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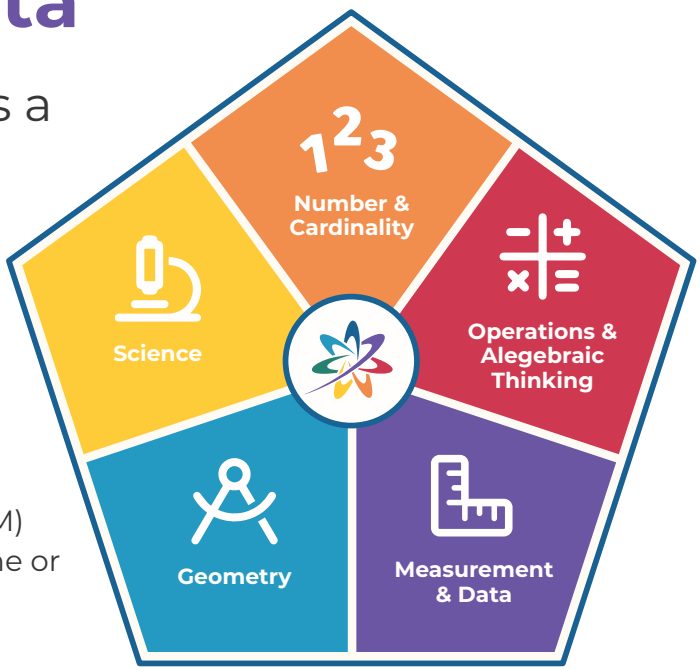
Measurement & Data

Measurement & Data

Measurement & Data develops a foundational understanding of measurement, time, money, and methods for gathering and using information.



There is 100% correlation between Waterford Early Learning's math and science curriculum™ and the National Council of Teachers of Mathematics (NCTM) Standards. All NCTM Standards are addressed in one or more levels of the curriculum.

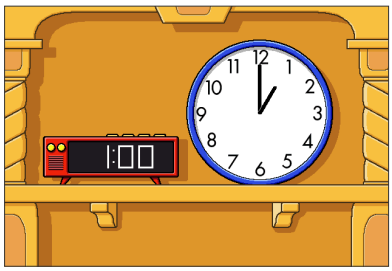
Measurement & Data Skills Taught | Overview

Beginning	Developing	Advanced
Compare, classify, and describe objects.	Represent data using tally marks, graphs, and diagrams.	Represent data using graphs.
Use digital and analog clocks to tell time to the hour.	Use digital and analog clocks to tell time to the half-hour.	Use digital and analog clocks to tell time to the minute.
Identify coins and their value.	Identify coin value and amounts of money.	Solve word problems.
Order objects by size, capacity, height, length, weight, etc.	Use objects to measure length.	Measure and estimate length using measurement tools.
	Compare measurable characteristics of different objects on the same dimensions (e.g., time, temperature, volume, weight, length, etc.)	Predict the likelihood of an event and verify the prediction.

View example Measurement & Data activities here.

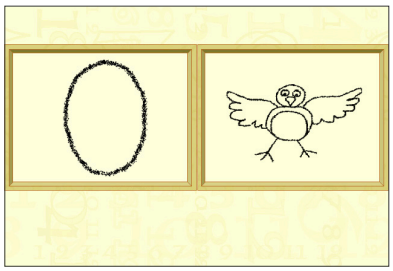
Telling Time

Learning to tell time helps students develop essential skills related to daily routines, organization, and understanding the concept of time. Mastery of telling time enables students to manage their schedules, follow instructions, anticipate events, and foster independence and responsibility through repetition, practice, and exposure to real-life examples.



Tell Time to the Hour

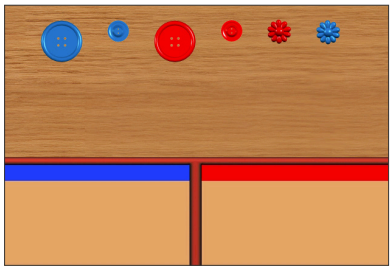
Telling Time Song



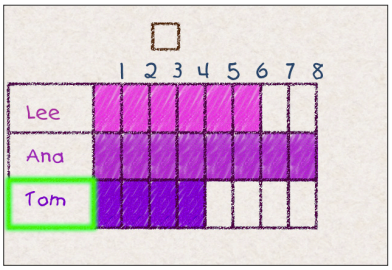
More Time, Less Time

Data and Graphs

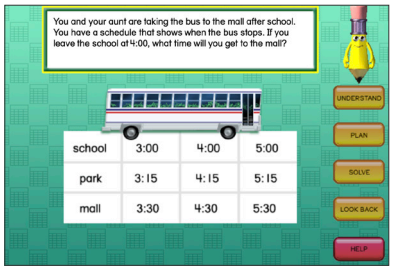
Reading graphs is important for students as it cultivates their data literacy, critical thinking, and analytical skills. Students learn to read graphs through engaging activities that involve interpreting pictographs, bar graphs, or simple charts, allowing them to make connections between visual representations and real-world information and fostering their ability to understand and analyze data effectively.



