

Project G.L.A.D.
Forest Grove School District
Measurement and Time (1st/2nd grade)
Corinna Woita

Idea Pages

I. UNIT THEME

- Measurement skills are used all of the time in our daily lives. Measurement makes our lives easier.

II. FOCUS/MOTIVATION

- *I Thought You Might Like to Know: Measurement* Big Book
- Inquiry Charts
- Observation Charts
- Measurement Realia: digital and analog clocks, thermometers, metric and standard rulers, yard sticks, meter sticks, measuring tapes, dry measuring cups, liquid measuring cups, measuring spoons, body weight scale, kitchen scale, growth chart, sand timers, hourglass, stop watch, kitchen timer, calendars

III. CLOSURE/EVALUATION

- Summary Letter to Families
- Measurement project displays (for Open House)

IV. CONCEPTS/UNDERSTANDINGS

- All things that take up space can be measured.
- You can measure length, weight, time, temperature, perimeter, area and volume.
- There are many different tools to measure things.
- You can measure using U.S. Standard, Metric, or nonstandard measurement.

V. VOCABULARY

measure	standard	metric	temperature	sundial
degrees	analog	digital	clock	units
watch	length	ruler	nonstandard	distance
foot	yard	perimeter	measuring tape	liquid
area	volume	weight	measurement	quart
height	inch	scale	measuring cups	gallon
time	minute	second	centimeter	calendar
day	week	month	hourglass	sand timer
teaspoon	cup	pint	tablespoon	capacity
kilogram	gram	liter	meter	width
dry	units	hour	year	ounce
pound				

VI. MATH SKILLS

- Temperature can be measured using U.S. Standard (Fahrenheit) and Metric (Celsius) tools of measure (thermometers).
- Time can be measured with U.S. Standard and nonstandard units and tools of measure.
- Time can be measured with both digital and analog clocks.
- Length, perimeter, area and volume can be measured using U.S. Standard, Metric, and nonstandard units and tools of measure.
- Rulers, yardsticks, and measuring tapes are tools used to measure length.
- Measuring cups can measure volume.
- Weight can be measured using U.S. Standard, Metric, and nonstandard units and tools of measure.
- A scale is a tool to measure weight.
- Measurement data can be collected, organized, and displayed using graphs.

VII. SCIENCE SKILLS

- Information can be gathered by observing, including the use of scientific instruments.
- Information gained through observing can be communicated by speaking, writing, drawing, or constructing.
- Numbers can be used to observe, measure, compare and communicate information.
- Different methods of inquiry can be used to observe and record data.
- Changes in daily and seasonal weather can be observed and described.

VIII. READING SKILLS

- Literal comprehension can be demonstrated by summarizing main ideas, facts, and events in informational selections.
- Locating information using illustrations, tables of contents, glossaries, indexes, headings, graphs, charts, diagrams, and/or tables will increase comprehension and learning.
- Nonfiction books contain factual information.

IX. WRITING SKILLS

- Expository writing can be used to explain an idea, teach a lesson, and/or define a topic.
- The writing process can be used as a tool to learn, reflect and communicate.

X. SPEAKING SKILLS

- Knowledge of a topic can be conveyed using main ideas with some supporting details appropriate to audience and purpose.

XI. RESOURCES

Measurement Books	
Title	Author
<i>Ten Beads Tall</i>	Adams, Pat
<i>How Tall, How Short, How Faraway</i>	Adler, David A.
<i>The Dragon's Scales</i>	Albee, Sarah
<i>Who Sank the Boat?</i>	Allen, Pamela
<i>All in a Day</i>	Anno, Mitsumasa
<i>Anno's Sundial</i>	Anno, Mitsumasa
<i>In Shadowland</i>	Anno, Mitsumasa
<i>Bats Around the Clock</i>	Appelt, Kathi
<i>Bear Shadow</i>	Asch, Frank
<i>Happy Birthday, Moon</i>	Asch, Frank
<i>Pigs in the Pantry</i>	Axelrod, Amy
<i>Pigs on a Blanket</i>	Axelrod, Amy
<i>Birthday Magic</i>	Baker, James
<i>How to Weigh an Elephant</i>	Barner, Bob
<i>Benjamin's 365 Birthdays</i>	Barrett, Judi
<i>Today is Monday</i>	Baum, Susan
<i>The Adventures of the One Inch Boy</i>	Boshi, Issun
<i>I'm Growing</i>	Brandenberg, Alik
<i>The Mitten</i>	Brett, Jan
<i>Jim and the Beanstalk</i>	Briggs, Raymond
<i>The Official M & M's Book of the Millennium</i>	Brimner, Larry Dane
<i>Marvin Measures Up</i>	Browning, Dave
<i>Happy Birthday, Dear Duck</i>	Bunting, Eve
<i>Spaghetti and Meatballs for All</i>	Burns, Marilyn
<i>The Enormous Egg</i>	Butterworth, Oliver
<i>The Principal's New Clothes</i>	Calmenson, Stephanie
<i>The Biggest Nose</i>	Caple, Kathy
<i>The Grouchy Ladybug</i>	Carle, Eric
<i>How Do You Say It Today, Jesse Bear?</i>	Carlstrom, Nancy White
<i>It's About Time, Jesse Bear</i>	Carlstrom, Nancy White
<i>Pulling My Leg</i>	Carson, Jo
<i>Mouse Time</i>	Cartlidge, Michelle
<i>Santa Makes a Change</i>	Chaneles, Sol
<i>Counting on Frank</i>	Clement, Rod
<i>January Brings the Snow</i>	Coleridge, Sara
<i>The King's Giraffe</i>	Collier, Mary Jo & Peter
<i>How Old is Old?</i>	Combs, Ann
<i>8 O'clock</i>	Creighton, Jill & Pariseau, Pierre-Paul
<i>The BFG</i>	Dahl, Roald

<i>P.B. Bear's Birthday Party</i>	Davis, Lee
<i>Time for School, Nathan!</i>	Delacre, Lulu
<i>Pancakes for Breakfast</i>	DePaola, Tomie
<i>Time and the Clockmice Etcetera</i>	Dickinson, Peter
<i>Alligators and Others All Year Long</i>	Dragonwagon, Crescent
<i>Tick-Tock</i>	Dunbar, James
<i>Our House on the Hill</i>	Dupasquier, Philippe
<i>The Wonderful Counting Clock</i>	Edens, Cooper
<i>Big Book of Time</i>	Edmonds, William
<i>Off the Clock</i>	Fakih, Kimberly Olson
<i>So Big: My First Measuring Book</i>	Faulkner, Keith
<i>Ask Mr. Bear</i>	Flack, Marjorie
<i>Time Train</i>	Fleischman, Paul
<i>Time for Bed</i>	Fox, Mem
<i>On the Day You Were Born</i>	Frasier, Debra
<i>The Cuckoo-Clock Cuckoo</i>	Fuchshuber, Annegert
<i>A Bag Full of Pups</i>	Gackenbach, Dick
<i>The Story of Weights and Measures</i>	Ganeri, Anita
<i>Happy Birthday Rotten Ralph</i>	Gantos, Jack
<i>The Biggest Sandwich Ever</i>	Gelman, Rita Golden
<i>The Missing 'Gator of Gumbo Limbo</i>	George, Jean Craighead
<i>The Old Man and His Birds</i>	Ginsburg, Mirra
<i>The Fly on the Ceiling</i>	Glass, Dr. Julie
<i>Brendan's Best-Timed Birthday</i>	Gould, Deborah
<i>Nine Days to Christmas</i>	Hall Ets, Marie and Labastida, Aurora
<i>It's Pumpkin Time!</i>	Hall, Zoe
<i>The Oxford Treasury of Time Poems</i>	Harrison, Michael & Stuart-Clark, Christopher
<i>It's About Time!</i>	Heide, Florence Parry
<i>A Piece of String is a Wonderful Thing</i>	Hindley, Judy
<i>Is It Larger? Is It Smaller?</i>	Hoban, Tana
<i>My Hands Can</i>	Holzenthaler, Jean
<i>Do You Know What Day Tomorrow Is?</i>	Hopkins, Lee & Arenstein, Misha
<i>It's About Time</i>	Hopkins, Lee Bennett
<i>Fannie in the Kitchen</i>	Hopkinson, Deborah
<i>Little Mouse's Birthday Cake</i>	Hurd, Thacher
<i>Clocks and More Clocks</i>	Hutchins, Pat
<i>Happy Birthday Sam</i>	Hutchins, Pat
<i>Biggest, Strongest, Fastest</i>	Jenkins, Steve
La hora	Jeunesse, Gallimard
<i>How Big is a Whale?</i>	Johnson, Jinny
<i>Farmer Mack Measures His Pig</i>	Johnston, Tony
<i>George Shrinks</i>	Joyce, William
<i>Orchestranimals</i>	Kampen, Vlasta Van and Eugen, Irene C.

