putting together flower puzzles and making edible flowers.

Materials

- sheets of paper (heavy stock) or two small poster boards
- construction paper
- scissors
- markers
- flower-shaped cookie cutters
- slices of cheese
- round crackers
- grapes (sliced in half)
- paper plates

Build-a-Flower Puzzles

Beforehand prepare ten puzzle boards by drawing a circle for a flower center and a line for a stem in the center of each board. Add a leaf to each side of the stem. Write a numeral from 1 to 10 inside each of the circles. Cut several flower petals from construction paper to use with the puzzles.

- Introduce the puzzles to a small group of children: *Dilly planted a flower garden, and Bruno Buzzbee helped her. It's time for her flowers to bloom, but Dilly needs your help.*
- Demonstrate how the flower puzzles are to be put together. Take one puzzle board, and point to the numeral in the center. Ask who can name the numeral. Then count together the same number of petals. Have children watch as you place the petals on the board around the center.
- Have each child take a number board and do the same. Children can check one another's completed puzzles by counting the petals.



- After the children have all had a chance to work with the puzzles, celebrate with a treat by making edible flowers.
- Have each child count out three crackers and three grape slices. Have them use a flower-shape cookie cutter to cut three cheese shapes. They can top each cracker with the cheese and the grape slice and enjoy!

Children learn the importance of recycling and conservation as they celebrate Earth Day.

Materials

- blankets
- recyclable items (paper products, plastic products, cans)
- three large cartons or bins (for recycling)
- chart paper
- marker

Save the Earth

Celebrate Earth Day in a special way by helping children become aware of the importance of their environment. Tell children: *All the members of the InvestiGator Club take special care of the places where they live and play—the beach, the city, and the forest—and you should too!*

- Go outside with some blankets. Sit in a grassy area with children. Ask: *How does it feel to sit on the ground? Look around. Name something beautiful you see.*
- Talk about ways we take care of Earth. Include keeping it clean, protecting it, using only what we need, and reusing things we can.
- Take children indoors again, and present the recycling bins. Put a label on each bin: paper, plastic, metal. Then reveal a collection of clean recyclable materials for children to sort.
- Teach children the following recycling song to the tune of “She’ll Be Comin’ Round the Mountain.”

We will save all the paper, yes, we will!

We will save all the paper, yes, we will!

We will help to save our Earth, if we put it in the bin.

We will help to save our Earth, if we pitch in.

We will save all the plastic, yes, we will...

We will save all the metal, yes, we will...

- Remind children each day to recycle materials used at school. Post a graph on chart paper. Each time a child recycles something, have him or her place a tally mark on the graph. At the end of the week, count the number of times children recycled.

SAVE THE EARTH—RECYCLE!	
PAPER	/// / / /
PLASTIC	/// / / /
METAL	/// / /

- To promote recycling through art activities children will enjoy, look for these resources:

Ecoart!: Earth-Friendly Art and Crafts Experiences for 3- to 9-Year-Olds
by Laurie Carlson

Good Earth Art by MaryAnn Kohl and Cindy Gainer

Children learn just how long an inchworm is and use an inch to measure other items.

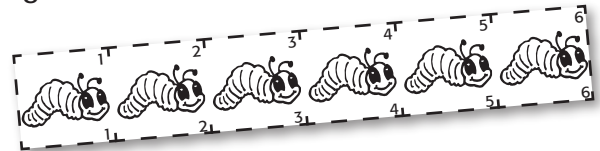
Materials

- colorful paper
- ruler and measuring tape
- chart paper
- marker
- Inchworm Measurements Activity Sheet for each child

Inchworm Measurements

Beforehand make an inchworm ruler for each child. Use the pattern found on the Inchworm Measurements Activity Sheet. Reproduce it on colorful paper and laminate for durability. Cut one inchworm from paper to use in a demonstration for children.

- Show children a ruler and a measuring tape. Say: *This ruler and this measuring tape are just like the ones Chuck Wood uses to measure with when he builds things. Today we are going to use something different to measure with. It's an inchworm!* Show children the inchworm cutout so they have an idea of how long an inchworm is.
- Give each child his or her own inchworm ruler. Say: *Let's count how long this ruler is by counting the number of inchworms.* Lead children to see that it is six inchworms long.



- Demonstrate how to place the ruler next to an item and count the inchworms to see how long the item is. Then ask: *Is it shorter than six inchworms? Is it longer than six inchworms?*
- Have children go about the room measuring things. Have them report what they measured and if the item was shorter than or longer than six inchworms. Make a chart to record the items and lengths. If children can count the exact number of inches, encourage them to do so.

SHORTER THAN 6 INCHWORMS	LONGER THAN 6 INCHWORMS
crayon glue stick marker paper clip	table pencil book paintbrush

- Reproduce the Inchworm Measurements Activity Sheet for each child. Tell children to take the chart home and fill it out as they discover things at home that are shorter than or longer than six inchworms. Send a note home asking family members to help children record the names of things they measure and bring it back to school in one or two days.
- Look for Leo Lionni's *Inch by Inch* in your library.

Children count bugs as they play a card game and recite a finger rhyme.

