



Dos Pollitas Listas ~ Shaping up with Geometry

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Intercultural Development Research Association

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Intercultural Development Research Association

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Listen to Classnotes Podcast episode on from this presentation, “Geometry in Early Childhood,” Episode 139 with Nilka Avilés, Ed.D.

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Objectives

- Create mental images of geometric shapes using spatial memory and spatial visualization
- Recognize and represent shapes from different perspectives
- Categorize, define, and relate figures in a variety of representations
- Use culturally connected instructional approaches such as storytelling, song, rhythm, imagery, cooperative learning and creative writing

Appointment Clock

Group Activity You Can Use with Students or in a Training Session with Adults:

Make an “appointment” with a different partner in the room for our pretend noon, 3:00, 6:00 and 9:00 times.

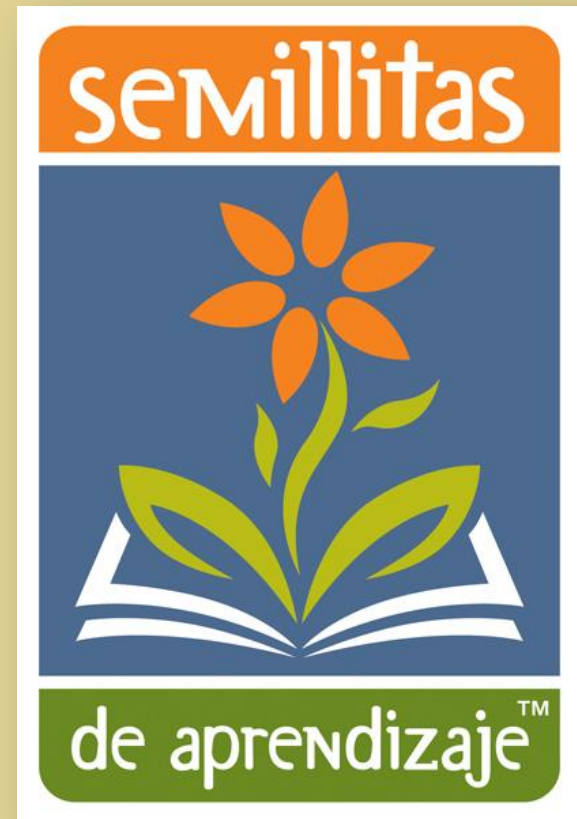


Noon

Share with your partner a childhood memory involving rhyme, rhythm and repetition

Semillitas de Aprendizaje™

Semillitas de Aprendizaje is a bilingual (Spanish/English) supplemental early childhood curriculum by IDRA that is based on the art of storytelling. Its culturally-relevant stories are for children to listen, view and then read along. Children eventually begin to repeat the stories and learn the art of creating their own stories as well as recite poetry. The teacher guide provides lesson activities for literacy development as well as integrating STEM.