<i>The Biggest Fish</i>	Keenan, Sheila
<i>Much Bigger Than Martin</i>	Kellogg, Steven
<i>More For Me!</i>	Kleinhenz, Sydnie Meltzer
<i>Big Time Bears</i>	Krensky, Stephen
<i>It's Groundhog Day</i>	Kroll, Steven
<i>The Biggest Pumpkin Ever</i>	Kroll, Steven
<i>Cucumber Soup</i>	Krudwig, Vickie Leigh
<i>The Librarian Who Measured the Earth</i>	Lasky, Kathryn
<i>Big, Small, Short, Tall</i>	Leedy, Loreen
<i>Measuring Penny</i>	Leedy, Loreen
<i>The Fattest, Tallest, Biggest Snowman Ever</i>	Ling, Bettina
<i>A Busy Year</i>	Lionni, Leo
<i>Inch by Inch</i>	Lionni, Leo
<i>A Circle of Seasons</i>	Livingston, Myra Cohn
<i>My First Book of Time</i>	Llewellyn, Claire
<i>The Stopwatch</i>	Lloyd, David
<i>The Giant Jam Sandwich</i>	Lord, John Vernon
<i>Monster Math School Time</i>	Maccarone, Grace
<i>The Story of Clocks and Calendars: Marking a Millennium</i>	Maestro, Betsy
<i>Animal Hours</i>	Manning, Linda and Van Kampen, Vlasta
<i>Measuring Up!</i>	Markle, Sandra
<i>Here Are My Hands</i>	Martin, Bill & Archambault, John
<i>Telling the Time</i>	Matthews, Rupert
<i>The Great Pumpkin Switch</i>	McDonald, Megan
<i>Happy Silly Birthday to Me</i>	McGovern, Ann
<i>The School Bus Comes at Eight O'Clock</i>	McKee, David
<i>Train Leaves the Station</i>	Merriam, Eve
<i>Emmett's Snowball</i>	Miller, Ned
<i>In the Next Three Seconds...</i>	Morgan, Rowland
<i>How Big Were the Dinosaurs?</i>	Most, Bernard
<i>Hickory, Dickory, Dock</i>	Muller, Robin & Duranceau, Suzanne
<i>Mmm, Cookies</i>	Munsch, Robert
<i>Moira's Birthday</i>	Munsch, Robert
<i>Just a Little Bit</i>	Munsinger, Lynn
<i>Get Up and Go!</i>	Murphy, Stuart
<i>Pepper's Journal</i>	Murphy, Stuart
<i>Room For Ripley</i>	Murphy, Stuart
<i>Super Sand Castle Saturday</i>	Murphy, Stuart
<i>The Best Bug Parade</i>	Murphy, Stuart
<i>How Big is a Foot?</i>	Myller, Rolf
<i>The Long and Short of It</i>	Nathan, Cheryl & McCourt, Lisa
<i>Melisande</i>	Nesbit, E. & McCourt, P.J.
<i>Sir Cumference and the First Round Table</i>	Neuschwander, Cindy

<i>Harvey Potter's Balloon Farm</i>	Nolen, Jerdine
<i>Telling Time</i>	Older, Jules
<i>Blue Monday and Friday the Thirteenth</i>	Perl, Lila
<i>Louise Builds a Boat</i>	Pfanner, Louise
<i>Length</i>	Pluckrose, Henry Arthur
<i>Some Birthday!</i>	Polacco, Patricia
<i>The NBA Book of Big and Little</i>	Preller, James
<i>The Year at Maple Hill Farm</i>	Provinsen, Alice and Martin
<i>Mrs. Toggle and the Dinosaur</i>	Pulver, Robin
<i>Pumpkins</i>	Ray, Mary Lyn
<i>It's About Time, Max!</i>	Richards, Kitty
<i>Bear Child's Book of Hours</i>	Rockwell, Anne
<i>Only Six More Days</i>	Russo, Marisabina
<i>The Line Up Book</i>	Russo, Marisabina
<i>Birthday Presents</i>	Rylant, Cynthia
<i>Slower Than a Snail</i>	Schreiber, Anne
<i>Somewhere in the World Right Now</i>	Schuett, Stacey
<i>If You Hopped Like a Frog</i>	Schwartz, David M.
<i>Happy Birthday to You</i>	Seuss, Dr.
<i>What Time is Grandma Coming?</i>	Seymour, Peter
<i>Mr. Cuckoo's Clock Shop</i>	Shapiro, Arnold
<i>Tiffany Dino Works Out</i>	Sharmat, Marjorie Weinman
<i>The Time It Took Tom</i>	Sharratt, Nick and Stephen Tucker
<i>Marcellus' Birthday Cake</i>	Simeon, Lorraine
<i>Nine O'Clock Lullaby</i>	Singer, Marilyn
<i>Round and Round</i>	Skofield, James
<i>Donde vive el tiempo</i>	Skutina, Vladimir
<i>The Biggest Birthday Cake in the World</i>	Spurr, Elizabeth
<i>Cook-a-Doodle-Do</i>	Stevens, Janet & Crummerl, Susan Stevens
<i>The Money Tree</i>	Stewart, Sarah
<i>How Big is Big?</i>	Strauss, Stephen
<i>Me Counting Time</i>	Sweeney, Joan
<i>Me and the Measure of Things</i>	Sweeney, Joan
<i>What's the Time?</i>	Tankel, Lara
<i>Pumpkin Pumpkin</i>	Titherington, Jeanne
<i>Nothing Sticks Like a Shadow</i>	Tompert, Ann
<i>Sue Patch and the Crazy Clocks</i>	Tompert, Ann
<i>The Ever-Living Tree</i>	Vieira, Linda
<i>Sunday Morning</i>	Viorst, Judith
<i>Cookie's Week</i>	Ward, Cindy and DePaola, Tomie
<i>Lion Dancer</i>	Waters, Kate and Slovenz-Low, Madeline
<i>How Many? How Much? Measuring</i>	Weiss, Monica
<i>Is a Blue Whale the Biggest Thing There Is?</i>	Wells, Robert E.

<i>What's Smaller Than a Pygmy Shrew?</i>	Wells, Robert E.
<i>How Many, How Much</i>	Wells, Rosemary
<i>My Place</i>	Wheatley, Nadia
<i>Tuesday</i>	Wiesner, David
<i>Kay's Birthday Numbers Book</i>	Wilkins, Verna Allette
<i>Kids Cook!</i>	Williamson, Sarah & Zachary
<i>Dime Cuanto Pesa</i>	Willis, Shirley
<i>Dime Que Hora Es</i>	Willis, Shirley
<i>Dime Que Tan Lejos Esta De Aqui</i>	Willis, Shirley
<i>Tell Me How Far It Is</i>	Willis, Shirley
<i>Tell Me How Much It Weighs</i>	Willis, Shirley
<i>Tell Me What the Time Is</i>	Willis, Shirley
<i>A Big Fish Story</i>	Wylie, Joanne & David
<i>Weighing the Elephant</i>	Ye, Ting-xing
<i>Measure Me</i>	Ziefert, Harriet
<i>What's a Birthday?</i>	Ziefert, Harriet
<i>Over and Over</i>	Zolotow, Charlotte
<i>Clocks</i>	Zubrowski, Bernie

Project G.L.A.D.
Forest Grove School District
Corinna Woita
Measurement and Time (1st/2nd grade)

Unit Planning Pages

I. FOCUSING/ MOTIVATION

- *I Just Thought You Might Like to Know: Measurement Big Book*
- Read aloud
- Inquiry chart
- Observation charts
- Measurement Realia: digital and analog clocks, thermometers, metric and standard rulers, yardsticks, meter sticks, measuring tapes, dry measuring cups, liquid measuring cups, scale
- Picture file cards
- Master Measurer awards, badges, notebooks

II. INPUT

- Pictorial input chart: *Time Measurement Tools*
- Read Alouds: *Tick Tock, The Grouchy Ladybug, On the Day You Were Born, Measuring Penny, Farmer Mack Measures His Pig, Inch By Inch, Tell Me How Much It Weighs, Fannie in the Kitchen, Super Sandcastle Saturday, Telling Time*
- Comparative input chart: *Analog/Digital Clocks*
- Graphic organizer: (*Webbing or Brace map*) *Units of Measurement*
- Narrative input: *Baby Bear's Busy Day*

III. GUIDED ORAL PRACTICE

- T-chart for cooperative group rules
- Measurement chants
- Cooperative learning
- Think-pair-share
- Farmer in the Dell chart
- Process grid: *Measurement, tools & occupations that use measurement*
- Vocabulary matching on pictorial chart and comparative input chart
- Measurement Poems

IV. READING/WRITING ACTIVITIES

Whole Class

- Shared Reading Experience
- Interactive writing

Cooperative Choices

- Flexible Guided Reading groups
- Cooperative strip paragraphs

- Buddy reading
- Farmer in the Dell sentence strip books (“Measuring Here, Measuring There...”)
- Expert groups
- Ear-to-ear reading
- Poetry reading
- Big Books
- Reading the walls

Individual Choices/Writers’ Workshop

- Silent sustained reading
- Reading response journaling
- Writer’s Workshop, including conferencing with the teacher
- Author’s chair
- Reading the walls
- Learning Log writing
- Peer Editing

V. EXTENDED ACTIVITIES FOR INTEGRATION

- Second grade hall mural of measurement
- Measurement data gathering and graphing
- Linear Leaps (Length measurement activity by Kim Sutton)
- Student written chants
- Multiple Intelligences activities
- Make a measuring tape, ruler, etc.
- Cooking
- Poetry recital
- Measurement Songs (Ron Brown’s “Math Concepts I & II CD)

VI. CLOSURE/EVALUATION

- Process inquiry and observation charts
- Summary letters to parents
- Presentation of measurement projects at Open House or Friends and Family luncheon
- Cooperative team presentation of chants and songs
- Ongoing assessment

XII. RESOURCES

Non-fiction

- *What Makes Day and Night?*, Franklyn M. Branley, HarperCollins, 1986
- *How Much, How Many, How Far, How Heavy, How Long, How Tall is 1000?*, Helen Nolan, Kids Can Press Ltd., 1995
- *Measuring Penny*, Loreen Leedy, Henry Holt and Co., 1966
- *Whiz Kids: Tell Me How Far It Is*, Shirley Willis, Grolier, 1999
- *Whiz Kids: Tell me How Much It Weighs*, Shirley Willis, Grolier, 1999
- *Whiz Kids: Tell Me What The Time Is*, Shirley Willis, Grolier, 1999

- *The 100-Pound Problem*, Jennifer Dussling, The Kane Press, 2000
- *Time*, Henry Pluckrose, Children's Press, 1995
- *Counting Time*, Joan Sweeney, Crown Publishers Inc., 2000

Fiction

- *Pepper's Journal A Kitten's First Year*, Stuart J. Murphy, HarperCollins, 2000
- *Super Saturday Sand Castle*, Stuart J. Murphy, HarperCollins, 1999
- *Tuesday*, David Wiesner, Houghton Mifflin Co., 1991
- *Sunday Morning*, Judith Viorst, Aladdin Paperbacks, 1978
- *George Shrinks*, William Joyce, HarperCollins, 2000
- *Cook-A-Doodle-Do!*, Janet Stevens and Susan Stevens Crummel, Harcourt Brace & Co., 1999
- *Get Up And Go*, Stuart J. Murphy, HarperCollins, 1996
- *Lulu's Lemonade*, Barbara deRubertis, The Kane Press, 2000
- *High Noon*, Scott Sundby, Charlesbridge, 2000

Spanish Books

- *El misterio de las medidas*, Adria Klein, Metropolitan Teaching and Learning Co., 1999
- *Ya es hora*, Jack Beers, Metropolitan Teaching and Learning Co., 1999
- *El tiempo que tardó Tomás*, Nick Sharratt, Lectorum, 1998
- *Los estupendos: Dime cuánto pesa*, Shirley Willis, Grolier, 1999
- *Los estupendos: Dime qué hora es*, Shirley Willis, Grolier, 1999

I Just Thought You Might Like to Know: Measurement

By Corinna Woita

I just thought you might like to know.

