| Problem/Slide # | Notes |
|---|---|

## Part 1: Matemáticas en Nuestra Vida Diaria (10 minutes/7:20 - 7:30)

**Matemáticas en Nuestra Vida Diaria**

¿Dónde usas las matemáticas en tu vida diaria? ¿Cómo las utilizas? ¿Qué haces con las matemáticas? Estos son algunos ejemplos.

| Donde usamos las matemáticas | Cómo usamos las matemáticas |
|---|---|
| En el supermercado | Contar dinero para pagar mis comestibles (Marina) |
| Cuidar a mis hijos | Preparar la fórmula para mi hijo de 2 años (Amanda) |
| En la cocina | Medir ingredientes cuando cocino (Jessica) |

**Matemáticas en Nuestra Vida Diaria**

¿Dónde usas las matemáticas en tu vida diaria? ¿Cómo las utilizas? ¿Qué haces con las matemáticas?

| Donde usamos las matemáticas | Cómo usamos las matemáticas |
|---|---|
| | |
| | |
| | |

**[**Note to Facilitators: Use the script and questions to support a free-flowing conversation about where and how we use mathematics in our daily life. Write what participants say, include their first names near their responses.

*Sometimes we don't realize how much we use math in our everyday lives. Today we want to talk about all the ways in which we use math, but don't even realize it. Think about where you use money, time, counting, measuring, etc.*

*Where do you use math in your everyday life?*
*How do you use it?*
*What do you do with math? Here are some examples.*

**Some Possible Questions for Prompting Discussion**
- What do you do for work?
  - Construction: Do you measure things in your work? Do you have to use spatial reasoning?
  - Domestic Worker: How do you decide how much cleaning agent to use? How do you organize your time and decide how much to spend in each room/house?
- Do you cook/bake? How do you figure out amounts to use? How do you decide on the size of a pan/pot to use?
- Do you go to the laundro-mat? How do you figure out how long it will take? How do you figure out how much it will cost? How much does a load cost, how did you figure that out?

# Part 2: Problemas matemáticos que nuestros hijos ven en las escuelas (40 minutes/7:30 - 8:10 PM)

**Problem 1**

Jessica has 12 balloons. Dan has 7 balloons.
How many more balloons does Jessica have than Dan?

**Notes:**

Image Source: https://balloonshopnyc.com/product/ultimate-polka-dots-assorted-colors-12-inch-latex-balloons-bouquet/

**Problema 1**

Jessica tiene 12 globos. Dan tiene 7 globos.
¿Cuántos globos más tiene Jessica?

**Notas:**

Image Source: https://balloonshopnyc.com/product/ultimate-polka-dots-assorted-colors-12-inch-latex-balloons-bouquet/

Big Idea/Concept: Word Problems/Compare Problem
Standard(s): 1.OA.1

[Note to Facilitator:  First show the problems in English. Then show slide in Spanish. Take notes on both slides]

*We are going to look at some examples of math problems that your children might see in their classroom or bring home for homework. We won't solve the problem, but let's talk about which ones you feel comfortable with and which ones might be challenging for you to do with your child and why.*

*Would you feel comfortable doing this problem with your child? Why or why not?  What would be challenging for you about supporting your child with the problem?*

Question Prompts:
- What do you understand about this problem?
  - Is there anything you (words, images, etc.) understand about this problem?What do you understand about this problem?
- What is happening in this problem?
- What is difficult for you about this problem?

Language Support:
Word problems can be challenging due to the language demands.  "How many more" can be difficult as the language of the problem doesn't explicitly tell you to compare.  In a K/1 classroom the teacher would read this problem aloud to the children and think about the meaning together.

Conceptual Support:
This word problem includes no action, the balloons are not being blown up and/or popped. Problems with action are easier for students because they can more easily visual what is happening.  In this problem, you must know that you need to compare in order to solve the problem.

