



# Círculos y triángulos

## Standards

Addressing K.CC.A.3, K.CC.B, K.CC.B.5, K.G.B.4

## Goals

- Explain (orally) strategies for distinguishing between circles, triangles, and shapes that are not circles or triangles.
- Write numbers to represent how many circles and triangles.

## Instructional Routines

- Card Sort
- Which Three Go Together?

## Student Facing Learning Goals

- Aprendamos los nombres de algunas figuras.

## Lesson Purpose

The purpose of this lesson is for students to identify, describe, and compare circles and triangles.

## Narrative

Students are also introduced to the geometric terms **circle** and **triangle**. Students develop their intuitive understanding of circles and triangles. They may incorrectly identify shapes in this activity, such as identifying an oval as a circle. If this happens, acknowledge the similarities between the shapes (*“Esta figura es curva como un círculo, pero no es un círculo”* // “This shape is curved like a circle, but it is not a circle.”) As students sort examples and nonexamples of triangles in the second activity, they continue to build their informal understanding of what is a triangle.

## Access for Students with Disabilities

- Representation

## Access for English Learners

- MLR8

## Required Materials

### Materials to Gather

- Colored pencils or crayons: Activity 1
- 5-frames: Activity 3
- Collections of up to 20 small objects: Activity 3
- Counting mats: Activity 3
- Materials from previous centers: Activity 3

### Materials to Copy

- Card Sort Triangles Cards (1 copy for every 4 students): Activity 2

## Lesson Timeline

Warm-up	10 min
Activity 1	10 min

## Teacher Reflection Questions

How did students think of triangles as they came into the lesson? In what ways did their understanding of triangles change upon completing the lesson?



Activity 2 15 min

Activity 3 20 min

Synthesis Estimate 5 min

## Warm-up

10 min

Cuáles tres van juntos: Más figuras

### Standards

Addressing K.G.B.4

### Instructional Routines

- Which Three Go Together?

This *Warm-up* prompts students to carefully analyze and compare the attributes of four shapes. In making comparisons, students have a reason to use language precisely (MP6). The activity also enables the teacher to hear the terminologies students know and how they talk about attributes of shapes. During the *Activity Synthesis*, students discuss what they notice about a shape with a curved side. This leads to the work of an upcoming activity, where students identify circles.

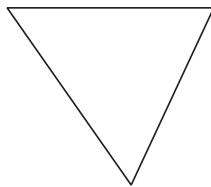
### Student Task Statement

¿Cuáles 3 van juntas?

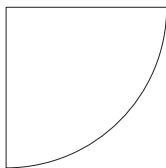
A



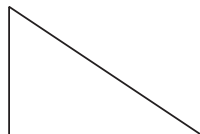
B



C



D



### Launch

- Groups of 2
- Display the shapes.
- “Escojan 3 figuras que vayan juntas. Prepárense para compartir por qué van juntas” // “Pick 3 shapes that go together. Be ready to share why they go together.”
- 1 minute: quiet think time

### Activity

- “Discutan con su compañero lo que pensaron” // “Discuss your thinking with your partner.”
- 2–3 minutes: partner discussion
- Share and record responses.

### Activity Synthesis

- Display Shape C.
- “¿Qué observas sobre esta figura?” // “What do you notice about this shape?” (It has a side that is curved.)
- “¿Conocen otra figura que tenga lados curvos?” // “Do you know any other shapes that have curved sides?” (A circle.)

### Student Response

Sample responses:

A, B, and C go together because:

- They have flat tops.

A, B, and D go together because:

- They have straight sides.

A, C, and D go together because:

- They have a corner that looks like an L or a square.
- They have corners that look the same.



B, C, and D go together because:

- They have 3 sides.

## Activity 1

🕒 10 min

Coloreemos círculos y triángulos

### Standards

Addressing K.CC.A.3, K.CC.B.5, K.G.B.4

The purpose of this activity is for students to identify examples of circles and triangles. The geometric terms **circle** and **triangle** are formally introduced, though some students may already be familiar with the terms and have heard or used them in previous lessons. This activity exposes students to a wider variety of circles and triangles than they may have seen previously, which encourages students to expand their concepts of the shapes. Students may incorrectly identify some shapes as circles or triangles, particularly distractors, such as a shape that looks like a triangle but has 4 sides. These shapes can be discussion points and are expected throughout kindergarten. Students distinguish between defining and non-defining attributes of shapes in grade 1.