- ❖ There are many ways that we can **measure** things to find out more about them and to compare them.

I just thought you might like to know.

measurement: *n. The quantity, capacity, or dimensions determined by measuring.*

I just thought you might like to know.

- ❖ We can measure to find the **distance** between people, places, or things.
- ❖ We can measure **height**, **length**, and **width** to find out the size of things.

I just thought you might like to know.

I just thought you might like to know.

- ❖ Sometimes we measure the distance around an object.
- ❖ This measurement is called **perimeter**.

I just thought you might like to know.

I just thought you might like to know.

- ❖ Sometimes we measure the space that something covers.
- ❖ The space is called the **area**.

❖ We can measure size and distance using **standard units** called **inches, feet** and **yards**.

❖ The **metric units** are called **centimeters** and **meters**.

I just thought you might like to know.

I just thought you might like to know.

❖ We can **weigh** things to see how heavy things are.

❖ We measure how much something weighs using standard units called **ounces** and **pounds** or metric units called **grams** and **kilograms**.

I just thought you might like to know.

I just thought you might like to know.

❖ We can measure to find out how much a container holds. We call this **capacity**.

❖ We measure capacity using units called **cups, pints, and quarts**, or metric units called **liters**.

I just thought you might like to know.

I just thought you might like to know.

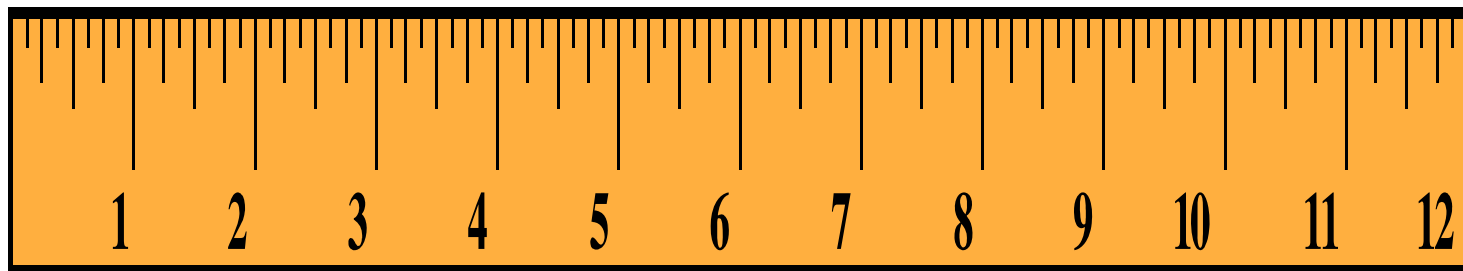
❖ Sometimes we measure time with **clocks** and **calendars**.

❖ We measure time on a clock using units called **seconds, minutes, and hours**.

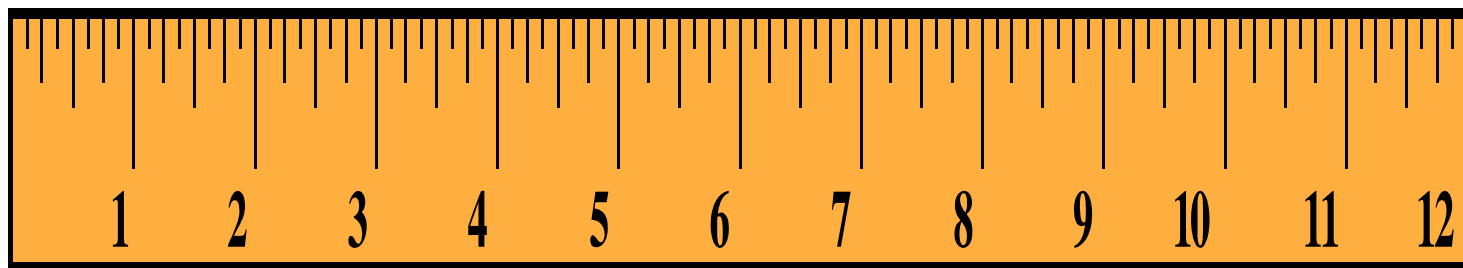
❖ We measure time on a calendar using **days, weeks, months, and years**.

I just thought you might like to know.

How many ways do you use measurement each day?



I Thought You Might
Like To Know:
Measurement!



TAL VEZ TE INTERESA ENTENDER

escrito por Corinna Woita, traducción al español por Laura Curry

Quizás te gustaría saber...

Hay muchas maneras en que podemos *medir* las cosas para compararlas y para ganar más información sobre ellas.

Tal vez te interesa entender.

medida f. Una cantidad, una capacidad, o unas dimensiones comparadas a una unidad de medir.

Quizás te gustaría saber...

- Podemos medir *la distancia* entre personas, lugares o cosas.
- Podemos medir *la altura, la largura y la anchura* para encontrar el tamaño de cosas.

Tal vez te interesa entender.

Quizás te gustaría saber...

- A veces medimos *la distancia alrededor* de un objeto.
- Esta medida se llama *el perímetro*.

Tal vez te interesa entender.

Quizás te gustaría saber...

- A veces medimos *el espacio que algo cubre*.
- Este espacio se llama *el área*.
- Podemos medir tamaño y distancia usando *unidades estándares* que se llaman *pulgadas, pies y yardas*.
- *Las unidades métricas* se llaman *centímetros y metros*.

Tal vez te interesa entender.

Quizás te gustaría saber...

- Podemos medir *el peso* de las cosas.
- Podemos ver cuánto pesa algo usando unidades estándares que se llaman *onzas* y *libras* o usando unidades métricas que se llaman *gramos* y *kilogramos*.

Tal vez te interesa entender.

Quizás te gustaría saber...

- Podemos medir cuánto cabe en un recipiente. Esto se llama *la capacidad*.
- Medimos capacidad usando unidades estándares que se llaman *tazas*, *pintas* y *cuartos de galón*, o usando unidades métricas que se llaman *litros*.

Tal vez te interesa entender.

Quizás te gustaría saber...

- Medimos el tiempo con *relojes* y con *calendarios*.
- Medimos el tiempo en un reloj usando unidades que se llaman *segundos*, *minutos*, y *horas*.
- Medimos el tiempo en un calendario usando *días*, *semanas*, *meses* y *años*.

Tal vez te interesa entender.

Y ahora nos gustaría saber...

¿En cuántas maneras usas tú las medidas cada día?

Based on Anne Rockwell's *Bear Child's Book of Hours*

By Corinna Woita

9:00 Rrrrring! Baby Bear's alarm clock tells him that it is nine o'clock—time to wake up and get dressed.

9:30 Baby Bear helps Mama Bear make breakfast. He measures a tablespoon of brown sugar into his oatmeal. He pours a cup of milk for himself.

"What time is it, Mama?" asks Baby Bear.

"It is 9:30, Baby Bear," answers Mama Bear. "The short hour hand is pointing to the 9 and the long minute hand is pointing to the 6, which stands for thirty minutes. That means that it is 9:30."

10:00 Baby Bear and Mama Bear sit down to eat breakfast. He watches the clock, which seems to be ticking too slowly for Baby Bear.

"What time is it, Mama?" asks Baby Bear.

"It is a quarter past 10:00," says Mama Bear. "The short hour hand is pointing to the 10 and the long minute hand is pointing to the 3, which means that 15 minutes have passed."

"Oh! A quarter is $\frac{1}{4}$ of an hour, which is 15 minutes," says Baby Bear.

11:00 Baby Bear helps Mama Bear wash and dry the dishes. He looks at the clock in the kitchen and wishes it were time to play.

"When is it time to play?" asks Baby Bear.

"In a half-hour," says Mama Bear.

"How long is a half-hour?" wonders Baby Bear.

"An hour is 60 minutes. Half of 60 is 30." replies Mama Bear.

"I know! A half-hour is 30 minutes!" cheers Baby Bear.

12:00 Baby Bear and Mama Bear go for a walk outside, to plan where they want to plant a new flowerbed. Baby Bear and Mama Bear find a perfect spot and measure how long and how wide they want to make the garden. Mama Bear uses a measuring tape to see how long it is.

"How long is it, Mama?" asks Baby Bear.

"It is 4 feet (48 inches) long and 2 feet (24 inches) wide," replies Mama Bear. "That will be plenty of room for our new flowers."

"What time is it?" asks Baby Bear.

"It's a quarter 'til one," says Mama Bear.

"Hmm... A quarter of an hour is 15 minutes, so that must mean that it is 15 minutes until one o'clock."

"Yes, Baby Bear. It is also 12:45. The long minute hand has passed by 45 minutes on the clock."

"Wow! It's 12:45 and a quarter to one? Does that mean it is time to play?" hopes Baby Bear.

"No Baby Bear, that means it is time to eat lunch," says Mama Bear.

1:00 Baby Bear and Mama Bear eat lunch outside on the picnic table. After lunch they enjoy the midday sun.

"What time is it now, Mama?" asks Baby Bear.

"It's 2:00. It's time to play," says Mama Bear.

2:00 Baby Bear and his friend Bitsy Bear play outside with a ball. Later, they decide to race.

"I wonder how fast we run?," asks Baby Bear.

"I know," says Bitsy, "We can use my dad's stopwatch and it will tell us how many minutes and seconds it takes us to run to the finish line."

They take turns timing each other running until they finally get too hot.

"Baby Bear!" calls Mama Bear. "It's time to come in."

"What time is that?" asks Baby Bear.

"It's 3:00, now come inside."

3:00 Baby Bear decides to play with his blocks and he builds a tall tower.

"Hmm...I wonder how tall my tower is? I bet I can measure it using Mama's yardstick!" His tower was 36 inches tall—one yard.

4:00 "Baby Bear, it's time to make our flower bed," says Mama Bear.

"What time is that?" asks Baby Bear.

"The short hour hand is on the 4 and the long minute hand is on the 12," says Mama Bear.

"It's 4 o'clock!" cries Baby Bear.