Sort Practice



Bar Graphs



Problem Solving Strategies (Use Graphs & Tables)

Coins and Value

Learning about coins and their value introduces students to the practical understanding of money, promotes basic numeracy skills, and establishes the foundation for financial literacy. This knowledge empowers them to make informed decisions about saving, spending, and exchanging money, setting them on a path toward financial responsibility and understanding the value of currency in their everyday lives.

Bugs for Sale

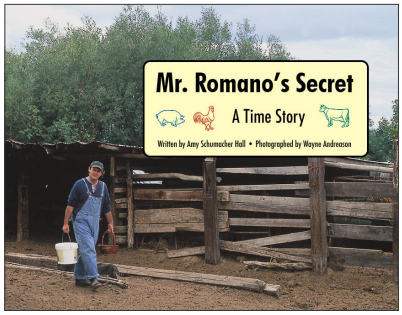
Count Dimes, Nickels, and Pennies

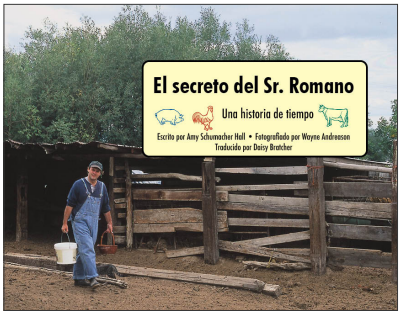
Count Bills and Coins

Offline Resources and Activities

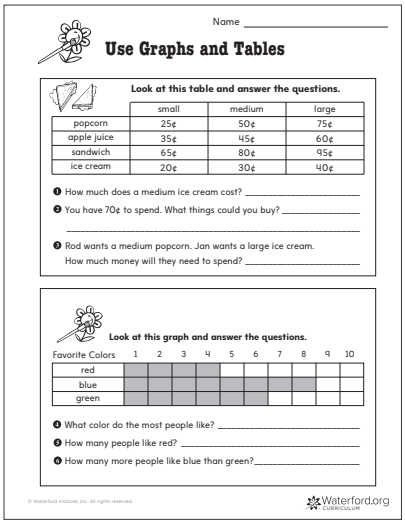
Waterford's offline resources are beneficial for educators as they provide hands-on learning experiences, engage students' senses, and promote the development of fine motor skills. These materials, available in English and Spanish, can be used in various educational settings—including classrooms and environments with limited technology access—to ensure equal learning opportunities and encourage independent thinking and creativity in students.

Children's Books introduce young readers to the world of counting, numerical concepts, and understanding quantities. Through engaging stories and colorful illustrations, these books foster a foundational understanding of numbers and how they relate to everyday life.





Teacher Resources support instruction and enhance learning in the classroom. Lesson plans, activities, and practice pages can be printed and used by educators to provide additional practice and enrichment opportunities.



Name _____

Use Graphs and Tables

Look at this table and answer the questions.

	small	medium	large
popcorn	25¢	50¢	75¢
apple juice	35¢	45¢	60¢
sandwich	65¢	80¢	95¢
ice cream	20¢	30¢	40¢

❶ How much does a medium ice cream cost? _____

❷ You have 70¢ to spend. What things could you buy? _____

_____

❸ Rod wants a medium popcorn. Jan wants a large ice cream. How much money will they need to spend? _____

Look at this graph and answer the questions.

Favorite Colors	1	2	3	4	5	6	7	8	9	10
red	■	■	■	■						
blue	■	■	■	■	■	■	■			
green	■	■	■	■	■	■	■			

❹ What color do the most people like? _____

❺ How many people like red? _____

❻ How many more people like blue than green? _____

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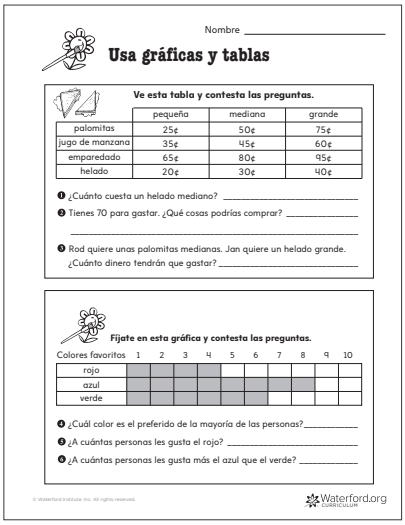

Nombre _____

Usa gráficas y tablas

Ve esta tabla y contesta las preguntas.

	pequeña	mediana	grande
palomitas	25¢	50¢	75¢
jugo de manzana	35¢	45¢	60¢
emparedado	65¢	80¢	95¢
helado	20¢	30¢	40¢

❶ ¿Cuánto cuesta un helado mediano? _____

❷ Tienes 70 para gastar. ¿Qué cosas podrías comprar? _____

_____

❸ Rod quiere unas palomitas medianas. Jan quiere un helado grande. ¿Cuánto dinero tendrán que gastar? _____

Fíjate en esta gráfica y contesta las preguntas.