### Access for English Language Learners

- | *MLR8 Discussion Supports.* To support the transfer of new vocabulary to long-term memory, invite students to chorally repeat these words in unison 1–2 times: circle, triangle.
- | *Advances: Listening, Speaking*

### Access for Students with Disabilities

- | *Representation: Access for Perception.* Synthesis: Students might need extra support determining that the oval and the pizza slice shapes are not circles or triangles. Hold up a circle and triangle next to the shapes to visually show that the oval and pizza slice shapes do not match the circle and triangle, respectively.
- | *Supports accessibility for: Visual-Spatial Processing*

## Required Materials

### Materials to Gather

- Colored pencils or crayons: Activity 1

## Required Preparation

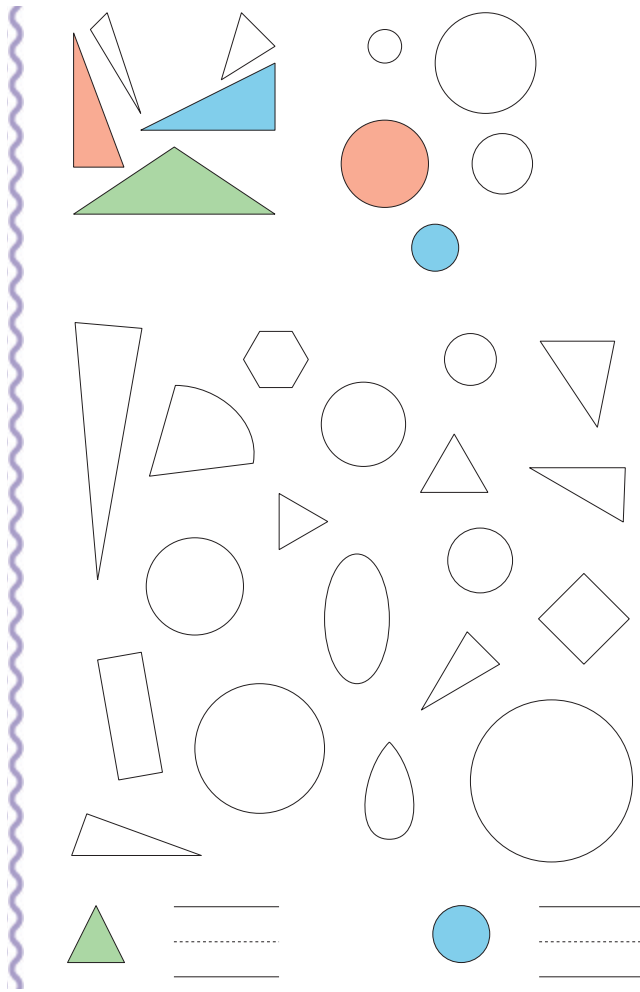
Each student needs at least 2 different colored crayons or colored pencils.

### Student Task Statement

### Launch

- Groups of 2
- Give each student access to 2 different color crayons or colored pencils.





## Student Response

Students color 6 circles and 7 triangles.

- Display the image from the book.
- *"Mai puso sus figuras en 2 grupos. ¿Qué observan? ¿Por qué creen que Mai puso estas figuras juntas?"* // *"Mai put her shapes into 2 groups. What do you notice? Why do you think Mai put these shapes together?"*
- 30 seconds: quiet think time
- Share responses.
- *"¿Qué nombre le podemos dar a cada grupo?"* // *"What can we name each group?"*
- 30 seconds: quiet think time
- 30 seconds: partner discussion
- Share responses.
- *"Podemos llamar **triángulos** a este grupo de figuras porque todas las figuras de este grupo son triángulos"* // *"We can call this group **triangles** because all shapes in this group are triangles."*
- *"¿Qué saben sobre los triángulos?"* // *"What do you know about triangles?"*
- 30 seconds: quiet think time
- 30 seconds: partner discussion
- Share and record responses.
- Display the student book.
- *"Coloreen con el mismo color todos los triángulos"* // *"Color all triangles the same color."*
- 2 minutes: independent work time
- *"Podemos llamar **círculos** a este grupo. Todas las figuras de este grupo son círculos"* // *"We can call this group **circles**. All shapes in this group are circles."*
- *"¿Qué saben sobre los círculos?"* // *"What do you know about circles?"*
- 30 seconds: quiet think time
- 30 seconds: partner discussion
- Share and record responses.
- *"Coloreen con otro color todos los círculos que encuentren"* // *"Color all circles that you find with another color."*
- 2 minutes: independent work time

## Activity

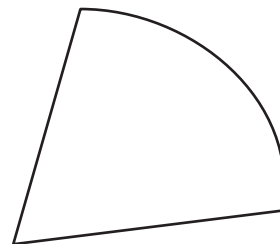
- *"Escojan un triángulo que hayan coloreado."*

*Cuéntenle a su compañero una cosa que sepan sobre esa figura* // "Choose 1 triangle that you colored in. Tell your partner one thing that you know about that shape."