Baby Bear and Mama Bear use a measuring tape to make the flowerbed.

"Wouldn't it look nice to put a small fence around our flowerbed? How long is it all the way around the edges, Baby Bear?" asks Mama.

"Hmm..." Baby Bear uses a calculator to help him with the big numbers. "This long side is 48 inches and there are 2 of them. So that makes 96 inches. The short side is 24 inches, but there are 2 of them. So, that makes 48. $48 + 96$ equals 144 inches."

"Good Job, Baby Bear. You just found out that the perimeter is 144 inches."

"I did? Wow!"

Baby Bear helps Mama Bear finish the flowerbed, and then they go inside to make dinner.

5:00 Dad Bear, Mama and Baby Bear sit down to eat dinner at 5:00.

When they finish dinner, Baby Bear asks to have a story read to him before bedtime.

6:00 Dad Bear reads a story to Baby Bear, but Baby Bear begs for a few more stories.

"OK, Baby Bear, but I am going to set the sandtimer and when 60 minutes are up, it is time for you to go to sleep."

7:00 After one hour, all the sand has fallen to the bottom of the timer,
and it is time for Baby Bear to be tucked into bed by Mama and Papa Bear.
It's time for sleep.

Basado en *Bear Child's Book of Hours* por Anne Rockwell

Por Corinna Woita

traducción al español por Laura Curry

9:00 ¡Rrrin! Osito mira su reloj despertador y ve que son las nueve—hora de despertarse y vestirse.

9:30 Osito ayuda a su mamá a preparar el desayuno. Mide una cucharada de azúcar y la echa a su avena. Llena su vaso con una taza de leche.

"¿Qué hora es?" Osito le pregunta a su mamá.

"Son las nueve y media, Osito," contesta Mamá Osa. "La manecilla corta de las horas está apuntando al nueve, y la manecilla larga de los minutos está apuntando al seis, que significa 30 minutos. Esto quiere decir que son las nueve y media."

10:00 Osito y su mamá se sientan para comer el desayuno. Osito estaba mirando el reloj, que le parecía mover demasiado despacio.

"¿Que hora es, Mamá?" pregunta Osito.

"Son las diez y cuarto," le dice Mamá. "La manecilla corta de las horas está apuntando al diez, y la manecilla larga de los minutos está apuntando al tres, que significa que han pasado 15 minutos."

"¡Oh! Un cuarto de hora es lo mismo que 15 minutos!" dice Osito.

11:00 Osito ayuda a su mamá a lavar y secar los platos. Mira al reloj de la cocina, con muchas ganas de jugar.

"¿Cuándo será hora de jugar?" pregunta Osito.

"En media hora," dice Mamá Osa.

"¿Cuánto es media hora?" pregunta Osito.

"Una hora es 60 minutos. La mitad de 60 es 30," contesta su mamá.

"¡Ya entiendo! ¡Media hora es lo mismo que 30 minutos!" grita Osito.

12:00 Osito y Mamá Osa caminan afuera, para planear dónde quieren plantar un jardín de flores nuevo. Encuentran el lugar perfecto, y lo miden para saber cuán largo y cuán ancho lo quieren hacer. Mamá Osa usa una cinta de medir para averiguar las medidas.

"¿Qué tan grande es?" pregunta Osito.

"Mide 4 pies (48 pulgadas) de largo y 2 pies (24 pulgadas) de ancho," contesta Mamá. "Habrá bastante lugar para nuestras flores nuevas."

"¿Qué hora es?" pregunta Osito.

"Es la una menos cuarto", dice Mamá Osa.

"Hmm...Un cuarto de hora es 15 minutos, entonces quiere decir que falta 15 minutos para la una."

"Sí, Osito. También se puede decir que son las 12:45. La manecilla larga de los minutos ha pasado 45 minutos en el reloj."

"¡Guau! Son las 12:45 y la una menos cuarto? ¿Eso quiere decir que es hora de jugar?" espera Osito.

"No Osito, eso quiere decir que es hora de comer el almuerzo," dice Mamá Osa.

1:00 Osito y su mama comen su almuerzo afuera. Después descansan, tomando el sol de mediodía.

"¿Qué hora es, Mamá?"

"Son las dos. Es hora de jugar," dice Mamá Osa.

2:00 Osito y su amiga Mina juegan afuera con la pelota. Luego, deciden hacer una carrera.

"Me gustaría saber qué rápido podemos correr," piensa Osito.

"Tengo una idea", dice Mina. Podemos usar el cronómetro de mi papá para averiguar cuántos minutos y cuántos segundos duramos en llegar al final."

Toman turnos midiendo su tiempo de correr, hasta que tengan demasiado calor.

"¡Osito!" llama Mamá. "Es hora de volver a casa."

"¿Qué hora es?" pregunta Osito.

"Son las 3:00, ven adentro."

3:00 Osito empieza a jugar con sus bloques, y hace una torre alta.

"Hmm...me gustaría saber qué alto es mi torre. ¡Pienso que la podría medir con la vara de medir de Mamá!" Su torre mide 36 pulgadas—una yarda.

4:00 "Osito, es hora de hacer nuestro jardín de flores," dice mama Osa.

"¿Qué hora es?" pregunta Osito.

"La manecilla corta de las horas está en el 4 y la manecilla larga de los minutos está en el 12," dice Mamá.

"¡Son las cuatro!" grita Osito.

Osito y su mama usan una cinta de medir para hacer su jardín de flores.

"¿No se mirará bonito una cerca chiquita alrededor del jardín? ¿Cuánto mide todo alrededor de los bordes, Osito?" pregunta Mamá Osa.

"Hmm..." Osito usa una calculadora para ayudarle con los números grandes. "Este lado largo mide 48 pulgadas, y hay dos lados largos. Así que suman a 96. El lado corto mide 24 pulgadas, pero hay dos de ellos. Suman a 48. 48 más 96 da 144 pulgadas."

"Bien hecho, Osito. Descubriste que el perímetro es 144 pulgadas."

"¿De veras? ¡Guau!"

Osito le ayuda a Mamá a terminar el jardín, y se van adentro para preparar la cena.

5:00 Papá Oso, Mamá Osa y Osito comienzan a cenar a las 5:00. Cuando terminan de comer, Osito pide que le lean un cuento antes de acostarse.

6:00 Papá Oso lee un cuento a Osito, pero Osito quiere que sigan leyendo más.

"Está bien, Osito, pero voy a marcar el tiempo con este reloj de arena, y cuando se acaban 60 minutos, ya tienes que dormir."

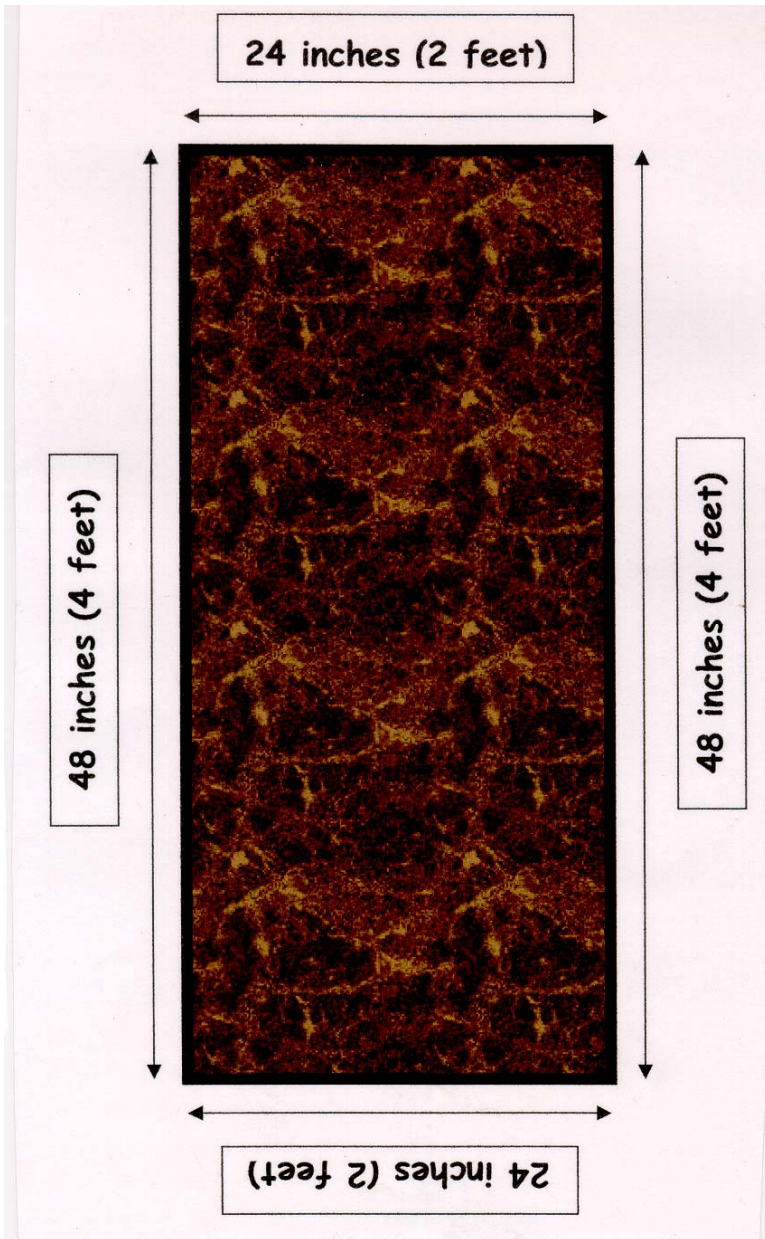
7:00 A las siete, ya ha caído toda la arena del reloj, y Mamá y Papá le dan un beso a Osito, y le dejan soñando en su camita. Buenas noches.