**Problem 2**

Which of these number sentences are true and which are false?

$$6 = 1 + 5$$
$$2 + 3 = 5$$
$$5 + 5 = 10 + 2$$
$$10 + 7 = 11 + 7$$

Notes:

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**Problema 2**

¿Cuáles de estos enunciados numéricos son verdaderos y cuáles son falsos?

$$6 = 1 + 5$$
$$2 + 3 = 5$$
$$5 + 5 = 10 + 2$$
$$10 + 7 = 11 + 7$$

Notas:

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Big Idea/Concept: Operations/True or False Number Sentences
Standard(s): 1.OA.7

*Would you feel comfortable doing this problem with your child? Why or why not? What would be challenging for you about supporting your child with the problem?*

Question Prompts:
- What is this problem asking you to do?
- What do you understand about this problem?
    - Is there anything you (words, images, etc.) understand about this problem?
    - What questions do you have about the directions or the problems?
- Is one of them particularly tricky/difficult? Why?
- Can you only have one number on the left side of the equal sign?
- Can you have more than one number on the right side of the equal sign?

Language Support: Understanding what the question is asking the student to do might be difficult. The "which of these" could be particularly challenging.

Conceptual Support: The meaning of the equal sign is central to understanding this problem. The equal sign is about a relationship between the left and right side, but is often treated as a sign meaning to compute an answer. Most people will agree the second is true and the fourth is false. The difficulty can be with problem one that it seems "backwards", and possibly untrue to some, but both sides are 6, so it's true. Problem three might be true to some as they see 5+5=10, but the entire problem is asking is 10=12, so this is false.

**Problem 3**

What are the names of these shapes?
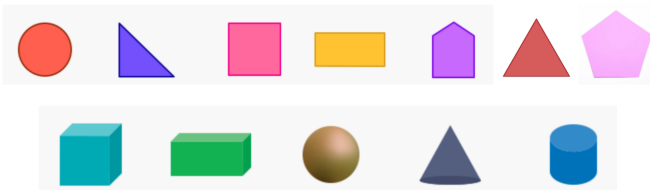How can you describe each shape?
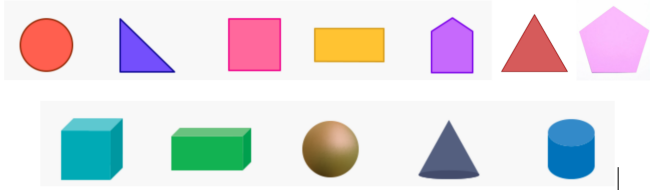


Notes:

**Problema 3**

¿Cuáles son los nombres de estas formas?
¿Cómo puedes describir cada forma?



Notas:

Big Idea/Concept:  Geometry/Identifying and Classifying Shapes
Standard(s):K.G.2, K.G.3 & 1.G.1

*Would you feel comfortable doing this problem with your child? Why or why not?  What would be challenging for you about supporting your child with the problem?*

Question Prompts:
- What is the problem asking you to do?
- What do you understand about this problem?
  - Is there anything you (words, images, etc.) understand about this problem?Which shapes are easier to describe or name? Why?
- Which ones are more difficult?
- What do you notice about certain shapes that make them different from other shapes?
- What words can we use to describe shapes?
- What are some differences between the first and second row of shapes?

Language Support:  Geometry has a lot of terms, so we may know the shape in our home language and examples of it in our everyday lives, but not know the specific term for it in English. This also goes for features of shapes, do we call it a line, side, flat? Do we call it circular, curved, or round? We have a number of terms, some mathematical and some descriptive, which gets into the use of  formal and informal language

Conceptual Support: Identifying and categorizing shapes can be difficult based on formal definitions and the use of specific vocabulary that may be unfamiliar. For example, a square is a specific case of a rectangle, but we often treat them as fundamentally different shapes. This also means the shape does not change based on orientation.

**Problem 4**

Decompose or "break apart" the number in as many ways as you can. Write number sentences.

23

Examples:

$$20 + 3 = 23$$
$$23 = 5 + 5 + 5 + 5 + 3$$
$$13 + 10 = 23$$
$$10 + 10 + 3 = 23$$
$$20 + 1 + 1 + 1 = 23$$

Notes:

**Problema 4**

Descompone o "rompe" el número de tantas maneras como puedas. Escribe enunciados numéricos.

23

Ejemplos:

$$20 + 3 = 23$$
$$23 = 5 + 5 + 5 + 5 + 3$$
$$13 + 10 = 23$$
$$10 + 10 + 3 = 23$$
$$20 + 1 + 1 + 1 = 23$$

Notas:

Big Idea/Concept: Place Value/Decomposing Numbers
Standard(s):K.NBT.1, K.OA.3, & 1.NBT.2

*Would you feel comfortable doing this problem with your child? Why or why not? What would be challenging for you about supporting your child with the problem?*

Question Prompts:
- What is the problem asking you to do?
- What do you understand about this problem?
  - Is there anything you (words, images, etc.) understand about this problem?
- Why are there so many different number sentences or equations?
- What is the problem asking you to do?
  What might be easy or difficult in finding different ways to break apart 23?