- 30 seconds: quiet think time
- 30 seconds: partner discussion
- *"Escriban un número que muestre cuántos triángulos colorearon"* // "Write a number to show how many triangles you colored."
- 1 minute: independent work time
- *"Escojan un círculo que hayan coloreado. Cuéntenle a su compañero una cosa que sepan sobre esa figura"* // "Choose 1 circle that you colored in. Tell your partner one thing that you know about that shape."
- 30 seconds: quiet think time
- 30 seconds: partner discussion
- *"Escriban un número que muestre cuántos círculos colorearon"* // "Write a number to show how many circles you colored."
- 1 minute: independent work time
- *"¿Colorearon más triángulos o más círculos? ¿Como lo saben?"* // "Did you color more triangles or more circles? How do you know?"
- 30 seconds: quiet think time
- 30 seconds: partner discussion

### Activity Synthesis

- Display the shape from student book, or draw the shape:



- *"¿Colorearon esta figura? ¿Por qué si o por qué no?"* // "Did you color this shape? Why or why not?" (I didn't color the shape. It looks like a triangle but 1 side is round.)
- Display the shape from the student book, or draw the shape:



- “¿Colorearon esta figura? ¿Por qué si o por qué no?” // “Did you color this shape? Why or why not?” (I didn’t color this shape. It looks like a circle but it’s stretched out.)

## Activity 2

Clasificación de tarjetas: Triángulos

 15 min  
 PLC Activity

### Standards

Addressing **K.G.B.4**

### Instructional Routines

- Card Sort

The purpose of this activity is for students to begin to distinguish triangles from other shapes. This sorting task gives students opportunities to analyze shapes closely and make connections (MP7). By working with variants and non-examples of triangles, students begin to develop their understanding of what makes a shape a triangle. Students may more easily identify equilateral triangles as triangles but may also identify other examples as triangles. When students discuss which group a shape should be placed in, students informally describe the attributes of the shape (MP6).

## Required Materials

### Materials to Copy

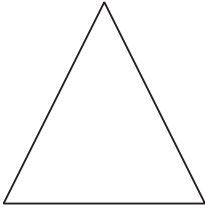
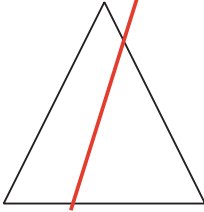
- Card Sort Triangles Cards (1 copy for every 4 students): Activity 2

## Required Preparation

- Cut out triangle cards from the blackline master. Each group of 4 students needs 1 set of cards.



## Student Task Statement

<p>Triángulos</p>  <p>_____</p> <p>-----</p> <p>_____</p>	<p>No son triángulos</p>  <p>_____</p> <p>-----</p> <p>_____</p>
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## Student Response

Groups:

- triangles: A, C, E, G, I, K, M, O
- not triangles: B, D, F, H, J, N, P

Sample Responses:

- A is a triangle because it has 3 corners.
- H isn't a triangle because some sides are curved.

## Launch

- Groups of 4
- Give each group a set of cards.

## Activity

- *"Clasifiquen las figuras en dos grupos. Al lado izquierdo de su tablero, pongan todas las figuras que son triángulos. Al lado derecho, pongan todas las figuras que no son triángulos. Juntos, descifren en dónde debería ir cada figura. Cuando ubiquen una figura, díganle a sus compañeros por qué creen que va en ese grupo" // "Sort the shapes into two groups. On the left side of your mat, put all shapes that are triangles. On the right side of your mat, put all shapes that are not triangles. Work with your group to figure out where each shape should go. When you place a shape, tell your group why you think the shape belongs in that group."*
- 4 minutes: small-group work time
- Monitor for students who discuss attributes of triangles when sorting.
- *"Escriban un número que muestre cuántas figuras hay en cada grupo" // "Write a number to show how many shapes are in each group."*
- 1 minute: independent work time
- *"Caminen por el salón para ver cómo organizaron sus figuras los demás compañeros. ¿Las organizaron de la misma manera que ustedes?" // "Walk around to see how the other groups organized their shapes. Did they organize them the same way that your group did?"*
- 6 minutes: work time

