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# Let's Get Started

**Starfall Education Foundation** 

P.O. Box 359, Boulder, CO 80306



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## Let's Get Started

### Week 2

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# Week 2 Summary

The children will become better acquainted with the Gathering Routine. They will learn about creating and extending simple patterns and continue their study of geometric shapes and their attributes. The children will also:

- Continue their study of numbers
- Use and interpret data from a graph
- Become more familiar with place value
- Count backward
- Learn about zero

## Preparation

DAY 1

You will need Number Cards 1-7 and Shape Picture Cards: circle, hexagon, pentagon, rectangle, square, and triangle.

DAY 2



Prepare several construction paper circle and triangle shapes to demonstrate a circle/triangle pattern.

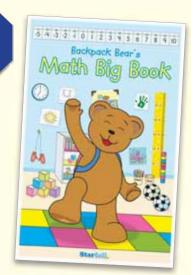
Provide containers of crayons and paper clips, enough for at least three of each per child.

DAY 3

Prepare a large construction paper octagon.

You will use 1 set of Shape Picture Cards (circle, ellipse, hexagon, octagon, pentagon, rectangle, rhombus, square, and triangle) for the pocket chart and 2 or 3 additional sets, enough so each child has a shape.

You will also need Backpack Bear's Math Big Book.





Cut three of each shape (*circle, triangle, rectangle, square*) from construction paper, and place the sets in individual plastic bags for each child and one for demonstration.





You will need five seedless grapes or other food or manipulatives for each child.

Have a large construction paper circle and an ellipse (oval) available.

UNIT 1 WEEK					
	2	DAY 1	DAY 2		
	Daily Routines	Calendar Weather Number Line Place Value Hundreds Chart	Calendar Weather Number Line Place Value Hundreds Chart		
	Math Concepts	Review circle, triangle, rectangle, square  Introduce  Hexagon	Introduce  AB patterns		
	Formative / Summative Assessment	Matching shapes and numbers	Partner to create AB Patterns		
	Workbooks & Media	Starfall.com: Geometry & Measurement, "Patterns" (Choose 2)			

DAY 3	DAY 4	DAY 5
Calendar Weather Number Line Place Value Hundreds Chart	Calendar Weather Number Line Place Value Hundreds Chart	Calendar Weather Number Line Place Value Hundreds Chart
Introduce Octagon Review 2-D shapes	Review AB patterns  Introduce  AABB Patterns	Introduce The number zero Counting backward to zero (eating activity) Review ellipse (oval)
Review shapes	Creating patterns	Shape review
	Math Melodies CD Track 2, "Bingo"	Starfall.com: Math Songs, "Five Little Bears" "Five Little Frogs" "The Zero Song"

DAY

Counting & Cardinality

A.2 - Count forward from a

given number.

B.4 - Understand the relationship

between numbers

B.4a - Say number names in order,

pairing each object

with one number. B.4b - The last

number counted

number of objects.

number refers to

tells the total

B.4c - Each

successive

one more.

and quantities.

# Daily O Routines



### Calendar

Materials Classroom Calendar

Continue the Calendar Routine:

- A volunteer tells the name of the month.
- The children name the days of the week.
- The calendar helper turns the next number.
- Say: Today is (name of day and date).

### Weather

**Materials** 

☐ Weather Picture Cards (displayed)

Say: Here are pictures of different kinds of weather. Yesterday was (yesterday's weather). I wonder what kind of weather we will have today.

The meteorologist goes to the window to look outside, and predicts the weather. He or she places a tally mark under the predicted weather.

Ask: Why do you think this will be the weather?

Say: Let's look at the weather graph. A graph is a picture that gives information. Which Weather Picture Card has the most tally marks? What does that mean?

The children should understand that the Weather Picture Card with the most tally marks indicates the weather that has occurred most frequently.

Once a Weather Picture Card has five tally marks, demonstrate how to draw four straight tally marks and one diagonal tally mark to indicate a set of five.

### Number Line

Say. Look at the number line. It tells us how many days we have been in school. Let's count them. Point to and count the days.

Say: Today we will add one more number. Raise your hand if you know what five plus one more is. The number helper chooses a volunteer. **Right, five plus one more is six.** Remove the sticky note to reveal six. We have been in school six days.