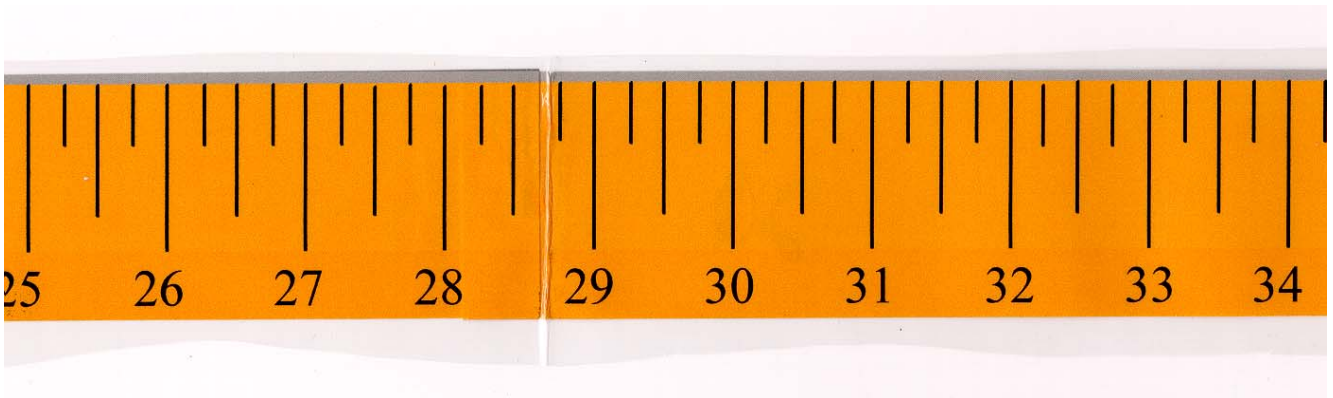
Process Grid

Measurement Tools	What Can We Measure?	Occupations That Use Measurement
time		
temperature		
capacity		
weight		
length		

Narrative Input Chart: pieces









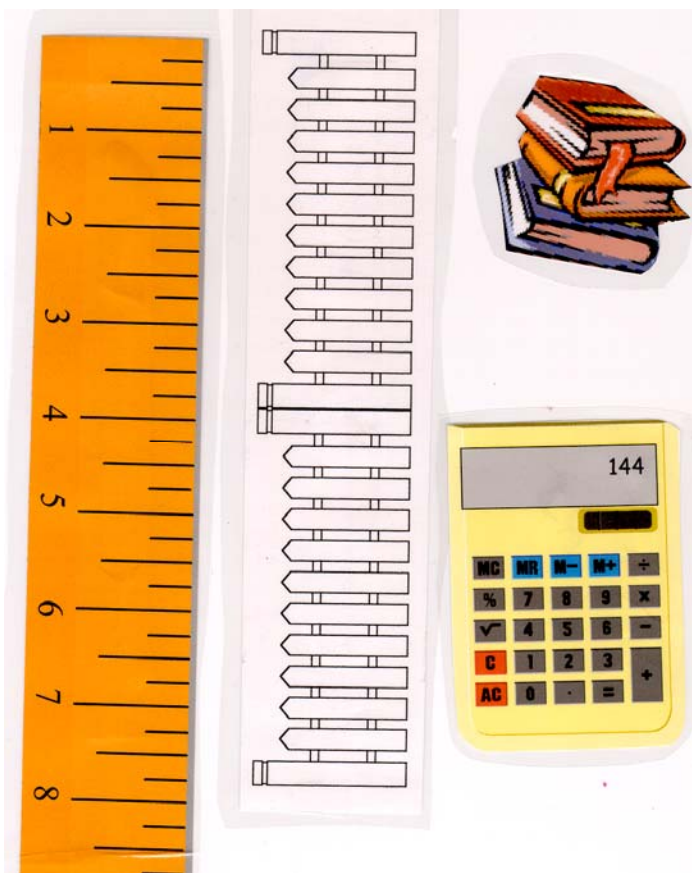












Measurement Poems

Name: _____



I'M A CLOCK

sung to the tune of "I'm a Little Piece of Tin"
by Laura Curry

I'm a clock, I tell the time,
On the hour you might hear me chime.
I have two hands, one's short, one's long,
When you know the difference you can't go wrong.

I'm a clock, tick-tock.
I'm a clock, tick-tock.
Working 24 hours a day.

My short hand points to the hour—okay,
From one to twelve, twice around each day.
My long hand tells how many minutes past,
If you can count by fives, then it's a blast.

I'm a clock, tick-tock.
I'm a clock, tick-tock.
Working 60 minutes an hour.

5, 10, 15 is a quarter past,
20, 25, 30, half an hour goes fast.
35, 40, 45, a quarter 'til,
50, 55, a new hour! What a thrill!

I'm a clock, tick-tock.
I'm a clock, tick-tock.
I'm a c-l-o-c-k.

Because of Measurement

(Sung to the tune of "The Ants Go Marching")

Our clocks measure time for us. Hurrah! Hurrah!
Our clocks measure time for us. Hurrah! Hurrah!
Analog or digital clocks,
Measure time as they go, "Tick-Tock!"
And we're on time because of measurement.

Our rulers measure length for us. Hurrah! Hurrah!
Our rulers measure length for us. Hurrah! Hurrah!
Rulers are marked by the inch,
Measuring length is really a cinch!
And we're accurate because of measurement.

A scale measures weight for us. Hurrah! Hurrah!
A scale measures weight for us. Hurrah! Hurrah!
Scales measure how many pounds we are,
Or fruits and veggies, or even a car!
And we're precise because of measurement.

Thermometers measure temperature. Hurrah! Hurrah!
Thermometers measure temperature. Hurrah! Hurrah!
Thermometers measure in degrees,
If something will boil or if it will freeze.
And we're prepared because of measurement.



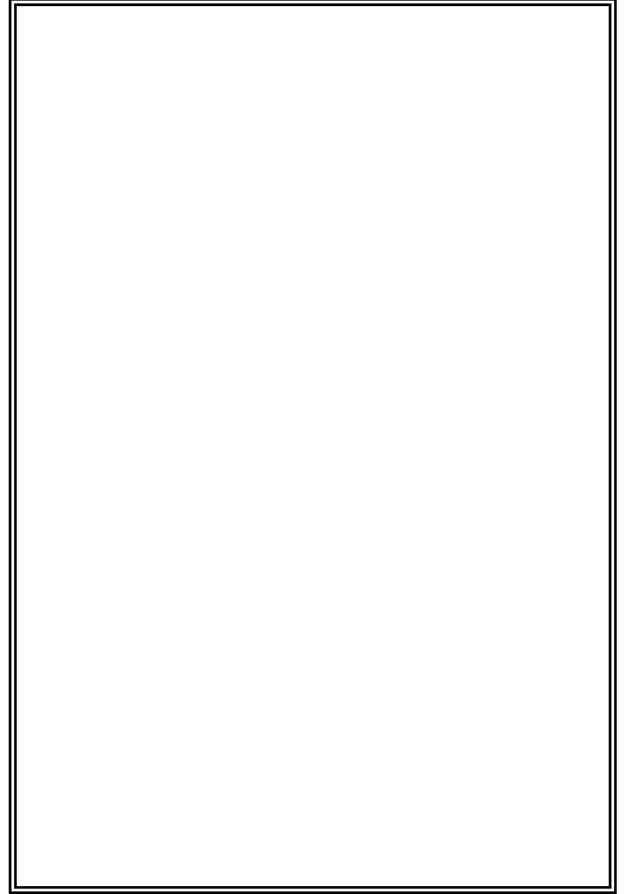
I Can Spell Measurement

I can spell **inch**, I-N-C-H.
I can spell **foot**, F-O-O-T.
I can spell **yard**, Y-A-R-D.
But, I can't spell **measurement**.

I can spell **hour**, H-O-U-R.
I can spell **week**, W-E-E-K.
I can spell **year**, Y-E-A-R.
But, I can't spell **measurement**.

I can spell **clock**, C-L-O-C-K.
I can spell **scale**, S-C-A-L-E.
I can spell **ruler**, R-U-L-E-R.
But, I can't spell **measurement**.

Yes I can! Yes I can!
M-E-A-S-U-R-E-M-E-N-T, MEASUREMENT!



Measurement Bugaloo

We're all mathematicians and we're here to say,
"We all use measurement everyday."

Rulers, scales, measuring cups, too,
Doing the Measurement Bugaloo!

When you're in the kitchen and you're going to cook,
Get out your measuring cups and a good cookbook.
Teaspoons, tablespoons, and a cup,
If you measure carefully you'll avoid a mix-up.

Rulers, scales, measuring cups, too,
Doing the Measurement Bugaloo!

When you're outside planning your landscape,
Don't forget to bring your measuring tape.
When you measure something smaller by the foot or an inch,
Use your ruler; it's really a cinch!

Rulers, scales, measuring cups, too,
Doing the Measurement Bugaloo!

Do you want to know how fast you run?
Using a stopwatch will get the job done.
When measuring minutes and hours in a day,
Use a clock with analog or digital display.

Rulers, scales, measuring cups, too,
Doing the Measurement Bugaloo!

Measuring Here, Measuring There

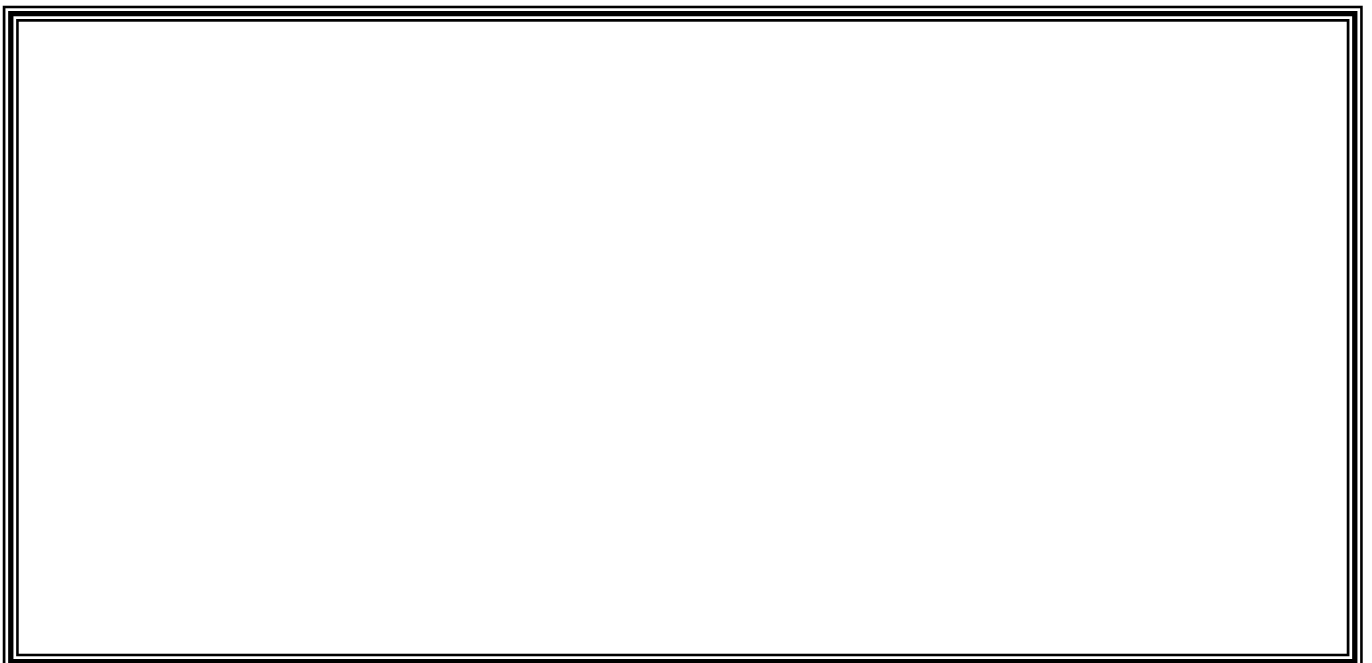
Measuring here, measuring there,
Measuring, measuring everywhere!