## Activity Synthesis

- Display Cards O, K, and G next to each other.
- *"Noah dice que la figura del medio no es un triángulo porque apunta hacia abajo y los triángulos tienen que apuntar hacia arriba. ¿Están de acuerdo con Noah? ¿Por qué sí o por qué no?" // "Noah says that the shape in the middle is not a triangle because it is pointing down and triangles have to point up. Do you agree with Noah? Why or why not?"*



## Advancing Student Thinking

If students put shapes other than triangles into the group of triangles, consider asking:

- “¿Como escogiste en qué grupo poner esta figura?” // “How did you choose which group to put this shape in?”
- “¿Qué tienen en común todas las figuras de este grupo?” // “What is alike, or the same, about all shapes in this group?”

## Activity 3

🕒 20 min

Conozcamos “Contar colecciones: Hasta 20”

### Standards

Addressing K.CC.B

The purpose of this activity is for students to learn Stage 1 of the *Counting Collections* center. Most students should be given collections with 6–10 objects. Based on formative assessment data collected in previous sections, adjust the number of objects in collections for individual students. Provide students with counting mats and 5-frames to help them accurately count or organize their collections. Students use appropriate tools strategically as they choose which tools help them count their collections (MP5). In a future variation of this center, students will draw pictures or write numbers to represent their collections.

After they participate in the center, students choose from any stage of previously introduced centers:

- Which One?
- Picture Books
- Bingo
- Shake and Spill

## Required Materials

### Materials to Gather

- 5-frames: Activity 3
- Collections of up to 20 small objects: Activity 3
- Counting mats: Activity 3
- Materials from previous centers: Activity 3

## Required Preparation

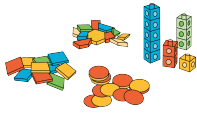
- Gather materials from:
  - Which One? Stage 1
  - Picture Books, Stages 1–3
  - Bingo, Stages 1 and 2
  - Shake and Spill, Stages 1 and 2



## Student Task Statement

Escoge un centro.

Contar colecciones



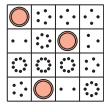
¿Cuál es?



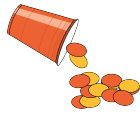
Libros de imágenes



Bingo



Revuelve y saca



## Launch

- Groups of 2
- Give each group a collection of objects and access to counting mats and 5-frames.
- *“Hoy vamos a conocer un centro nuevo llamado ‘Contar colecciones’. En parejas, descifren cuántos objetos hay en su colección. Usen las herramientas si les ayudan. Cuando ambos estén de acuerdo en cuántos objetos hay en la colección, pueden escoger otra colección” // “We are going to learn a new center called *Counting Collections*. Work with your partner to figure out how many objects are in your collection. Use the tools if they are helpful. When you and your partner agree on how many objects are in the collection, you can choose another collection.”*

## Activity

- 8 minutes: partner work time
- *“Ahora pueden escoger otro centro. También pueden seguir jugando ‘Contar colecciones’” // “Now you can choose another center. You can also continue playing *Counting Collections*.”*
- Display the center choices in the student book.
- Invite students to work at the center of their choice.
- 10 minutes: center work time
- If time, invite students to choose another center.

## Activity Synthesis

- *“¿Hicieron lo mismo que su compañero para descubrir cuántos objetos había en su colección? ¿Qué hicieron parecido? ¿Qué hicieron diferente?” // “Did you and your partner do the same thing to figure out how many objects were in your collection? What did you do the same? What did you do differently?”*

## Lesson Synthesis

*“Hoy les dimos nombre a los círculos y a los triángulos. ¿En qué son diferentes los círculos y los triángulos? ¿Qué palabras pueden usar para describir los triángulos? ¿Qué palabras pueden usar para describir los círculos?” // “Today we named circles and triangles. How are circles and triangles different? What words can you use to describe triangles? What words can you use to describe circles?”*

*“¿En qué lugares de su casa ven círculos u objetos que se parecen a los círculos? ¿En qué lugares ven triángulos?”*  
//“Where at home do you see circles or objects that look like circles? Where do you see triangles?”

## Observation

Lesson Observations for Unit 3, Section A

### Standards

Addressing K.G.B.4

### Look Fors

- Tell what is the same or different about two or more shapes.
- Use informal language to describe shapes.