Area of Study: Mathematics

Grade Level: 2nd

Teacher: Mrs. Stephens; Petal Primary School

Duration of Instruction: 2 weeks

Pre-service Teacher: Haley Sampson; Elementary Education

Day 1

Standards:

CCSS.MATH.CONTENT.2.MD.C.7
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

SLOs:

TSW identify increments of time, including hour, half-hour, and quarter hour. (Knowledge/Comprehension)

TSW demonstrate their knowledge of half of, quarter after, and quarter til by creating an hour strip. (Application)

TSW select the correct time shown from the analog clock. (Comprehension)

Procedures:

Spiral Review:

TSW complete Math Meeting Master reviewing old skills. TTW review.

TSW complete Problem of the Day. TTW check with class.

TSW complete Facts Sheet for the week in three minutes. TTW check with class.

Whole Group:

TTW introduce the topic of time by using a bridge map to show increments of time. (Ex: 60 seconds= 1 minute, 1 minute= 1 hour)

TTW discuss terms half of (2 equal parts), quarter (4 equal parts of a whole, 4 quarters in a football game).

Each SW be given a strip of paper. TSW write 4:00 at the top of the strip for the beginning hour. TTW discuss how long an hour is. TSW write 5:00 at the bottom of the strip. TSW fold the strip in half and write 4:30 and half past four. TSW label the quarters. TSW lightly color the quarters a different color.
Independent:
TTW give students choice cards (A,B,C,D). TTW show a PowerPoint including an analog clock with a given time (from the hour, quarter hour, or half hour). TSW independently choose the corresponding written form of the time using the choices (A,B,C,D) under the clock. TTW ask the students to choose a card quietly and reveal their cards when instructed.
TTW use a checklist to quickly mark the students that did not choose the correct answers as an assessment for the day.

Materials:
Strips of paper, colored pencils, pencils, choice cards, PowerPoint, Smart Board, Facts sheet

Assessment:
Time Pretest, Informal: Choice cards checklist

Enrichment:
TSW create an entire clock strip going from hour to hour.

Remediation:
When finished, TSW practice using the following website:
http://www.abcya.com/telling_time.htm

Accommodations/Adaptations:
TSW be given an example of the clock model to use when completing their own. TTW walk through the instructions step-by-step to assist the students who need help creating their clock models.
Day 2

Standard:

CCSS.MATH.CONTENT.2.MD.C.7
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

SLOs:

TSW recall counting by fives in order to tell time to the nearest five minutes. (Knowledge)

TSW identify time on an analog clock to the nearest five minutes and minute. (Comprehension)

TSW write the time on an analog clock given a digital time. (Synthesis)

Procedures:

Spiral Review:

TSW complete Math Meeting Master reviewing old skills. TTW review.

TSW complete Problem of the Day. TTW check with class.

TSW study Facts for the week with partner.

Whole Group:

TTW review quarter hour and half hour by using the clock model strip created on Day 1.

TTW discuss 5 minutes and how long it is. TTW have the students discuss among their tables to determine a list of things that can be done in 5 minutes.

TSW participate in Count Around the Room: start with 0 counting by 5’s, when TT claps, TS changes the pattern to counting by 1’s (Ex: 0, 5, 10, 15, CLAP, 16, 17, 18, 19, 20)

Small Group:

TSW take out time strips from yesterday and add the minute ticks in between their quarters.

TTW divide students into groups of two-three for the time traveling scoot. TSW travel around the room to write the analog or digital time shown on each clock. Once the students have traveled to each clock, TTW check together.

Independent:

TSW work on their interactive time activities in their math notebooks as an assessment for the material covered during the day. TTW guide the students in folding the slits of the paper down, so they do not glue the entire paper in their notebook. TTW guide them in gluing the top and
center of the Draw the Time sheet in their notebooks. TSW read the digital time given and draw the corresponding time on the analog clock slips.

**Materials:**

Hour strips, pencils, paper, Time Traveling stations, Draw the Time sheets, glue

**Assessment:**

Interactive Notebook checklist: Draw the Time

**Enrichment:**

TSW play Just in Time board game.

**Remediation:**

TSW work with the teacher one-on-one while the other students travel from station to station.

