

Mamie Martin Elementary

1st Grade MATH

Unit 11: Telling and Writing Time to the Half Hour

Days in Unit: 5

Envision Math Alignment:

1.MD.3: Topic 13 – Lessons 1, 2, 3, and 4

Unit Summary:

In this unit students extend their understanding of telling and writing time from unit 5 to include situations that deal with telling time to the half hour.

Focus Standards and *Specific Guidance for this Unit (*The MCCR Standard is listed along with specific guidance on what part of the standard to teach in this unit*)

Measurement and Data – 1.MD

B. Tell and write time.

1.MD.B.3. Tell and write time in hours and half-hours using analog and digital clocks.

LEARNING OUTCOMES:

Tell and write time to the half hours using analog and digital clocks.

LEARNING TARGETS

- **1.MD.3.1** Identify the parts of a clock. (hour hand, minute hand, and second hand)
- **1.MD.3.2** Tell the difference between analog and digital clocks.
- **1.MD.3.3** Tell time to the hour using analog and digital clocks.
- **1.MD.3.4** Tell time to the 1/2 hour using analog and digital clocks.
- **1.MD.3.5** Write the time correctly in hours and 1/2 hours using the colon correctly.

Unit Vocabulary:

- Analog Clock
- Digital Clock
- Appropriate Tool
- Precision
- Hour Hand
- Minute Hand
- Second Hand

Essential Questions:

- How do I tell time to the half-hour using a digital clock?
- What do the different hands on an analog clock stand for?
- How do I tell time to the half-hour using an analog clock?

Unit 11: Telling and Writing Time to the Half Hour

Suggested Instruction Time: 5 Days

ONLINE INSTRUCTIONAL VIDEOS:

- Basics of the Clock, 1st grade video (for review if needed)
<https://www.youtube.com/watch?v=5xRoBx7iVGI> (great intro!)
 - Rock around the clock practice song
<https://www.youtube.com/watch?v=OkjCt1j0ykA> (fun closure!!)
- <https://www.youtube.com/watch?v=RBvmO7NgUp0> (good intro to analog clock)
- Telling time to the ½ hour instructional videos:
<https://www.youtube.com/watch?v=ygOsZYP-whA> (great ½ hr lesson)
- https://www.youtube.com/watch?v=_5QbFwr7kl (good closure for ½ hr)
- <http://www.google.com/search?client=safari&rls=en&q=telling+time+to+the+half+hour+video&ie=UTF-8&oe=UTF-8>
- Two Kinds of Time: analog and digital online clocks
http://nlvm.usu.edu/en/nov/frames_asd_316_g_1_t_4.html

INTERACTIVE SMARTBOARD ACTIVITIES

(Use to introduce lessons daily and/or for technology centers):

Note: The students can take turns answering the questions and the teacher can also allow the student to maneuver the mouse and actually host the game.

- Online Clock manipulative
<http://www.cswego.org/ocsd-web/games/ClassClock/clockres.html>
 - Smartboard games and activities:
http://nlvm.usu.edu/en/nov/frames_asd_317_g_1_t_4.html?from=category_g_1_t_4.html
- http://www.harcourtschool.com/activity/telling_time_gr1/ (great time practice game!)
- http://www.learningplanet.com/act/tw/place_numbers_free.swf (fun time practice)
- <http://www.primarygames.com/time/question1.htm>
- <https://www.ixl.com/math/grade-1>
- <http://www.abc.net.au/countusin/games/files/memory.swf> (fun memory game)
- <http://www.bbc.co.uk/wales/snapdragon/yesflash/time-1.htm>
- <http://www.vrml.k12.la.us/curriculum/quicktip/quickmath.htm>
- http://www.abcya.com/telling_time.htm (LOVE this game!)

http://www.sheppardsoftware.com/mathgames/earlymath/on_time_game1.htm

<http://classroom.jc-schools.net>

WHOLE GROUP ACTIVITIES: (Instructional strategies, guided practice, independent practice)

Real Clocks, Real Time-

Materials Needed:

- Analog and digital clock for demonstration

1. Begin with a one-handed clock. A clock with only an hour hand can be read with reasonable accuracy. Use approximate language: "It's about 7 o'clock."
2. Discuss what happens to the hour hand as the minute hand goes from one hour to the next. When the minute hand is at 12, the hour hand is pointing exactly to a number.
3. Use two real clocks, one with only an hour hand and one with the minute and hour hands. (Break off the minute hand from an old clock.) Cover the two handed clock. Periodically during the day, direct attention to the one handed clock. Discuss the time in approximate language. Have students predict where the minute hand should be. Uncover the two handed clock and check. Make sure to include times of hour and $\frac{1}{2}$ hour.

Show Me the Time-

Materials Needed:

- Analog Clocks for teacher and students

TTW Discuss the differences between the two clocks: digital and a clock with hands. Discuss the differences between the hour hand and minute hand.

Discuss the fraction $\frac{1}{2}$.

Show 4 o'clock on a demonstration clock. Move the minute hand halfway around the clock to 6 while children count by fives.

Ask: How many minutes have passed? Where does the minute hand point? Where does the hour hand point? What time is it? Write four-thirty, 4:30 and half past 4 on the chalkboard. Continue moving the minute hand around the clock to 12 while children count by fives.

Ask: How much time has passed? What time is it now?

Discuss the two ways to read time at the half hour. (4:30 and half past 4) Where is the minute hand at half past the hour?

TTW model making her clock say a time to the half hour. TTW call out time to students and they race to see who can make their clock say the correct time first. Students hold their clocks up for the teacher to see as they get it done.

Time Concentration-

Materials Needed

- Clock Flashcards

http://www.math-aids.com/Flash_Cards/Telling_Time.html

Prepare cards showing several times on the hour and half hour. Also prepare matching cards with clock faces illustrating these times. Turn all cards face down individually. Students may play one to one or form partners to play the game. One student turns over two cards, trying to match a clock face with the corresponding time card. If the cards match, the student removes the cards and keeps them. If the cards do not match, the student replaces the cards face down, and the next player takes a turn. The game continues until all the cards are matched. The player with the most matches wins.

Military Time Sort-

Materials Needed:

- Counters
- Sorting cards

<http://www.collaborativelearning.org/12and24hourclocksort.pdf>

1. You are working in two pairs - A and B
2. Pair A has a set of colored cards.
3. Pair B has six counters.
4. Pair A should divide their cards equally. You can look at each others cards, but do not show them to Pair B.
5. The person in Pair A with the card with a time on it should read it out loud.
6. Pair A should then look for a matching card and show both cards to Pair B.
7. If Pair B agrees that the cards match they should say either "I/we agree because..." and give Pair A a counter... or if they don't think they match they should say "I/we disagree because..."
8. Pair A and Pair B should repeat this until all the cards are matched.
9. Pairs should change places and repeat the activity using either the same or a different set of colored cards

Stop The Clock-

Materials Needed:

- Worksheet <https://rich.maths.org/content/id/6071/Stop%20the%20clock.pdf>

This is a game for two players

1. Set the time on the clock to 6 o'clock to start the game.
 2. Decide who will go first (player 1) and who will go second (player 2).
 3. Take turns to choose to move the hands of the clock on by $\frac{1}{2}$ hour or by 1 hour. For example, player 1 could choose $\frac{1}{2}$ hour, so the clock hands move to 6.30, then player 2 might choose 1 hour, moving the clock hands to 7.30 ... etc.
- The winner is the player who moves the hands exactly onto 12 o'clock.

TTW ask: Can you work out a winning strategy so that you can always beat your opponent?

Telling Time Game-

- Telling Time Game Cards

<https://drive.google.com/file/d/0BwivNcO0Yu1RM2MyOGYzZDUtNDI3Ny00ZDFhLWFmNjktYmUwYmNkMTM1N2Q0/view>

This is a time-telling card game based on Old Maid. There are 33 cards, 16 of which are analog and digital clocks with the same time and 1 dead battery card.