The minutes are passing.
The clock is ticking.
The scale is weighing.
The cups are measuring.

Measuring here, measuring there,
Measuring, measuring everywhere!

Measuring in the kitchen.
Measuring at the store.
Measuring in the workshop.
Let's measure some more!

Measuring here, measuring there,
Measuring, measuring everywhere!



Measuring? Yes, Ma'am!

Can this be measured?

Yes, Ma'am!

Can this be measured?

Yes, Ma'am!

Well, how do you do it?

You measure its length.

Well, how do you do it?

From its end to end.

What tool do I use?

You use a ruler.

What tool do I use?

Or a measuring tape.

Can this be measured?

Yes, Ma'am!

Can this be measured?

Yes, Ma'am!

Well, how do you do it?

You measure its weight.

Well, how do you do it?

In ounces or pounds.

What tool do I use?

You can use a scale.

What tool do I use?

Scales tell ounces or pounds.

Can this be measured?

Yes, Ma'am!

Can this be measured?

Yes, Ma'am!

Well, how do you do it?

You measure hours and minutes.

Well, how do you do it?

From start to finish.

What tool do I use?

You can use a clock.

What tool do I use?

Or use a stopwatch.

Can this be measured?

Yes, Ma'am!

Can this be measured?

Yes, Ma'am!

Is measurement fun?

Yes, Ma'am!

MEDIDAS AQUÍ, MEDIDAS ALLÍ

Por Laura Curry

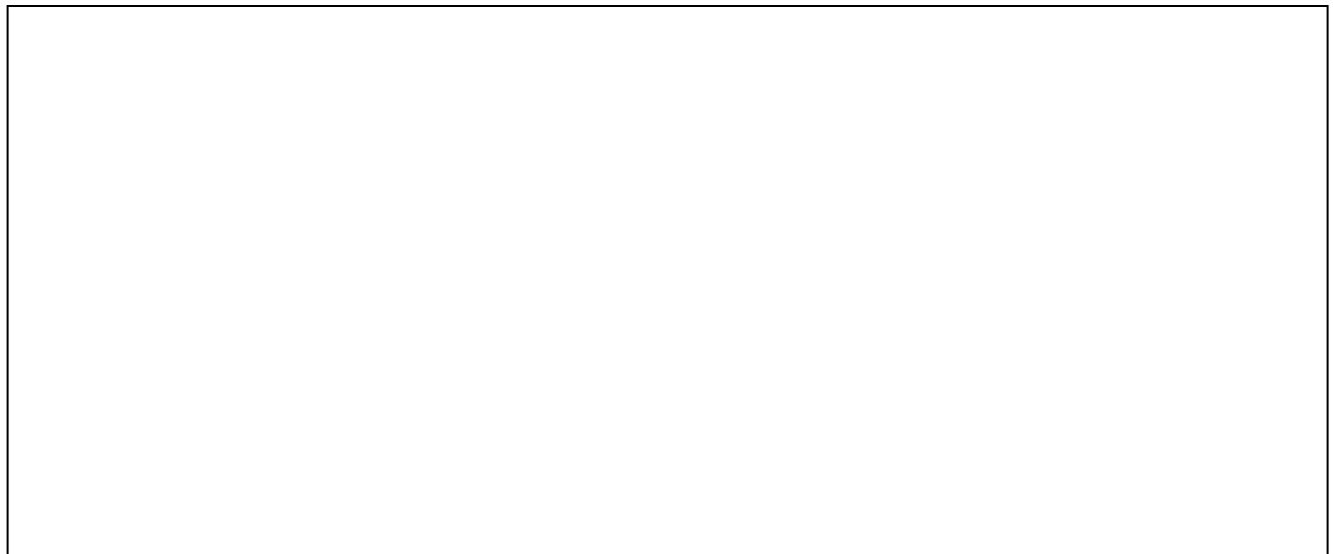
Medidas aquí, medidas allí,
Las medidas ayudan a ti y a mí.

Reglas midiendo pulgadas,
Escalas midiendo libras,
Varas midiendo yardas,
Y relojes midiendo horas.

Medidas aquí, medidas allí,
Las medidas ayudan a ti y a mí.

Medidas en la cocina,
Medidas en el taller,
Medidas en la tienda,
Y medidas para correr.

Medidas aquí, medidas allí,
Las medidas ayudan a ti y a mí.
¡Qué pesado! ¡Qué grande! ¡Qué rápido!



TENGO MUCHO TIEMPO

a la melodía de "Caballito Blanco"

Por Laura Curry

Tengo, tengo, tengo,
tú no tienes nada.
Tengo mucho tiempo
para disfrutarme.

Tengo 24 horas,
durante cada día.
Las horas tienen minutos,
60 por cada hora.

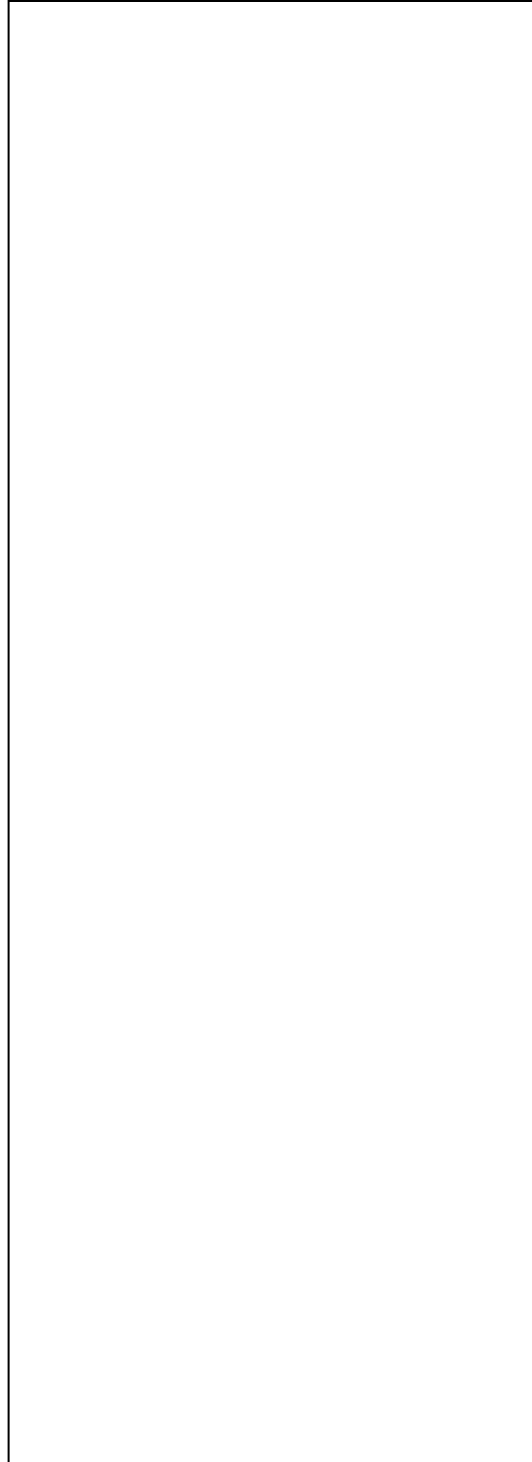
Tik-tok, tik-tok, tok-tok.

Para saber la hora
la manecilla corta
me apunta el número,
mientras mueve lento.

Para saber los minutos
la manecilla larga
cuenta de cinco en cinco
hasta la nueva hora.

Tik-tok, tik-tok, tok-tok.

Para la hora y 15,
apunta al 3.
Para la media hora,
apunta al 6.



Para la hora y 45,
apunta al 9.
Para la hora en punto,
hasta el 12 mueve.

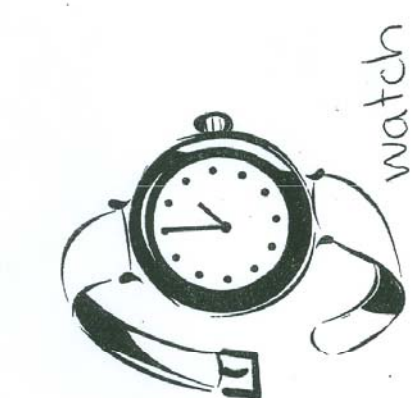
Tik-tok, tik-tok, tok-tok.

La manecilla roja,
dando vueltas rápidas,
marca los segundos,
60 por minuto.

Tengo, tengo, tengo,
tú no tienes nada.
Tengo mucho tiempo
Y el reloj me lo cuenta.