Materials

- index cards
- bug and flower stickers
- chart paper (optional)
- marker

Counting Bugs

Beforehand make one or more sets of counting bug playing cards. On one side of each index card, place one to ten bug stickers. Add a few flower stickers as well. On the flip side of each card, write the numeral showing the number of bugs pictured on the card. Make one card for each numeral. You might want to make more than one set of cards.

- Explain to children that Bruno Buzzbee is a bee, which is a kind of bug. Ask children to tell you what they know about insects. (three body parts, six legs, antennae, and some have wings)
- Discuss different ways bugs move and the kinds of bugs children know. You might want to record a list of bug names as children dictate.
- Introduce the card game to children. Show how on one side of each card they will see pictures of bugs and flowers. Explain that they are to find and count only the bugs they see. To check if they are correct, they can turn over the card to see the numeral.
- Have children work in small groups to share a set of cards. They can take a card and count alone or with a partner.
- Teach children the following finger rhyme about counting bugs. One group of children can hold up five fingers as they recite and put down one finger each time a bug goes away. The other group can perform actions suggested by the words in the rhyme.

Five little bugs running on the floor.

One flew away, and then there were four.

Four little bugs climb up a tree.

One ran down again, and then there were three.

Three little bugs found a leaf to chew.

One was full, and then there were two.

Two little bugs went in the grass to run.

One got tired, and then there was one.

One little bug resting in the sun.

She went home, and then there were none.

- Share a book about bugs with children, such as:

The Grouchy Ladybug by Eric Carle

The Very Quiet Cricket by Eric Carle

Old Black Fly by Jim Aylesworth



Children review the names of body parts while participating in an action rhyme.

Materials

- colored blocks

Bumble Bee!

Remind children that Bruno Buzzbee is a little bee. He is one of the InvestiGators, and he lives in a hive and knows how to make honey. Point out that we usually stay away from bees because they can sting us.

- Review the body parts *head*, *nose*, *arms*, and *toes* with children. As you say each word, have children point to theirs. Then teach children the following action rhyme. Have them imitate your actions and join in as they are able.

Bumble bee, bumble bee

Buzzing 'round the tree. (Trace one finger in the air as if a bee flying.)

Bumble bee, bumble bee,

Don't sting me! (Shake one finger back and forth and shake head "no.")

Shoo! from my head. (Cover head with hands.)

Shoo! from my nose. (Cover nose with hands.)

Shoo! from my arms. (Cross arms.)

Shoo! from my toes. (Cover toes with hands.)

Bumble bee, bumble bee!

Fly away home. (Wave.)

Bumble bee, bumble bee,

Leave me alone! (Point to self.)

- Focus on rhyming words. Give children three blocks, two of one color and one of another color. Say the two words *bee* and *see*. Show that the two words rhyme, or end the same, by placing together two blocks that are the same color as you repeat the words: *bee, see*. Repeat with the words *bee* and *sting*. Show that the words do not rhyme by placing together two blocks of different colors as you repeat the words: *bee, sting*. Continue with children using blocks to say and respond to word pairs: *tree/bee*, *head/nose*, *nose/toes*, *fly/arms*, *bee/me*.



