


HPISD Grade 1 Math						
UNIT NAME		ESTIMATED DURATION	9 WEEKS			
UNIT 14: MEASUREMENT		3 WEEKS	1	2	3	4
UNIT OVERVIEW						
This unit develops an understanding of how to compare and order length using non-standard units. It also develops an understanding of time to the hour and half hour.						
Enduring Understandings						
The student will understand that:	<ul style="list-style-type: none"> • The hour hand tells the hour, and the minute hand tells the number of minutes after the hour. • Time to the hour can be shown on an analog clock or on a digital clock and can be written in two ways: ____o'clock or ____:00 • Time can be given to the half hour. • Measurement is a process of comparing a unit to the object being measured. The length of any object can be used as a measurement unit for length. • Some problems can be solved by reasoning about the conditions in the problem. • Different units can be used to measure length. • Some problems can be solved by using objects to act out the actions in the problem. 					
Concepts						
Measurement		Some attributes of objects are measurable and can be quantified using unit amounts.				
Practices, Processes, and Proficiencies		Mathematics content and processes can be applied to solve problems.				
Guiding/Essential Questions						
<ul style="list-style-type: none"> • How are nonstandard units used to measure objects? • How do I choose the appropriate tool and unit when measuring? • How is estimation helpful in measurement? • When should you estimate amounts of time? • Why is telling time important? • How do the different units of time (minutes, days, and weeks) relate to each other? • How can I tell time using both digital and analog clock faces? 						

Learning Targets & Prerequisites	Progressions
<p><u>Prerequisite:</u></p> <ul style="list-style-type: none"> • Skip counting by 5s • Distinguish between the hour hand and minute hand • Compare the difference between the analog and digital clock. <p><u>Learning Target:</u></p> <ul style="list-style-type: none"> • The student will tell time to the hour using analog and digital clocks. <p><u>Second Grade Connection:</u></p> <ul style="list-style-type: none"> • 2.9 (G) Read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m. 	<ul style="list-style-type: none"> • Understands the concept of the hand-movement on the clock • Uses vocabulary such as, o'clock • Understands: one hour equals sixty minutes.
<p><u>Prerequisite:</u></p> <ul style="list-style-type: none"> • Tell time to the hour <p><u>Learning Target:</u></p> <ul style="list-style-type: none"> • The student will tell time to the half hour using analog and digital clocks. <p><u>Second Grade Connection:</u></p> <ul style="list-style-type: none"> • 2.9 (G) Read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m. 	<ul style="list-style-type: none"> • Uses vocabulary such as, half past the hour. • Understands: thirty minutes equals half an hour.
<p><u>Prerequisite:</u></p> <ul style="list-style-type: none"> • Describe objects according to length-longer/shorter/same • Identify nonstandard forms of measurement 	<ul style="list-style-type: none"> • Describe length using a number and a unit. • Measure the same length with two different units and explain why the measurement differ. • Use tools to measure the length of objects.

<ul style="list-style-type: none"> Understand how to measure an object end to end <p>Learning Target:</p> <ul style="list-style-type: none"> The student will estimate and measure length using nonstandard units, such as connecting cubes. <p>Second Grade Connection:</p> <ul style="list-style-type: none"> 2.9 (A) Find the length of objects using concrete models for standard units of length. 	<ul style="list-style-type: none"> Using different nonstandard units, the numeric value will vary <p>How long is the pencil, using paper clips to measure?</p> <p>Student: I carefully placed paper clips end to end. The pencil is 5 paper clips long. I th would take about 6 paperclips.</p> 
<p>Formative Assessments</p>	<p>Summative Assessments</p>
<p>TEKS: Readiness Standards</p>	<p>TEKS: Supporting Standards</p>
<p>1.7(E) Tell time to the hour and half hour using analog and digital clocks.</p> <p>*1.7(D) Describe a length to the nearest whole unit using a number and a unit</p>	<p>1.7(A) Use measuring tools [such as adding machine tape, ribbon, or string] to measure the length of objects to reinforce the continuous nature of linear measurement;</p> <p>1.7(B) Illustrate [demonstrate] that the length of an object is the number of same-size units of length that, when laid end-to-end with no gaps or overlaps, reach from one end of the object to the other;</p> <p>1.7(C) Measure the same object/distance with units of two different lengths and describe how and why the measurements differ</p>

TEKS Process Standards

1.1(A) Apply mathematics to problems arising in everyday life, society, and the workplace.

