## AERO:SBC Basic Unit Template

Subject/Course:
Grade Level:
Topic/concept:
Estimated Time Required:

## Math

First Grade
Time
10 days

## Desired Results:

1. What do we want students to know or be able to do? List standard(s) and relevant benchmark(s)
MEASUREMENT
B. The learner will be able to use time vocabulary in daily life (calendar, clocks)
C. The learner will be able to tell time to the half-hour.
2. What are the enduring understandings that this unit is built upon?

Students will understand the function and importance of measuring time with calendars and clocks; Students will understand how to tell time using analog and digital clocks.
3. What essential or unit questions will prompt curiosity and focus?

Do you think that knowing how to tell time important? Tell why or why not?
Why do we need to know how to tell time?
How do you make sure you are not late for school?
How does a calendar help us?
What are the ways we measure time?
4. In the context of this unit, what specific knowledge or skills do you want the students to acquire?
Students will know that telling time is necessary and important
Students will know vocabulary relevant to measuring time; second(s), minute(s), hour(s), day(s), week(s), month(s), year(s), calendar, analog, digital;
Students will be to tell time to the hour and half-hour.

## Evidence of Learning:

How will we know if students have achieved the desired result and can meet the standard(s) and benchmark(s)?

1. Provide a detailed description of the culminating task (summative assessment): MATCHING TIME PROJECT:
*Students will be given sheets with pictures of clocks, time shown in words *Students will match clock pictures with the correct time phrase.

WRITTEN ASSESSMENT:
*Student will draw in the hour/minute hands on blank clocks to show time listed on test *Student will correctly record the time below pictures of clocks showing a variety of time
"MY TIME" PROJECT:
*Each student will be given an $18 \times 12$ inch piece of construction paper
*Follow the teachers modeling to fold the paper into thirds
*Stamp a blank analog clock \& digital time box at the top of each column
*First Column - show a morning activity and the time you do the activity
*Second Column - show an afternoon (middle of the day) activity and the time you do the activity
*Third Column - show an evening (night) activity and the time you do the activity
*There must be at least one time to the hour and at least one time to the half hour
*Draw an illustration of the activity
*Written explanation - tell what the activity is and the time it takes place
2. Provide the scoring guide/rubric for the culminating task (summative assessment). PROJECT: "My Time"

| Criteria | 1-Attempts <br> the standard | 2 - Approaches <br> the standard | 3 - Meets the <br> standard | 4 - Exceeds the <br> standard |
| :--- | :--- | :--- | :--- | :--- |
| Fold paper into <br> thirds, clock <br> stamp | Stamps clocks <br> does not fold <br> paper or vice <br> versa | Paper is folded <br> into 3 sections <br> not equal parts, <br> or clocks not <br> stamped at the <br> top | Paper is folded <br> into thirds <br> (equal parts) <br> Clock stamp at <br> the top of each <br> section | Paper is folded <br> into 3 equal <br> parts, lines <br> drawn on the <br> folds to divide <br> the sections |
| Shows analog <br> and digital time <br> for activity | Shows time but <br> analog and <br> digital do not <br> match | Shows time <br> correctly for <br> one or two of <br> the clocks | Shows all time <br> correctly; both <br> analog and <br> digital | Tells how long <br> the activity <br> takes |
| Time must <br> have at least <br> one for the <br> hour and for <br> the half-hour | Shows time on <br> the clocks but it <br> is not shown <br> correctly | Shows time <br> correctly but <br> only to the hour <br> or to the half- <br> hour, not mixed | Shows time <br> correctly with <br> at least one to <br> the hour \& half- <br> hour, mixed | Shows time to <br> the hour, half- <br> hour \& quarter <br> hour or in 5 <br> minute intervals |


| Activity <br> matches the <br> time | Has activities <br> but they do not <br> all match the <br> time, i.e. might <br> show bedtime <br> at 2:00 | Has activities <br> but one or two <br> match the time, | All activities <br> match the time, | All activities <br> match the time <br> and one or <br> more tells how <br> long it takes |
| :--- | :--- | :--- | :--- | :--- |
| Illustrate the <br> activities | Drawings do <br> not match the <br> activity | Drawing of one <br> or two match <br> but not all | All drawings <br> match all the <br> activities | Picture shows <br> the start and <br> end of at least <br> one activity |
| Written <br> explanation of <br> activity | Writing is <br> present but it <br> does list the <br> time or does <br> not match the <br> activity | Writing <br> matches the <br> activity and lists <br> the time for <br> only one or two <br> sections | Written <br> explanation <br> matches the <br> activity and lists <br> the time for all <br> three activities | Written <br> explanation <br> matches the <br> activity and lists <br> the time for all <br> three activities <br> and tells the |
| beginning / end |  |  |  |  |
| for at least one |  |  |  |  |