Language Support: Decompose or break apart might not be something that parents are familiar with.

Conceptual Support: Thinking flexibly about numbers and how we can break them apart is very important, specifically when we consider using tens in different ways. Often, 23 may only be thought of in the first way (20 + 3). However, the more flexible children are in thinking about numbers, the better they are in thinking mentally/abstractly about addition and subtraction. The second example also uses the equal sign differently, but putting only one number on the left side of the equal sign.

**Problem 5**

Jessica wants to share a pizza with three friends. Draw lines to show how Jessica should cut her pizza so each person gets the same amount of pizza.

**Notes:**

Source Image:
https://www.clipartmax.com/middle/m2K9A0m2m2m2A0A0_pizza-clipart-pizza-clip-art-pizza-images-for-teachers-pepperoni-pizza-clipart/

**Problema 5**

Jessica quiere compartir una pizza con tres amigos. Dibuja líneas para mostrar cómo Jessica debe cortar su pizza para que cada persona reciba la misma cantidad de pizza.

**Notas:**

Source Image:
https://www.clipartmax.com/middle/m2K9A0m2m2m2A0A0_pizza-clipart-pizza-clip-art-pizza-images-for-teachers-pepperoni-pizza-clipart/

Big Idea/Concept: Fractions/Partition Shapes
Standard(s):1.G.3

*Would you feel comfortable doing this problem with your child? Why or why not? What would be challenging for you about supporting your child with the problem?*

Question Prompts:
- What is the problem asking you to do?
- What do you understand about this problem?
  - Is there anything you (words, images, etc.) understand about this problem?
- How many people are sharing the pizza?
- What does it mean to share something?
  - Do the pieces need to be equal (the same size)?

Language Support: Word problems can be challenging due to the language demands. There is a lot of vocabulary in this problem that could be challenging (share, draw lines, should, etc). In a K/1 classroom the teacher would read this problem aloud to the children and think about the meaning together.

Conceptual Support: This problem can be difficult for the same reason as the compare problem in that it's a word problem. Also, you need to think about how many people the problem is talking about and use this information to share (Jessica and three friends, so 4 people). This also pushes us into thinking about fractions.The problem doesn't ask us to name the fractions but we must know how to divide a circle evenly for four people and that is a learned skill and much easier to do with a rectangle. The challenge is in knowing how to draw lines to create equal size pieces with a pizza (circle).

## Part 3:  Apoyando a Nuestros Niños en Las Matemáticas (10 minutes/ 8:10 - 8:20 PM)

**Apoyando a Nuestros Niños en Las Matemáticas**

**Pregunta 1:** ¿Cuáles son algunos ejemplos de cómo un maestro/a o la escuela de tu hijo/a te ha apoyado para trabajar con tu hijo/a en las matemáticas?

> **Notas:**

*Finally, let's talk about ways you, your child's teacher, or the school is supporting your child/children in mathematics.*

**Question 1:** What are some examples of how your child's teacher or school has supported you in working with your child in mathematics?

Prompting Questions:
- Is language support provided? Is that helpful?
- Is there a way for you to ask questions of the teacher?
- Has any mathematical support been provided to you? If so, what type of supports

**Pregunta 2:** ¿De qué manera podrían los maestr@s y las escuelas mejorar tu experiencia y la de tu hijo/a con las matemáticas en el futuro?

> **Notas:**

**Question 2:** In what ways could teachers and schools better support your and your child's math experience in the future?

Prompting Questions:
- Would math classes for parents be helpful?
- Have you ever attended a family math night or family math workshop? If one was offered, would you attend?
- Are materials or summaries of math concepts provided in Spanish? Would that be helpful?

**Pregunta 3:** ¿Qué haces cuando tú o tu hijo/a no pueden resolver un problema de matemáticas?

**Notas:**

**Question 3:** What do you do when you or your child/children can not solve a math problem?

Prompting Questions:
- Do you ask someone for help? A friend? A neighbor? An older child?
- What resources do you use? A computer program? An app on your phone or tablet?