### 100 Place Value

Indicate the ones container. Ask: How many sticks are in the ones container? (five) Right, five. Today we get to add one more stick. This shows we have been in school for six days.

The number helper adds a stick.

### Materials

☐ Number line

Pointer

### Materials

Ones container

Craft sticks

Say: Let's count how many sticks we have so far.

Say: There is one more way to count how many days we have been in school. Let's look at the hundreds chart. This chart also shows how many days we have been in school. Today we will turn the next number. The number helper turns the number.

Ask: The hundreds chart shows that we have been in school how many days?

## **Explore Shapes**

### Review Shapes, Introduce Hexagon

Display the Number Cards 1-7 vertically in a pocket chart. Indicate each and the children name them with you. Ask: Which number tells how many days we have been in school? (six) Right, six.

Display the *circle, triangle, square, rectangle, pentagon,* and *hexagon* Shape Cards, but do not name the shapes.

Say: Here are some shapes. Let's organize them by the number of sides each shape has. Volunteers place the circle, triangle, square, and rectangle next to the numeral that represents the number of sides each has.

- Circle (1)
- Triangle (3)
- Square (4)
- Rectangle (4)

Say: Here are two more shapes. Who can find the shape that has five sides? Do you remember from last week that this shape is called a *pentagon*? Say, *pentagon*. (The children repeat, pentagon.) Let's count the sides.

Ask: Who can place this pentagon next to the number five? A volunteer does this.

Indicate the hexagon. Say: **This is a** *hexagon***. Say,** *hexagon***.** (The children repeat, *hexagon*.) **How many sides does a hexagon** have? **Let's count. Who can place the hexagon next to the number six?** A volunteer does this.

### **Materials**

Materials

Hundreds Chart

- Shape Cards: circle, hexagon, pentagon, rectangle, square, and triangle
- Number Cards: 1-7
- Pocket chart

### **Measurement & Data**

A.1 - Describe measurable attributes of objects.

### Geometry

A.2 - Correctly name shapes.











7

35



This lesson is an introduction to shapes. Children are not expected to master the names of all the different shapes at this time.

## Review Shapes

Say: Let's read our chart. Encourage the children to notice the following:

- A circle has one line.
- An ellipse has one line.
- A triangle has three straight lines.
- There are two shapes that have four lines, square and rectangle.
- No shape has two lines.
- A pentagon has five sides.
- A hexagon has six sides.
- No shape on this chart has seven lines.

## Gingerbread Man

Project *Starfall.com:* Holidays, "Gingerbread Man." The children take turns navigating to create a gingerbread man.



## Formative Assessment

### **Match Shapes and Numbers**

Remove the Shape Cards. Distribute them to volunteers who find the corresponding numbers and place their shapes next to them. Each child explains why he or she placed the shape next to the number. Repeat until all the children have a turn.

# Daily O Routines

**Counting & Cardinality** 

A.2 - Count forward from a given number. B.4 - Understand the

relationship between

B.4a - Say number

with one number.

number of objects.

one more.

B.4c - Each successive number refers to

B.4b - The last number counted tells the total

names in order, pairing each object

numbers and quantities.



## **Calendar**

**Materials** Classroom Calendar

Continue the Calendar Routine:

- A volunteer tells the name of the month.
- The children name the days of the week.
- The calendar helper turns the next number.
- Say: Today is (name of day and date).

### Weather

**Materials** 

☐ Weather Picture Cards (displayed)

Say: Here are pictures of different kinds of weather. Yesterday was (yesterday's weather). I wonder what kind of weather we will have today.

The meteorologist goes to the window to look outside, predicts the weather, and places a tally mark under the predicted weather. Ask:

- Why do you think this will be the weather today?
- Let's look at the weather graph. A graph is a picture that gives information. Which Weather Picture Card has the most tally marks? What does that mean? Volunteers respond.
- Which Weather Picture Card has the least number of tally marks? What does that mean? Volunteers respond.
- Do we have any Weather Picture Cards with the same or equal number of tally marks?

### Number Line

**Materials** 

☐ Number line

Pointer

Say: The number line tells us how many days we have been in school. Let's count. Point to and count the days.

Say: Today we will add one more number. Raise your hand if you know what six plus one more is. The number helper chooses a volunteer. **Right, six plus one more is seven.** Remove the sticky note to reveal seven. We have been in school seven days.