1.1(B) Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.

1.1(C) Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.

1.1(D) Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.

1.1(E) Create and use representations to organize, record, and communicate mathematical ideas.

1.1(F) Analyze mathematical relationships to connect and communicate mathematical ideas.

1.1(G) Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

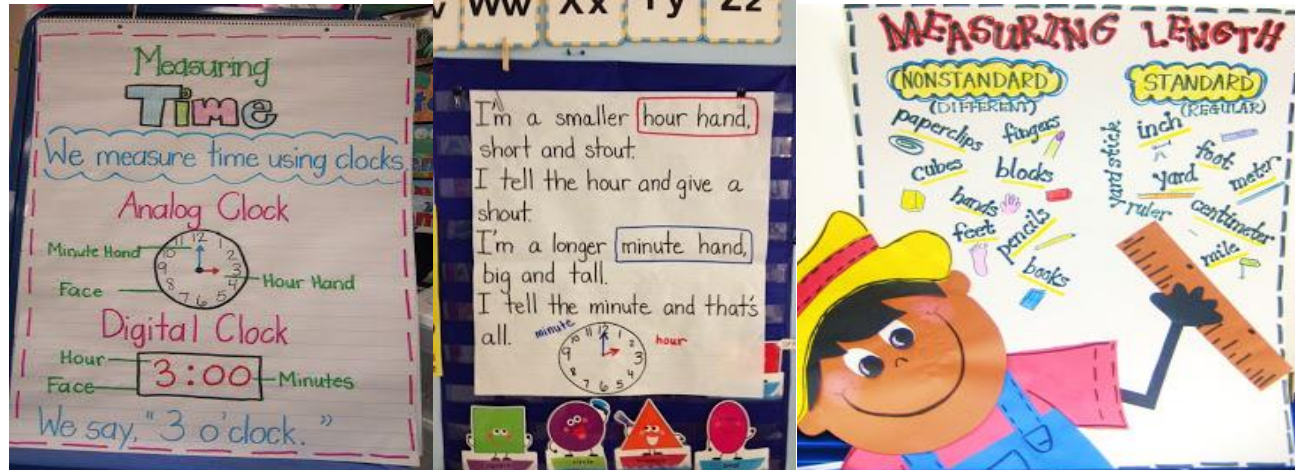
Processes and Skills:**What students should be able to DO**

- The students should be able to use different units can be used to measure length. (ex. – unifix cubes, paper clips)
- The students should be able to use multiple copies of one unit to measure the length of an object.
- The student should be able to lay a multiple copies of one unit end-to-end and count them to measure a length.
- The students should be able to use unifix cubes to measure the length of an object and discuss the number of cubes needed to measure the length.
- The students can measure the length of something that is not straight using different tools. (ex. – you can measure the length of a curvy path by laying a string

Facts:**What students should KNOW**

- Time is something that is measured.
- The students should know the differences between the two hands on a clock and the functions of these hands.
- The students should know the importance of careful measuring so that there are not any gaps or overlaps in order to get an accurate measurement.
- The students should know that the length of measurement of an object is the number of same-size length units that span it with no gaps or overlaps.
- The student should know the most appropriate tool of measuring objects in different ways.
- The students should know that objects can be compared and ordered by size. The students should know that the smaller the unit used, the more units needed to equal a given length.

<p>along the path, straightening it, and then measuring its length with connecting cubes or paper clips.</p> <ul style="list-style-type: none"> • The students should be able to estimate, measure, and compare lengths of objects. • The students will be able to use a clock to measure time in minutes and hours. 	
Topics	
Envisions Topic 14	
Language of Instruction	
Analog digital distance half hour height hour hour hand	length longest measure minute minute hand o'clock shortest time
State Assessment Connections	National Assessment Connections
Resources	



<https://www.teacherspayteachers.com/Product/Measure-the-Room-Math-Centre-271172>