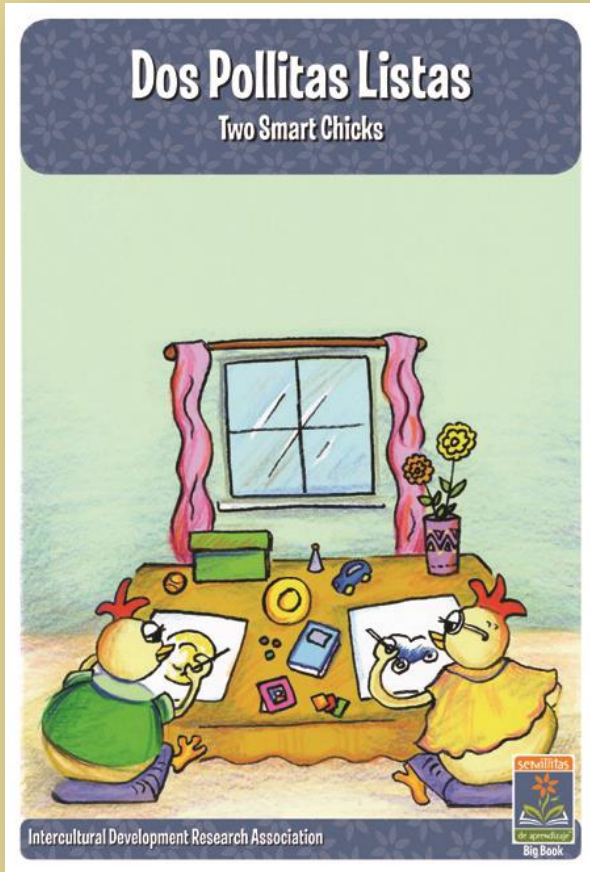


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Semillitas de Aprendizaje

Dos Pollitas Listas ~ Two Smart Chicks



In this story, two bright and creative little chicks discover a better way to learn and to share geometric shapes with their classmates for their homework assignment to search out and bring to class examples of all the geometric shapes they can identify at home.

The Power of Storytelling as a Tool for Language Learning

- We are all storytellers, especially teachers
- At the heart of human experience
- Our brains are wired for story
- Most powerful tool in your toolbox
- Encourages students to join in repetitive phrases or refrains
- Encourages them to create mental pictures

Storytelling

Storytelling is a shared social experience which provokes a response of laughter, sadness, empathy, excitement and anticipation that encourages social and emotional development.



How to Make Reading Fun

Emotions



Associations



Reasoning



Critical Thinking



Dos Pollitas Listas: Morning Song

by Hilda Reyes de Avilés and Dr. Nilka Avilés

(Música El Chorrito)

Carla y Clara son dos pollitas
Listas, alegres y muy bonitas
Estaban de buen humor (2)
Muy atareadas con su lección.

Buscaban formas de geometría
Triángulos grandes y de color
Círculos rojos y los cuadrados
Bastante grandes verde limón.

Buscaron formas rectangulares
Grandes, pequeñas color marrón
Y muy contentas con su maestra
Se dirigieron a su salón.



What is geometry?

Geometry

- The geometry strand of the *Principles and Standards for School Mathematics* covers skills and concepts of visualization, spatial reasoning and representation, and analyzing characteristics and properties of two and three dimensional shapes and their relationships
- Activities that support this mix of identifying and describing, moving and transforming geometric objects will help children explore important geometric ideas and inspire creative writing
- Geometry is found everywhere: art, architecture, engineering, space, sports, etc.

Geometry

- The foundations for geometric are laid early.
- Basic shapes are some of the first things infants learn to recognize.
- As children grow, they encounter two dimensional representations or “pictures” of familiar three dimensional objects.
- With experience, children learn to “read” these pictures and understand what they represent.
- Some children learn how to think with and reason about spatial information, but many do not.
- Significant research shows that teachers can improve children’s knowledge and ability to visualize and reason about the spatial aspects of the world in which they live.

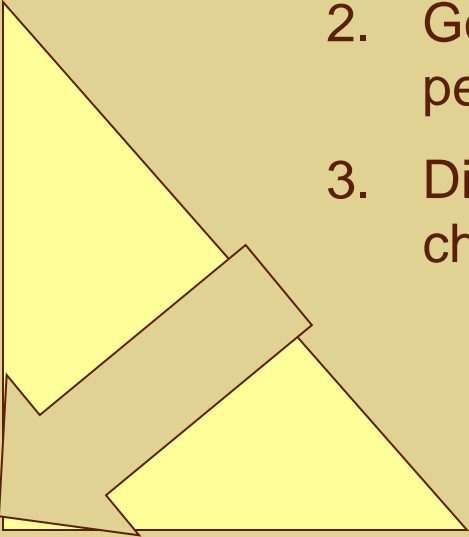
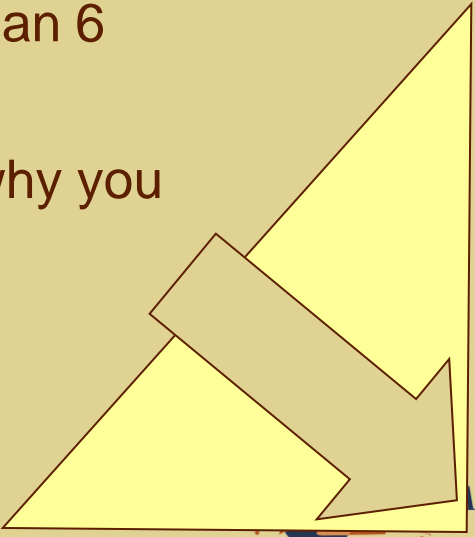
Shaping Up Academic Skills in Early Childhood