Students play in groups of 4. Pass out all the cards. Students take turn drawing a card from the person to their left. Student with the most pairs wins. Student left with the old maid loses.

Note: This game is differentiated up for those students ready to “move on”. The cards are created in 15 minute increments to include 15 minutes and 45 minutes after the hour.

Time Charade-

Have student volunteers mime activities they do during the day or evening. If possible, you can write specific activities on slips of paper and put them in a box or a hat. Activities can include waking up, going to bed, or eating lunch. Then have students name a specific time to the hour when they would do that activity. Make sure students tell whether the time is during the day or night. Have other students write the time to the ½ hour on the board or draw analog clocks to show the time.

As an added twist, you can write a time to the half hour on the board and have students mime an activity they would do during that time. Try writing a time where activities can be done during the day and in the evening. For example, if you choose 7:30, some students may mime waking up in the morning and other students may mime eating dinner or doing homework. Have other students decide which event is during the day and which is during the evening. Students can use the What Time is it? Worksheet.

Increasing Rigor Time Questions/Tasks-

- How does the hour hand look different from the minute hand? Is this comparison true for the duration of time each hand represents?
- (Display 3 analog clocks showing 11:30, 1:30 and 12:30) Which clock shows half past 12 o'clock? Explain your thinking.
- Why is 4:30 also known as half past 4?
- You eat lunch between 11:00am and 1:00pm. What are some possible times you can eat? What difference do you notice between the hour hands for 3:00 and 3:30? Why does it change?

Additional Clock Activities:

<http://betterlesson.com/lesson/523263/lean-back-lean-back>

<https://www.pinterest.com/janwray/double-digit-addition-subtraction/>

<http://www.theteachersguide.com/twodigitadditionworksheets.htm>

Optional Math in Literature Activity:

Read *Telling Time* by Jules Older, throughout the book she identifies digital and analog clocks and explains each hands' function on the analog clock.

MINI LESSONS/CLOSURE ACTIVITIES

Think Pair Share-

TTW will give students random time of day to the ½ hour and ask them what activities they usually do at that time of day. Students talk to partner for 10 seconds before answering questions.

Time Power Point + Exit Tickets-

Students will write the correct time on a slip of paper and turn in as an exit ticket. Teacher can use the blank clocks template below. Students will draw the time on the clock and write the correct time with colon in blank.

http://betterlesson.com/lesson/resource/3008507/time-to-the-half-hour_summarizing-pptx?from=lessonsection_narrative

<http://www.instantdisplay.co.uk/clockfaces.pdf>

Online Clock Practice/Quiz-

- Online Clock manipulative; teacher quizzes students on what time the clock shows

<http://www.oswego.org/ocsd-web/games/ClassClock/clockres.html>

Exit ticket-

teacher gives each student a clock and the student has to write down the time. Teacher can use one of the printable work sheets for time to the ½ hour and cut individual clocks out to use for exit tickets.

http://www.softschools.com/telling_time_sheets.jsp?timeType=1

Time to the ½ hour Flash Cards-

http://www.math-aids.com/cgi/pdf_viewer_3.cgi?script_name=flash_telling_time.pl&inc=30&c_num=4&color=0&numbered=2&paper=0&cut_lines=1&copies=8&x=148&y=20

Lesson Activity Based Closure

TTW use one of the activities provided to close out the lesson to make sure each student can talk about what they have learned today. It is important for the teacher to model a problem at the end of the lesson and let one students model the process to check for understanding.