## Instructional Plan

Provide a plan of your instructional activities, including time and materials needed. Map out, in steps, how you will get from the introduction of the unit to its conclusion so that by the end, your students can succeed on the culminating task and meet the benchmarks. Be sure to include any formative assessments at the points in the plan when you will need them.

## DAY ONE:

Time:
Class discussion; make a brainstorming list of all the things we use to tell time
Homework: find three things at that are used to keep time. Draw a picture of each
DAY TWO:
Calendar:
Share homework from the night before. Class discussion; how long is a year, a month, a week, a day, an hour, a minute
Tasks: Fill in a class calendar for the month

> Create a calendar for the current month

Getting started; "Which month (name) goes at the top?" "Where does the 1 go?" "How do you know?"
DAY Three:

## Analog clocks:

Class discussion; uses of watches and clocks, review the parts of a clock (face, hands, numbers) teacher uses Judy clock to show the movement of the hands, identify hour \& minute hands

Game: Play "Stop the clock!" Children watch the hour hand only; they yell "Stop" when the hour hand is pointing directly at a number. "Ask where the minute hand is pointing?" (straight up) do this a few times. Change the game; now the students are watching for the hour to point between two numbers then yell "Stop!" "Ask where is the minute hand pointing now?" (straight down) Practice estimating the time using the hour hand i.e. about 4 o'clock. Do several practice times together. DAY FOUR:
Telling time to the hour: Review clock information, children practice showing and telling times with individual small Judy clocks. FORMATIVE: Practice Sheet, children record times on the hour and show times on the hour DAY FIVE:
Telling time to the half-hour: Review which hand is the hour hand, which hand is the minute hand and which direction the minute hand points when Move minute hand pointing straight down. Ask "Where is the hour hand?" (half-way between the 4 and 5) Tell students we say "This is half past four" or "four thirty"
Practice together, teacher shows a time on the demonstration clock, then the students show the time on their small Judy clocks, have students tell what time is shown on the clock. FORMATIVE: Practice Sheet, children record times and show times on the hour and the half-hour
DAY SIX: Review showing several times on demonstration clock, student record the time on a white, show to teacher for quick FORMATIVE assessment.
SUMMATIVE: MATCHING TIME PROJECT
*Students will be given sheets with pictures of clocks, time shown in words
*Students will match clock pictures with the correct time phrase.
DAY SEVEN:
Digital clocks: Class discussion, "Ask are there clocks that do not have hands on the face?" "How can we know the time?" Show the students a time on a digital clock and the same time on an analog clock. Explain that these two clocks show the same time. Show some more examples. Explain what the numbers and symbols on the digital clock mean. The numbers on separated by a colon. The numbers before the colon tell the hours. The number after the colon tells the minutes after the hour.
FORMATIVE: Using individual white boards have children draw a rectangle and put a colon in the middle. This is your digital clock. Call out practice times, children practice writing them in digital formation. Check white boards.
DAY EIGHT: Review digital \& analog time. Do practice times together with small Judy clocks and whiteboards for digital time notation. FORMATIVE: Practice Sheet, children record times and show times on the hour and the half-hour on both analog and digital clocks.
DAY NINE: SUMMATIVE: WRITTEN ASSESSMENT
*Student will draw in the hour/minute hands on blank clocks to show time listed on test *Student will correctly record the time below pictures of clocks showing a variety of time DAY TEN: SUMMATIVE: "MY TIME" PROJECT (see above "Evidence of Learning" for details)

Resources: Everyday mathematics, (UCSMP) The University of Chicago School Mathematics Program, Copyright 2008 by Wright Group/McGraw-Hill