## 100 Place Value

**Materials** 

Ones container

Craft sticks

Indicate the *ones* container. Ask: How many sticks are in the ones container? (six) Right, six. Today we get

to add one more stick. This shows we have been in school for seven days.

The number helper adds a stick. Say: Let's count how many sticks we have so far.

Materials

☐ Hundreds Chart

Ask: What is one more way to count how many days we have been in school? Right, let's look at the hundreds chart. This chart also shows how many days we have been in school. **Today we will turn the next number.** The number helper turns the number.

Ask: The hundreds chart shows that we have been in school how many days?

### **AB Patterns**

### Materials

- Prepared construction paper circle and triangle
- Containers of crayons and paper clips

### Geometry

A.2 - Correctly name shapes.

**Operations & Algebraic Thinking** 

OA.1 - Identify, describe, or extend simple patterns.

## **Introduce AB Patterns**

Choose a girl and a boy to come forward and stand side-by-side. Say: Today we will talk about patterns. A pattern is something that repeats. Here are a girl and a boy. The rule for this pattern will be girl/boy. Choose another girl and boy to come forward.

Ask: If the rule for the pattern is girl/boy, who should go next? Continue adding children to the pattern with the help of the class.

Indicate a circle and a triangle. Say: Here are a circle and a triangle. Let's make a circle/triangle pattern. The rule will be circle/triangle.

Ask: What is a different pattern we can create using the circle and the triangle? Right, the rule could be triangle/circle.

### Create an AB Pattern

Distribute the circle and triangle shapes to the children. Ask: Who has a circle? The child comes forward. Who has a triangle? The child holding the triangle stands next to the child with the circle.

Say: The pattern is circle/triangle. Let's extend the pattern with more shapes. The children continue the AB pattern by coming forward and placing themselves in the correct order.

Project Starfall.com; Geometry & Measurement, "Patterns" (two shape; AB pattern).

Ask: What will the rule be for the pattern? Volunteers assist in completing the maze.

**Note:** Each screen will display a different pattern.



### **Partner to Create AB Patterns**

The children each select 3 crayons and 3 paper clips from the containers.

Partner the children. Say: Let's create a new pattern. The pattern rule is crayon/paper clip. Work together to create an AB pattern using your crayons and paper clips.

The children return the crayons and paper clips to the containers when the assessment is finished.





**Counting & Cardinality** 

A.2 - Count forward from a given number. B.4 - Understand the

relationship between numbers and quantities.

B.4a - Say number

with one number. B.4b - The last number

number of objects. B.4c - Each successive

number refers to one more.

counted tells the total

names in order, pairing each object

# Daily O Routines



### Calendar

Materials Classroom Calendar

Continue the Calendar Routine:

- A volunteer tells the name of the month.
- The children name the days of the week.
- The calendar helper turns the next number.
- Say: Today is (name of day and date).

### Weather

**Materials** 

☐ Weather Picture Cards (displayed)

Say: Here are pictures of different kinds of weather. Yesterday was (yesterday's weather). I wonder what kind of weather we will have today.

The meteorologist goes to the window to look outside, predicts the weather, and places a tally mark under the predicted weather.

Ask: Why do you think this will be the weather today?

Say: Let's look at the weather graph. A graph is a picture that gives information. Which Weather Picture Card has the most tally marks? What does that mean? Volunteers respond.

## Number Line

Materials

☐ Number line

Pointer

have been in school. Let's count. Point to and count the days. Say: Today we will add one more number. Raise your hand if you know

Say: The number line tells us how many days we

what seven plus one more is. The number helper chooses a volunteer. **Right, seven plus one more is eight.** Remove the sticky note to reveal eight. We have been in school eight days.

### **100** Place Value

Materials

Ones container

☐ Craft sticks

Indicate the *ones* container. Ask: How many sticks are in the ones container? (seven) Right, seven. Today we get to add one more stick. This shows we have been in school for eight days.

The number helper adds a stick. Say: Let's count how many sticks we have so far.

ndreds Chart

Ask: What's one more way to count how many days we have been in school? Right, let's look at the hundreds chart.

This chart also shows how many days we have been in school. Today we will turn the next number. The number helper turns the number.