- Identify circles, squares, rectangles and triangles and describe their properties
- Describe shapes in the environment
- Design a picture made of shapes



Corners

Group Activity You Can Use with Students or in a Training Session with Adults:

1. Choose your first, second and third choices of corners.
 2. Go to your first choice corner. If more than 6 people are there, go to another corner.
 3. Discuss with the others in your corner why you chose it.
- 
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Corners: A Participation Structure

- Use to kickoff a new topic or unit or to conclude one.
- Make signs for four or more topics, for example colors, countries, characters or four or more choices on a scale.
- Have students move to a chosen sign and discuss why they chose it.
- Conduct a whole group discussion.

Name Objects According to Shapes

- Form teams of four and sit down.
- Number off 1,2,3,4.
- Put your heads together to name two objects that have the shape you chose.
- #4's respond first.

Numbered Heads Together



Count off. Remember your number.

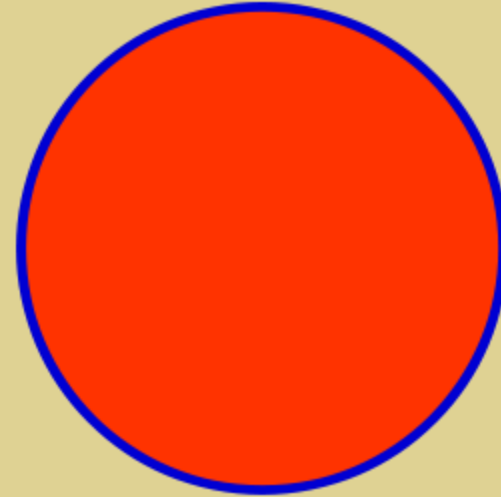
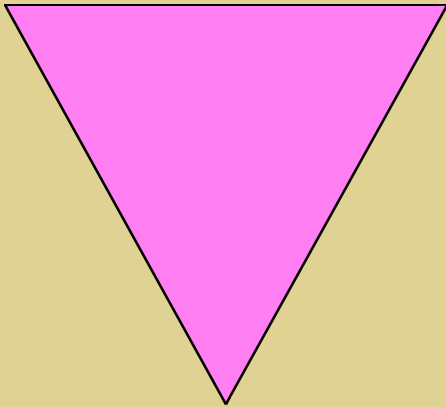


Put your heads together. Decide the right answer.



Stand if your number is called. Answer if your group is called.

Create Pictures with Shapes



Teams put their heads together to describe a picture which could be made with the two shapes

Creating Pictures with Shapes

- In your teams create pictures with the shapes.
- Glue pieces down. The shapes can be colored to add dimensions.
- Share your picture with another team and describe the way you used the shapes.

Individual Accountability

Have each student identify concrete and pictorial shapes and their properties by verbalizing them.

Ask students to name objects in the environment which are of each shape.



Nosotros fuimos a la tienda
vimos una maquina de chicles
comparamos 2 chicles. Luego fuimos
la casa y vimos un arbol
un espejo.



3.2.12

Los niños estaban jugando en el jardín.
Era Primavera y había muchos flores
y pajaros volando y estaba brillando
el sol.





<http://www.semillitasdeaprendizaje.com/>





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