Pictorial Input Chart: Ways to tell time: English



watch



Alarm
Clock

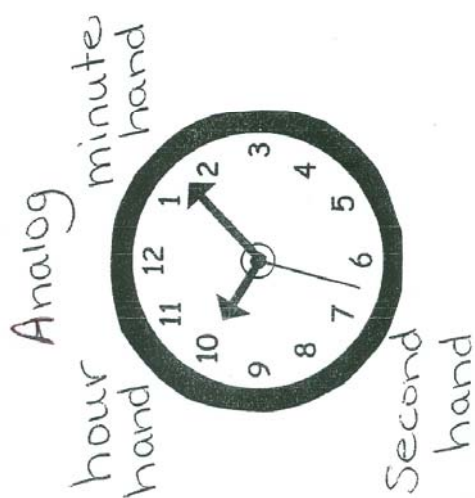
Digital



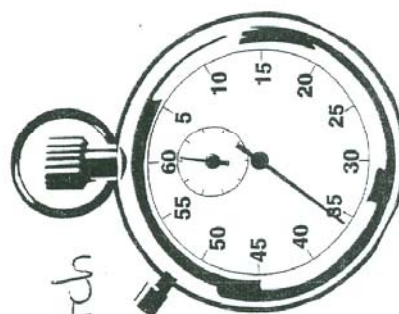
standard
or
military
time



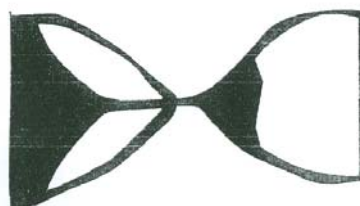
sundial



60 seconds = minute
60 minutes = hour
24 hours = day

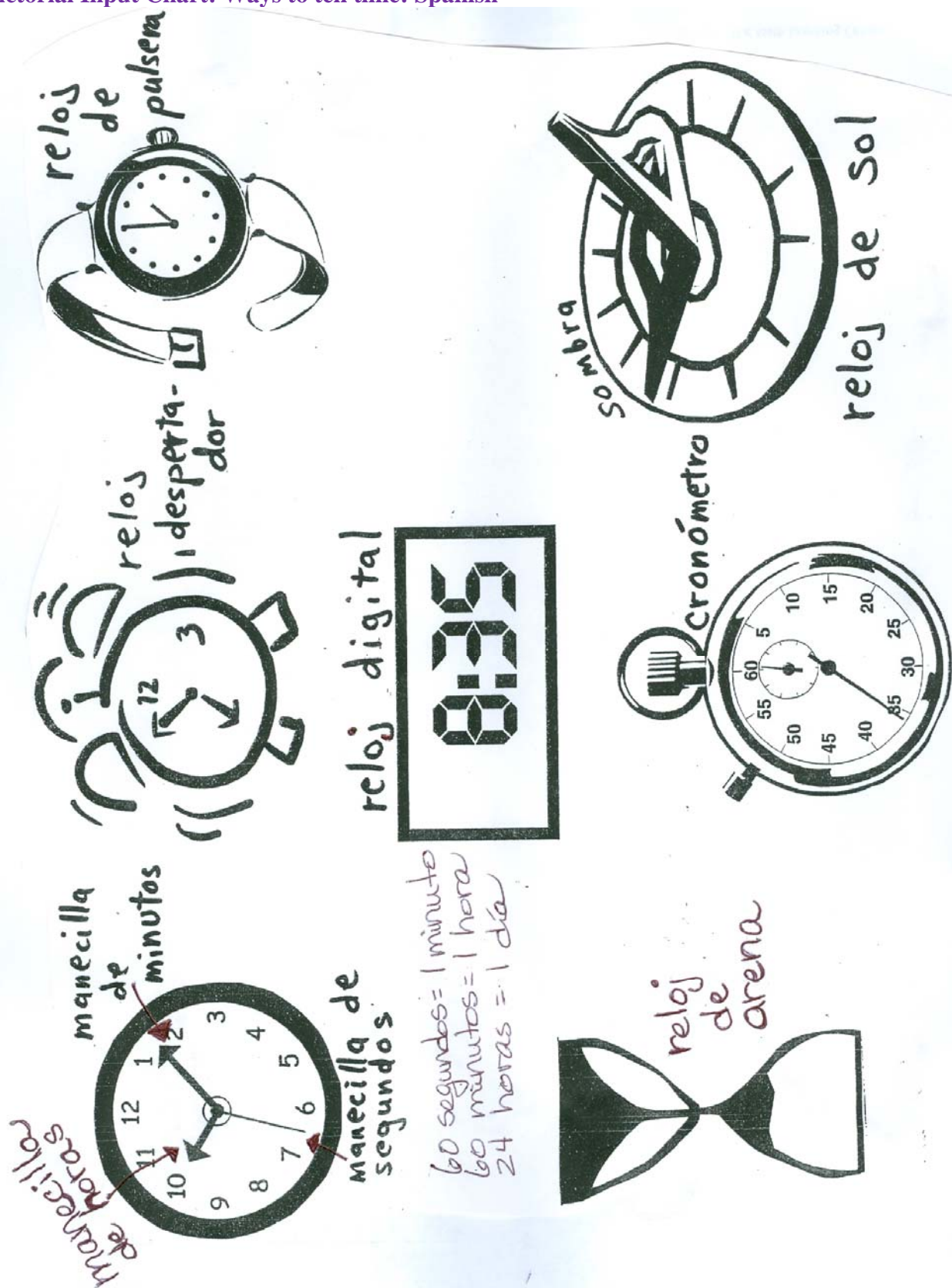


Stopwatch

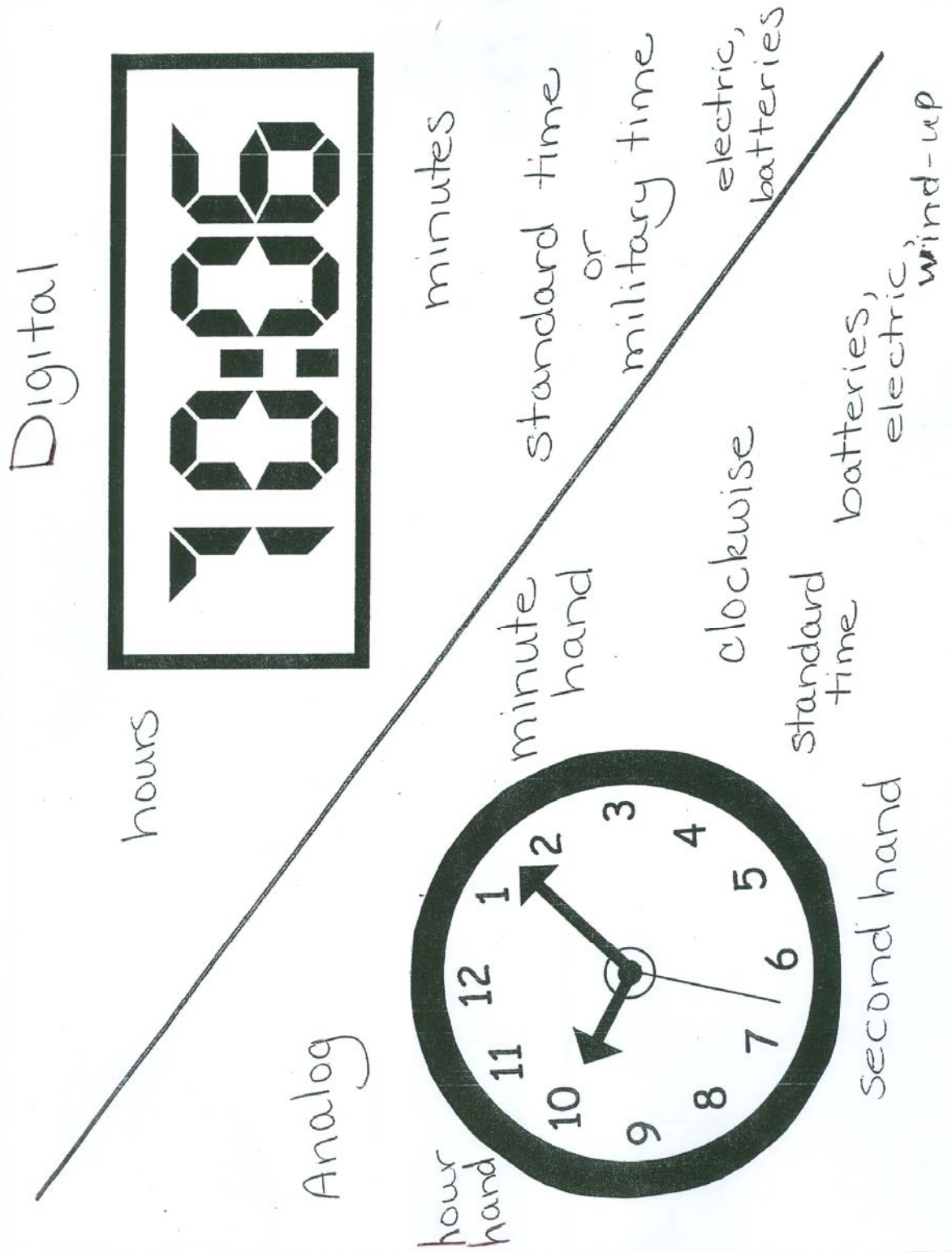


sand timer
hour glass