Ask: The hundreds chart shows that we have been in school how many days?

# Introduce *Octagon* and Review 2-D Shapes

## Introduce Octagon

Indicate Backpack Bear's Math Big Book, page 8. Say: Backpack Bear has drawn more shapes for us!

Read the speech bubble and the children count the number of sides for each shape: rhombus, pentagon, hexagon.

Say: Backpack Bear has another shape to show us. This shape is an octagon. Say, octagon. Does this shape have curved lines or straight lines?

Say: Let's count how many straight lines this octagon has. Count the eight sides.

Place the octagon in the sentence stem. Read: I know this is an octagon because (blank). A volunteer completes the sentence.

Ask: Who can think of a safety sign that is shaped like this? Right, a stop sign is an octagon shape.

## Identify 2-D Shapes

Place one set of Shape Cards face down in a pocket chart.

The children take turns to reveal Shape Cards and identify the shapes. A child may ask a volunteer for help in identifying the shape if necessary.

### **Materials**

**Materials** 

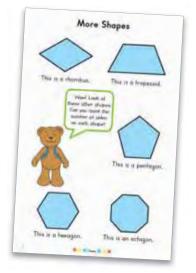
Hundreds Chart

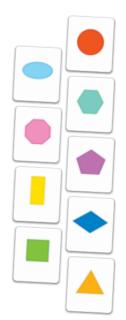
- One set of Shape Cards: circle, ellipse, hexagon, octagon, pentagon, rectangle, rhombus, square, and triangle
- Two or three sets of twodimensional Shape Cards in a paper bag (There should be at least 2 of each shape. Add additional shapes so each child has a shape.)
- Backpack Bear's Math Big Book, page 8
- Prepared construction paper octagon
- Pocket chart

### Geometry

A.3 - Identify shapes as two- or three-dimensional.

B.4 - Analyze and compare two- and three- dimensional shapes.





## **3** Match Shapes

Indicate the bag of two-dimensional Shape Cards.

- Each child draws a Shape Card from the bag
- The children find others with the same shape



## Formative Assessment

### **Review Shapes**

Gather the children and indicate Backpack Bear's Math Big Book.

Say: Let's play "Match Your Shape." I'll say the name of a shape. The children holding that shape stand and find the page in Backpack Bear's Math Big Book that demonstrates that shape (pages 4-8). Children may work together to find their shapes in Backpack Bear's Math Big Book.

# Daily O Routines

Materials

**Materials** 

Cards (displayed)

Materials

Materials Ones container

☐ Craft sticks

☐ Number line

Pointer

Weather Picture

Classroom Calendar

# **Calendar**

Continue the Calendar Routine:

- A volunteer tells the name of the month.
- The children name the days of the week.
- The calendar helper turns the next number.
- Say: Today is (name of day and date).

# Weather

Say: Here are pictures of different kinds of weather. Yesterday was (yesterday's weather). I wonder what kind of weather we will have today.

The meteorologist goes to the window to look outside, predicts the weather, and places a tally mark under the predicted weather.

Ask: Why do you think this will be the weather today?

Say: Let's look at the weather graph. A graph is a picture that gives **information.** Ask:

- Which Weather Picture Card has the most tally marks?
- Which Weather Picture Card has the least number of tally marks?
- Do any Weather Picture Cards have the same number or equal tally marks?

## Number Line

Say: The number line tells us how many days we have been in school. Let's count. Point to and count the days.

Say: Today we will add one more number. Raise your hand if you know what eight plus one more is. The number helper chooses a volunteer. **Right, eight plus one more is** *nine***.** Remove the sticky note to reveal *nine*. We have been in school nine days.

## 100 Place Value

Indicate the *ones* container. Ask: How many sticks are in the ones container? (eight) Right, eight. Today we get to add one more stick. This shows we have been in school for nine days.

The number helper adds a stick. Say: Let's count how many sticks we have so far.

### A.2 - Count forward

from a given number.

**Counting & Cardinality** 

B.4 - Understand the relationship between numbers and quantities.

B.4a - Say number names in order, pairing each object with one number.

B.4b - The last number counted tells the total number of objects.

B.4c - Each successive number refers to one more.

# 100

### **Hundreds Chart**

Materials

☐ Hundreds Chart

Ask: What's one more way to count how many days we have been in school? Right, let's look at the hundreds chart.