bee

me

see

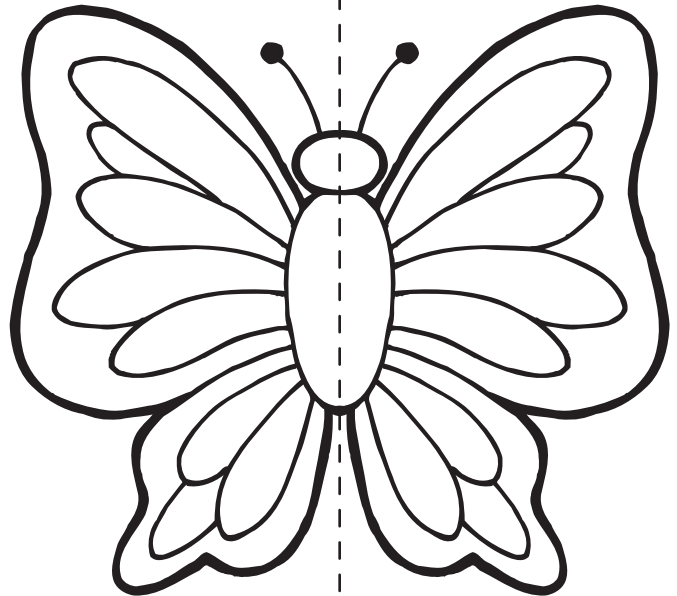
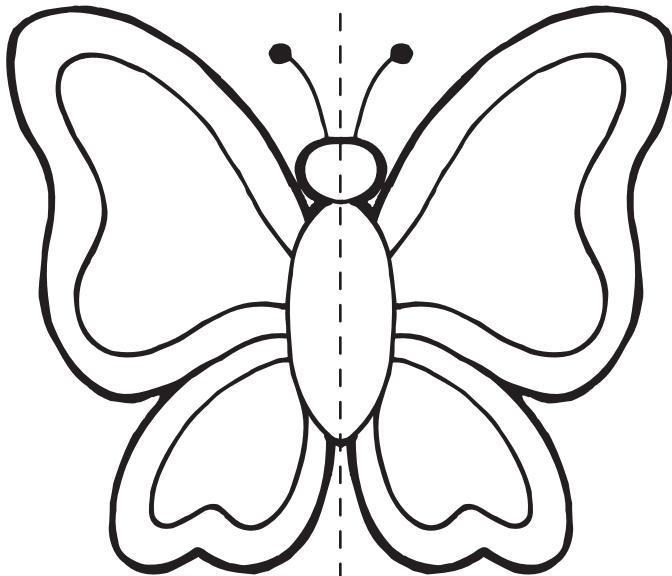
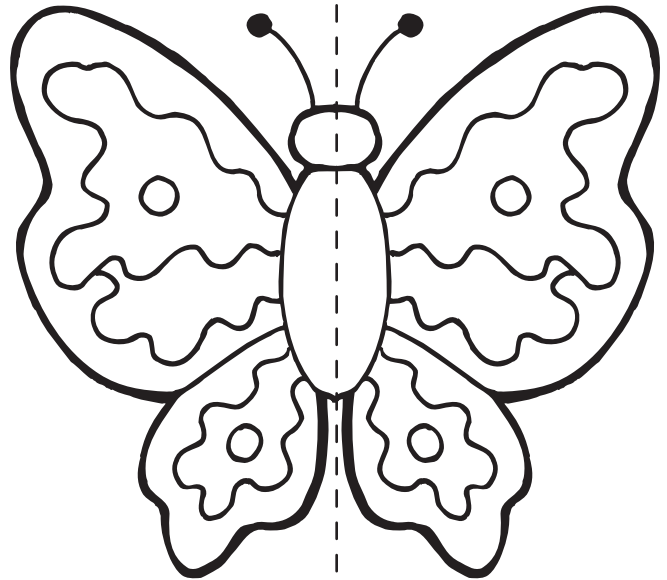
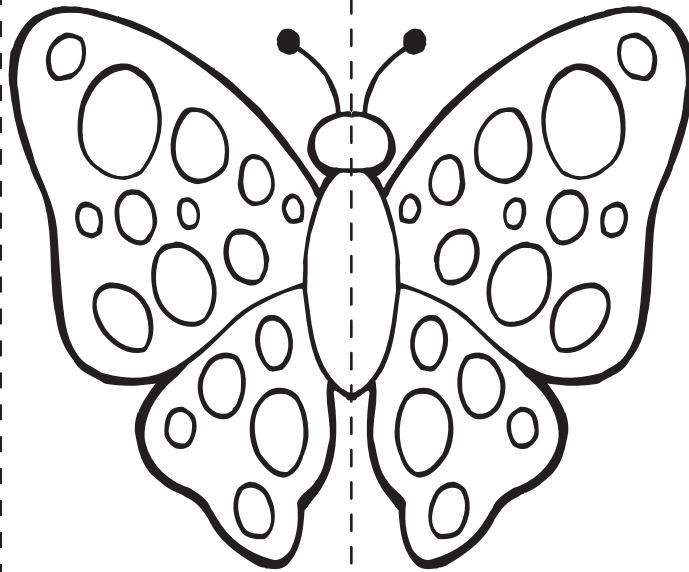
tree

Name _____

Butterfly Matchup

Color each butterfly.

Cut apart the cards to play a matching game.



Investigation: Sensational Seasons/Part 4

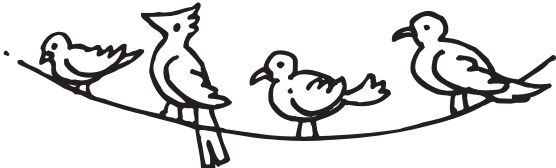
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Name _____

Be a Bird Watcher

Watch for birds each day. Put an X for each bird you see.
Write the number for each day.

 Birds I See		Total
Monday		
Tuesday		
Wednesday		

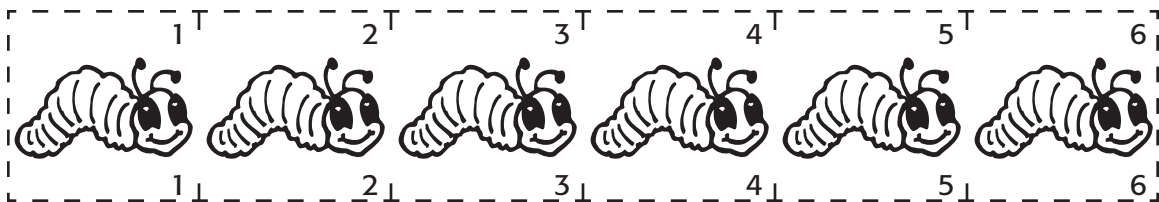


Name _____

Inchworm Measurements

Cut out the measuring stick. Use it to measure things in the room.
List things that are shorter or longer than six inchworms.

SHORTER THAN SIX INCHWORMS	LONGER THAN SIX INCHWORMS



Investigation: Sensational Seasons/Part 4

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