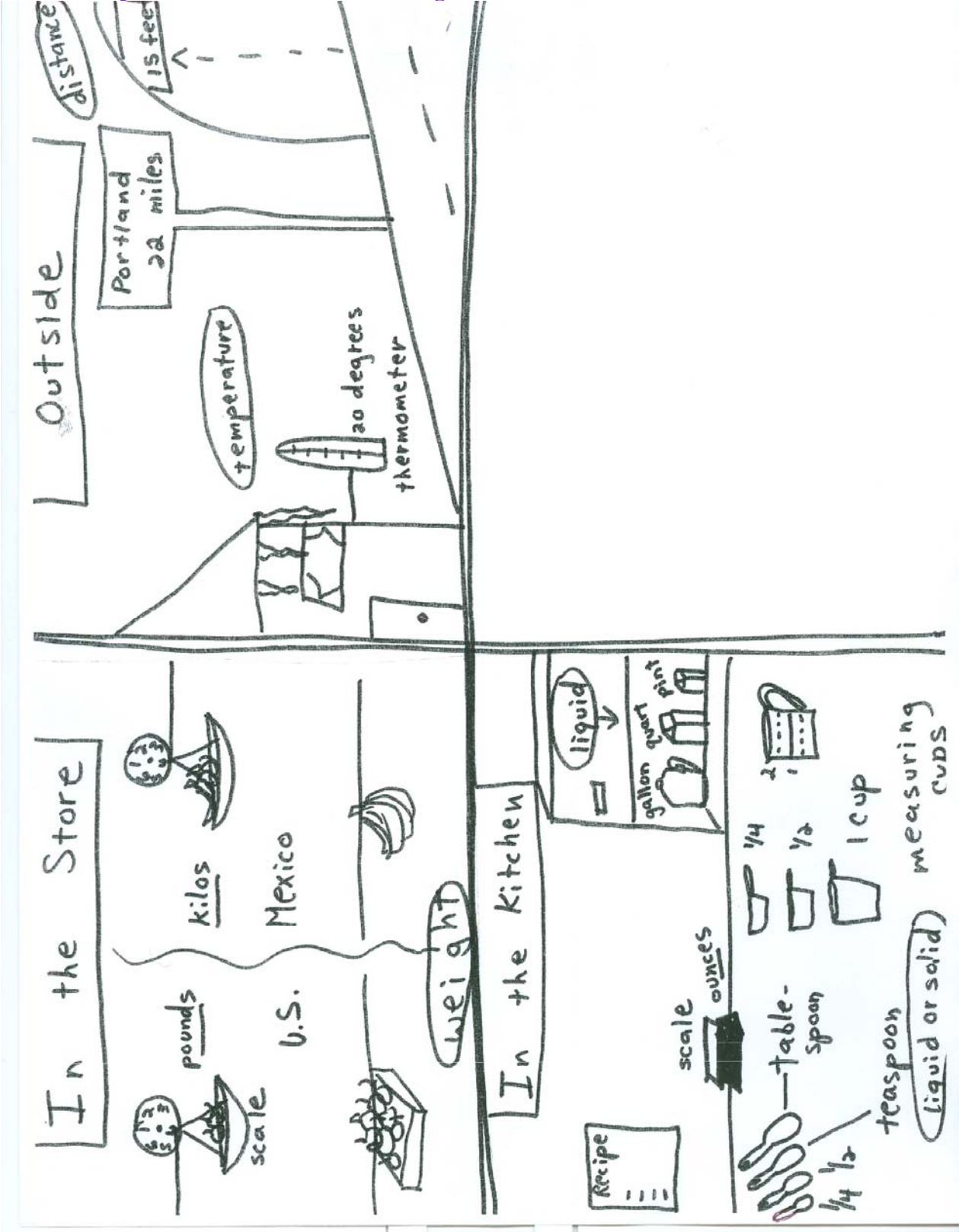
Pictorial Input Chart: Ways to tell time: Spanish



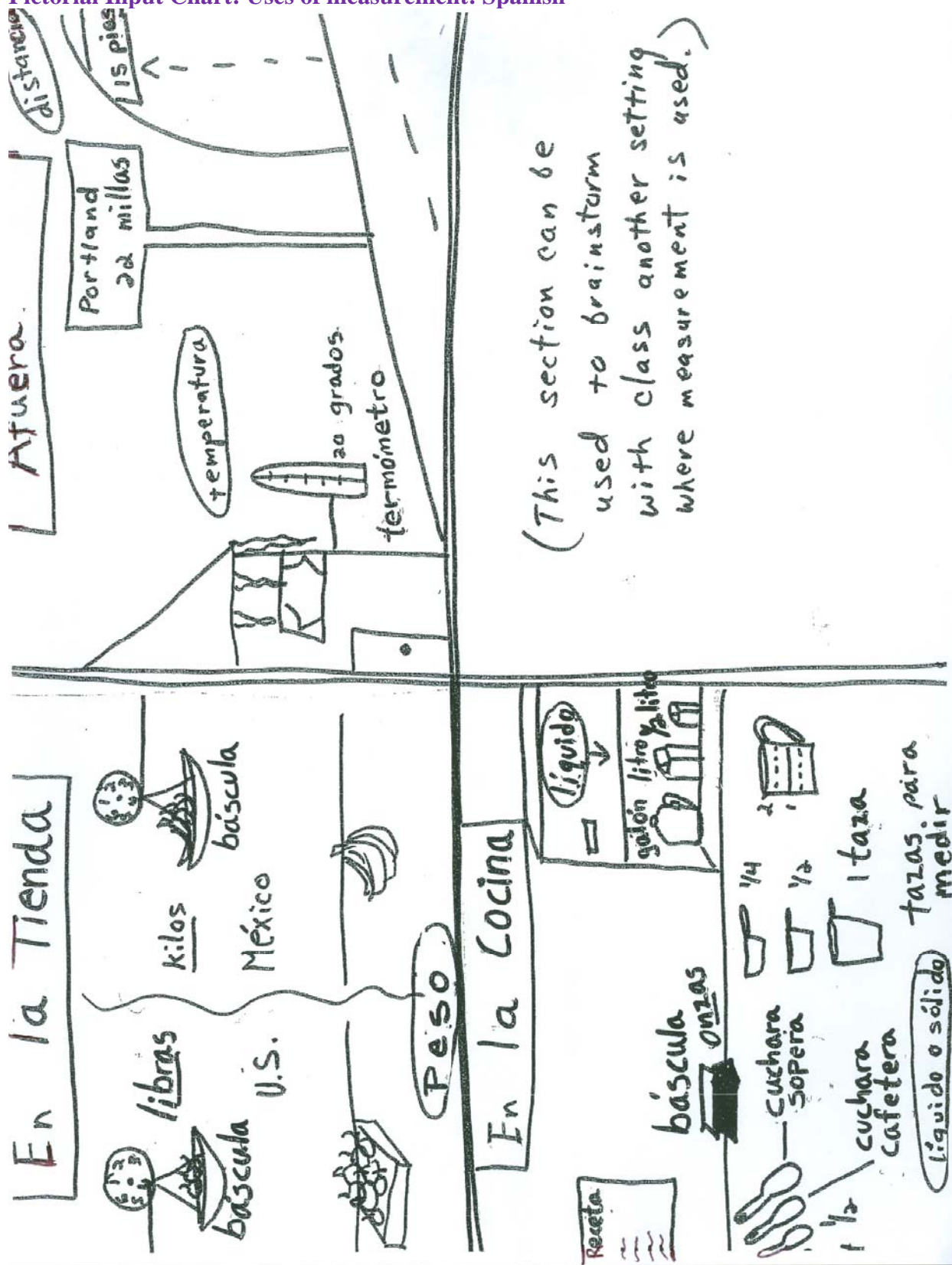
Pictorial Input chart: Telling Time



Pictorial Input: Uses of measurement: English

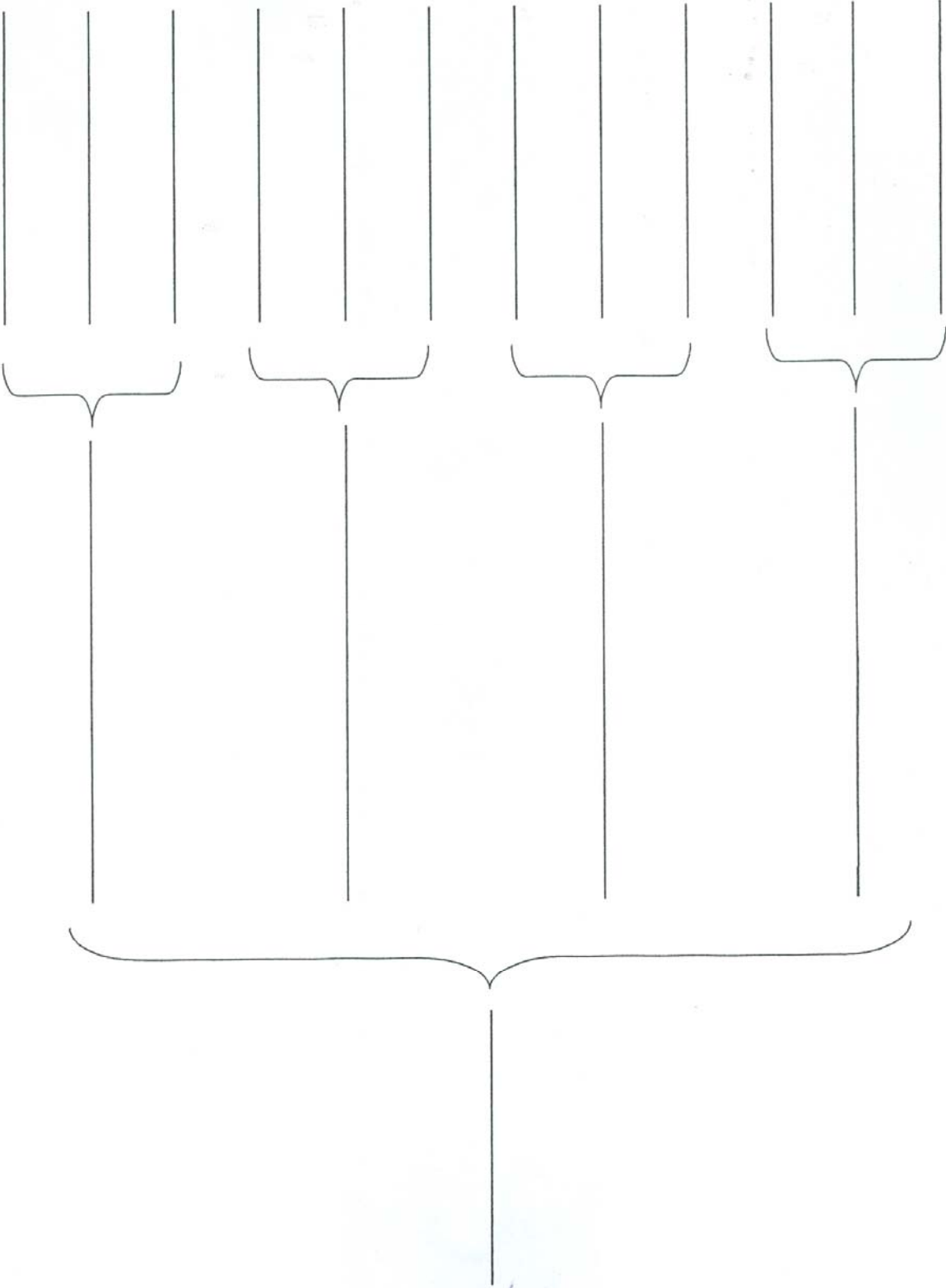


Pictorial Input Chart: Uses of measurement: Spanish



(This section can be used to brainstorm with class another setting where measurement is used.)

Woita: Brace Graph



Woita: Mind Map