This chart also shows how many days we have been in school. Today we will turn the next number. The number helper turns the number.

Ask: The hundreds chart shows that we have been in school how many days?

### Pattern Review

**Review AB Patterns** 

Recall the activity in which the children created a girl/boy pattern. Several volunteers come forward and re-create the girl/boy pattern.

# Math Melodies CD, Track 2 ☐ Three of each construction paper shape (circle, triangle, rectangle, square) in small plastic

bags (one bag for each child and one for demonstration)

Materials

Pocket chart

### Operations & Algebraic Thinking

OA.1 - Identify, describe, or extend simple patterns.

### Geometry

A.2 - Correctly name shapes.

Say: Today we will create a pattern. The rule for this pattern is stand/sit. Let's try this pattern. Ready? Stand/sit, stand/sit, stand/sit. The children do this

Ask: What is the next movement in this pattern? (stand) Right, stand. Now sit.

Say: Let's try some more. Suggestions:

- Hum, clap; hum, clap
- Touch your chin, touch your nose; touch your chin, touch your nose

### Introduce AABB Patterns

Say: Let's make the pattern a little more difficult. Listen first. The rule for this pattern is clap, clap, stomp, stomp. Ready? The children clap and stomp according to this pattern.

Say: Let's try some more. Suggestions:

- Hop, hop, jump, jump; hop, hop, jump, jump
- Bend, bend, kneel, kneel; bend, bend, kneel, kneel

The children suggest additional pairs of movements to create patterns.

# Bingo Song

Play Math Melodies CD Track 2, "Bingo."

Explain that during this song the children will create a clapping pattern. Play and sing the song. Discuss the pattern of clapping during the song.

### "Bingo"

Johnny had a little dog, And Bingo was his name-O.

B-I-N-G-O!

B-I-N-G-O!

B-I-N-G-O!

And Bingo was his name-O!



## **H** Formative Assessment

### **Create Patterns**

Distribute a plastic bag containing prepared construction paper shapes to each child. Say: **In your bag you have different shapes.** 

Indicate a circle from the demonstration bag. Say: This is a *circle*. In the shapes I just gave you, find a circle shape and wave it in the air. Repeat for the triangle, rectangle, and square.

Say: I can make a pattern with the shapes in my bag. Demonstrate how to use the shapes to create a pattern in the pocket chart. The children determine the rule of the pattern and take turns extending the pattern using their shapes.

Return the shapes to the children to use to create their own patterns. Use this time to assess the children's understanding of shapes and patterns.



**Counting & Cardinality** 

A.2 - Count forward from a given number. B.4 - Understand the

relationship between numbers and quantities.

B.4a - Say number

with one number. B.4b - The last number

number of objects. B.4c - Each successive

number refers to one more.

counted tells the total

names in order, pairing each object

# Daily O Routines



### Calendar

Materials Classroom Calendar

Continue the Calendar Routine:

- A volunteer tells the name of the month.
- The children name the days of the week.
- The calendar helper turns the next number.
- Say: Today is (name of day and date).

### Weather

**Materials** 

☐ Weather Picture Cards (displayed)

Say: Here are pictures of different kinds of weather. Yesterday was (yesterday's weather). I wonder what kind of weather we will have today.

The meteorologist goes to the window to look outside, predicts the weather, and places a tally mark under the predicted weather.

Ask: Why do you think this will be the weather today?

Say: Let's look at the weather graph. A graph is a picture that gives information. Which Weather Picture Card has the most tally marks? What does that mean? Volunteers respond.

### Number Line

Materials

☐ Number line

Pointer

Say: The number line tells us how many days we have been in school. Let's count. Point to and count the days.

Say: Today we will add one more number. Raise your hand if you know what nine plus one more is. The number helper chooses a volunteer. **Right, nine plus one more is** *ten.* Remove the sticky note to reveal *ten.* We have been in school ten days.

### **100** Place Value

Materials

Ones container

☐ Craft sticks

Indicate the *ones* container. Say: How many sticks are in the ones container? (nine) Right, nine. Remember, we can only put nine sticks in the ones container. Today we get to add one more stick.

Demonstrate removing the nine sticks from the ones container, adding one more stick, and bundling the ten sticks with a rubber band.