Colores favoritos	1	2	3	4	5	6	7	8	9	10
rojo	■	■	■	■						
azul	■	■	■	■	■	■	■			
verde	■	■	■	■	■	■				

❹ ¿Cuál color es el preferido de la mayoría de las personas? _____

❺ ¿A cuántas personas les gusta el rojo? _____

❻ ¿A cuántas personas les gusta más el azul que el verde? _____

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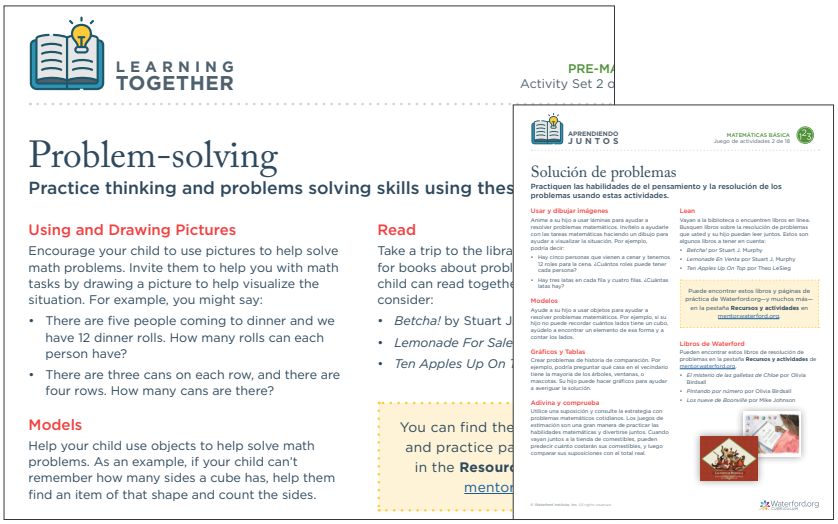
Learning Together Activity Sheets provide learning activities and resources for families. Each activity sheet includes simple and engaging ideas connected to the highlighted skills, as well as a variety of additional skills.



LEARNING TOGETHER

PRE-MA
Activity Set 2 c

Problem-solving

Practice thinking and problems solving skills using thes

Using and Drawing Pictures

Encourage your child to use pictures to help solve math problems. Invite them to help you with math tasks by drawing a picture to help visualize the situation. For example, you might say:

- There are five people coming to dinner and we have 12 dinner rolls. How many rolls can each person have?
- There are three cans on each row, and there are four rows. How many cans are there?

Models

Help your child use objects to help solve math problems. As an example, if your child can't remember how many sides a cube has, help them find an item of that shape and count the sides.

Read

Take a trip to the libra
for books about probl
child can read togethe
consider:

- *Betcha!* by Stuart J
- *Lemonade For Sale*
- *Ten Apples Up On*

You can find the
and practice pa
in the **Resour**
mentor

APRENDIENDO JUNTOS

MATEMÁTICAS BÁSICA
Juego de actividades 2 de 18

Solución de problemas

Practiquen las habilidades de el pensamiento y la resolución de los problemas usando estas actividades.

Usar y dibujar imágenes

Anime a su hijo a usar láminas para ayudar a resolver problemas matemáticos. Invítelo a ayudarle con las tareas matemáticas haciendo un dibujo para ayudar a visualizar la situación. Por ejemplo, podría decir:

- Hay cinco personas que vienen a cenar y tenemos 12 rollos para la cena. ¿Cuántos rollos puede tener cada persona?
- Hay tres latas en cada fila y cuatro filas. ¿Cuántas latas hay?

Modelos

Ayude a su hijo a usar objetos para ayudar a resolver problemas matemáticos. Por ejemplo, si su hijo no puede recordar cuántos lados tiene un cubo, ayúdelo a encontrar un elemento de esa forma y a contar los lados.

Gráficos y Tablas

Crear problemas de historia de comparación. Por ejemplo, podría preguntar qué casa en el vecindario tiene la mayoría de los árboles, ventanas, o mascotas. Su hijo puede hacer gráficos para ayudar a averiguar la solución.

Adivina y comprueba

Utilice una suposición y consulte la estrategia con problemas matemáticos cotidianos. Los juegos de estimación son una gran manera de practicar las habilidades matemáticas y divertirse juntos. Cuando vayan juntos a la tienda de comestibles, pueden predecir cuánto costarán sus comestibles, y luego comparar sus suposiciones con el total real.

Lean

Vayan a la biblioteca o encuentren libros en línea. Busquen libros sobre la resolución de problemas que usted y su hijo puedan leer juntos. Estos son algunos libros a tener en cuenta:

- *Betcha!* por Stuart J. Murphy
- *Lemonade En Venta* por Stuart J. Murphy
- *Ten Apples Up On Top* por Theo LeSieg

Puede encontrar estos libros y páginas de práctica de Waterford.org—y muchos más—en la pestaña **Recursos y actividades** en mentor.waterford.org

Libros de Waterford

Pueden encontrar estos libros de resolución de problemas en la pestaña **Recursos y actividades** de mentor.waterford.org

- *El misterio de las galletas de Chloe* por Olivia Birdsall
- *Pintando por número* por Olivia Birdsall
- *Las nueve de Bloomville* por Mike Johnson

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Visit Resources & Activities to find these resources and more!

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