40 Ways to Leave a Lesson-

<https://docs.google.com/file/d/0B-0npvl9xzTBMGs1SUUzeEN3RU0/edit>
www.mathworksheetisland.com

SMALL GROUP/CENTER ACTIVITIES:

http://www.softschools.com/time/telling_time_worksheets/

<https://www.pinterest.com/primaryjunction/time-ideas/>

<https://www.pinterest.com/1stklinger/1-md-3/>

<http://search.theeducationcenter.com/educationproduct/time-to-the-hour>

<http://www.thecurriculumcorner.com/thecurriculumcorner123/2012/05/11/telling-time/>

<http://search.theeducationcenter.com/educationproduct/telling-time-to-the-half-hour>

<https://www.teacherspayteachers.com/Product/FREE-Telling-Time-Scoot-Hour-Telling-Time-Task-Cards-1331253>

<http://deceptivelyeducational.blogspot.com/2011/11/telling-time-printable-card-game.html>

SUMMATIVE ASSESSMENT RESOURCES:

<http://commoncoretasks.ncdpi.wikispaces.net/First+Grade+Tasks>

<https://ccak52012.wikispaces.com/First+Grade+Teacher+Created+Tasks>

<http://www.crickweb.co.uk/ks2numeracy.html>

<http://www.math-salamanders.com/1st-grade-math.html>

<http://illuminations.nctm.org/Activity.aspx?id=3566>

https://www.orglib.com/1.oa.6-worksheet-as-assessment-viewTestQuestions_0d1520c2bb_8521a3a648b6468f8e96c9d0f0e9af01_265.html

http://www.internet4classrooms.com/grade_level_help/test_taking_assistance_first_1st_grade.htm

FORMATIVE ASSESSMENTS:

http://www.ehow.com/about_5419008_types-formative-assessment.html

<http://www.edutopia.org/resource/checking-understanding-download>

<http://wvde.state.wv.us/teach21/ExamplesofFormativeAssessment.html>

ADDITIONAL ONLINE RESOURCES (Bellwork):**Worksheets-**

www.mathworksheetisland.com

<http://www.k5learning.com/free-math-worksheets/first-grade-1>

<http://mathworksheetwizard.com/grade1/grade1numbers.html>

<http://www.mathworksheets4kids.com/activities/1st-grade.php>

<http://www.tlsbooks.com/firstgrademathworksheets.htm>

Free printable number cards:

<http://www.activityvillage.co.uk/number-flash-cards-1-30>

<https://www.teacherspayteachers.com/Product/1-120-Flashcards-freebie-317022>

or

<http://www.mediafire.com/file/a67e7r40m2omdy6/Flash+Cards+Numbers+0-120.pdf>

Free number word printable flashcards:

<https://www.havefunteaching.com/flash-cards/math-flash-cards/numbers-word-flash-cards-0-to-100/>

Free printable ten frames:

<http://www.mathwire.com/templates/tenframemat.pdf>

Free printable dominoes:

<http://www.dltk-cards.com/dominos/>

Free printable spinners:

<http://cte.sfasu.edu/wp-content/uploads/2012/09/Templates-for-Spinners.pdf>

Free printable hundreds charts:

<https://www.superteacherworksheets.com/hundreds-chart.html>

Free printable clocks:

<http://www.craftnhome.com/clock-faces.html>

Virtual manipulatives can be found here:

<https://grade1commoncoremath.wikispaces.hcpss.org/file/view/Directions%20for%20Virtual%20Manipulatives%201.NBT.2.pdf/519489918/Directions%20for%20Virtual%20Manipulatives%201.NBT.2.pdf>

Practice for Math Fact Fluency Activities:

<http://www.interventioncentral.org/teacher-resources/math-work-sheet-generator>

http://www.abcya.com/math_facts_game.htm

<http://www.playkidsgames.com/games/mathfact/mathFact.htm>

<http://www.factmonster.com/math/flashcards.html>

<http://www.fun4thebrain.com/addition.html>

http://www.mathplayground.com/index_addition_subtraction.html

<http://www.math-drills.com/addition.shtml>

<http://mrshillsallstars.weebly.com/addition-without-regrouping.html>

<https://www.pinterest.com/janwray/double-digit-addition-subtraction/>

<http://www.theteachersguide.com/twodigitadditionworksheets.htm>

DIFFERENTIATING RESOURCES:

<https://daretodifferentiate.wikispaces.com/Learning+Centers>

http://www.internet4classrooms.com/common_core

<http://www.k-5mathteachingresources.com>