Say: Today is "Bundle Day!" Now we have one bundle of ten sticks. We will put our bundle in the tens container. This shows we have been in school for ten days.

Ask: What's one more way to count how many days we have been in school? Right, let's look at the hundreds chart. This chart also shows how many days we have been in school. Today we will turn the next number. The number helper turns the number.

Ask: The hundreds chart shows that we have been in school how many days?

### Count Backward to Zero

### Introduce Zero

Project *Starfall.com*; Math Songs: "Five Little Bears" (or prepare to play the song on the *Math Melodies* CD).

Say: We can count in many different ways. Today we will count forward.

Play "Five Little Bears." Say: When we count forward we are adding one more each time we say the next number.

Say: Another way to count is to count backward.

Play "Five Little Frogs." Say: When we count backward we are taking one away, or subtracting one, each time we say a number.

### Count Down From Five

Distribute five grapes, other food, or manipulatives to each child. Place the Number Cards 0-5 in order in a pocket chart.

Ask: How many grapes do each of you have? Who can point to the number that represents five?

Continue: Eat one grape. Now you have one fewer grape. How many grapes do you have left? (4) Right, 4. Who can find the number that represents four?

Continue this process until the children only have one grape each.

Say: Now you have one grape left. Eat your one grape. How many grapes do you have left? (none) Right, none. Who can find the number that represents none. This number is zero. Say, zero.

### **Materials**

**Materials** 

- Starfall.com; Math Songs, (or Math Melodies CD) "Five Little Bears," "Five Little Frogs," and "The Zero Song"
- Five seedless grapes, other food, or manipulatives for each child
- Pocket chart
- Number Cards: 0-5
- Prepared construction paper shapes: ellipse (oval), and circle

### "Five Little Bears"

One little bear Wondering what to do Along came another Then there were two!

Two little bears
Climbing up a tree
Along came another
Then there were three!

Three little bears
Ate an apple core
Along came another
Then there were four!

Four little honey bears
Found honey in a hive
Along came another
And then there were five!

### **Counting & Cardinality**

B.4 - Understand the relationship between numbers and quantities.

B.4a - Say number names in order, pairing each object with one number.

B.4b - The last number counted tells the total number of objects.

B.4c - Each successive number refers to one more.

CC.3 - Count backward from a given number.

### Operations & Algebraic Thinking

A.1 - Represent addition and subtraction in a variety of ways.

### Geometry

A.2 - Correctly name shapes.



Say: We have been in school for ten days. Look at the number line. Let's count forward from zero and stop at ten. Indicate each number as it is counted.

Continue: Great job! Now, let's count backward from ten to zero. Do this.

## 3 The Zero Song

Project Starfall.com; Math Songs: "The Zero Song." Say: Let's watch a video about counting backward to zero. Play the song.

## Review Ellipse (Oval)

Say: Zero reminds me of a shape.

Indicate an ellipse (oval). Say: This shape looks like an egg. Some people call it an *oval*. It also has another name. It is an ellipse. Say, ellipse.

Continue: I know this is an ellipse because it has one curved line around two points. What shape does this remind you of? (a circle) Right, a circle. Let's see how these shapes are the same and how they are different.

Indicate the circle. Say: Remember, a circle is one curved line that is always the same distance from its center.

Indicate the ellipse. Say: Let's see if this shape is the same distance from the center.

Demonstrate how the ellipse has two points that are away from the center so the line around them isn't always the same distance from the center of the ellipse.

### The Zero Song

If I had ten apples And gave them all away I would then have zero apples Zero apples today

Ten, nine, eight, seven Six, five, and four Three, two, one, zero! Now I have no more.

Zero, zero, zero Zero apples today Zero, zero, zero apples I gave them all away

We each have an apple An apple we can bite Once we eat all our apples There'll be zero apples in sight

Ten, nine, eight, seven, Six, five, and four Three, two, one, zero! Now there are no more.

Zero, zero, zero Zero apples we say Zero, zero, zero apples We ate them all today!



### Formative Assessment

### **Shape Review**

Say: Let's play a game. I'll point to one shape. You say circle if it is a circle, or say ellipse if it is an ellipse. Point to each shape several times and the class responds.

Ask: Which of these shapes reminds you of zero? (ellipse) Right, the ellipse.