**Accommodations/Adaptations:**

TTW partner the students on varying academic levels, so they can work with their partners if they need assistance with the time telling scoot.
Day 3

(Workshop Day: Seven students in class)

CCSS.MATH.CONTENT.2.MD.C.7
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

SLOs:

TSW identify time on an analog clock to the nearest five minutes and minute. (Knowledge)

TSW convert analog time to digital time. (Comprehension)

TSW practice telling time to the nearest five minutes, using a.m. and p.m. (Application)

Procedures:

Spiral Review:

TSW complete Math Meeting Master reviewing old skills. TTW review.

TSW complete Problem of the Day. TTW check with class.

TSW study Facts for the week with partner.

Small Groups:

Group 1: TSW use plastic eggs to match the time form an analog and digital clock. The top of the egg will include the analog clock and the bottom will include the digital.

Group 2: TSW practice using clock manipulatives using numbers and words.

Group 3: TSW complete Telling Time practice using the computers on Study Island.

Independent:

TSW work on their interactive time activities in their math notebooks as an assessment of the material covered in class. TTW pass out the materials for Clock Words & Digital Time. TSW glue five analog clocks in their folders. Above the row of clocks, TSW glue three slips of paper with the words clock, word, and digital in their notebooks. TSW read the analog clock and write the time shown in word and number form.

TTW collect notebooks to assess.

Materials:

Computers, Just in Time board game, Plastic egg manipulative, math notebook, glue, Clock Words & Digital Time papers, pencils, paper

Assessment:

Interactive Notebook checklist: Clock Words & Digital Time
**Enrichment:**

TSW work on identifying times to the hour using word problems

**Remediation:**

When finished with small groups, the students will practice writing the word form of time using http://www.abcya.com/telling_time.htm.

**Accommodations/Adaptations:**

TTW provide students with an example of the Clock Words & Digital Time interactive sheet.
Day 4

CCSS.MATH.CONTENT.2.MD.C.7
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

SLOs:

TSW identify and write time to the quarter after and quarter til. (Knowledge)

TSW practice telling time to the nearest five minutes. (Application)

TSW categorize time by quarter after, quarter til, and half past. (Analysis)

TSW write the word form of each time. (Language Arts: Synthesis)

TSW discover how to tell the time of weather using the forecast. (Science: Application)

Procedures:

Spiral Review:

TSW complete Math Meeting Master reviewing old skills. TTW review.

TSW complete Problem of the Day. TTW check with class.

TSW study Facts for the week with partner.

Whole Group:

TTW revisit the clock line strip to review telling time to the quarter after, half past, and quarter til.

TSW complete a tree map in their math notebooks by sorting times by quarter after, quarter til, and half past.

TTW have students practice time by using weather.com TTW remind students of the weather unit they have been studying. TTW pull up the radar for the day. TTW ask the students what time it will rain today. TTW ask the students to write the digital time on their paper. TTW ask TS to use the clock manipulative to show the analog time.

TSW write the digital time and the time in words under each clock on the tree map.

Independent:

TSW work on their interactive time activities in their math notebooks. TSW glue the Time Pockets in their notebooks. The three pockets will have time to the hour, quarter hour, and half hour. TSW receive slips of paper with an analog clock and given time. TSW work with their group to identify each slip and place them in the correct pocket.

TTW collect notebooks to check for mastery.
**Materials:**
Math notebooks, Time pocket interactive worksheets, glue, pencils

**Assessment:**
Interactive Notebook checklist: Time Pockets

**Enrichment:**
TSW create task cards with different times. TSW create four card with the written time and the digital time. TSW partner with another to quiz each other on the times.

**Remediation:**
TSW complete Telling Time practice using the computers on Study Island.

**Accommodations/Adaptations:**
TTW have printed worksheets of the tree maps for students who cannot adequately complete the assignment.
Day 5

CCSS.MATH.CONTENT.2.MD.C.7
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

SLOs:
TSW identify and write time using digital and analog clocks. (Comprehension)
TSW write and read a narrative to determine time. (Language Arts: Synthesis)
TSW construct an order and sequence text describing a tornado. (Science: Synthesis)

Procedures:

Spiral Review:
TSW complete Math Meeting Master reviewing old skills. TTW review.
TSW complete Problem of the Day. TTW check with class.
TSW study Facts for the week with partner.

Whole Group:
TTW review the anchor chart with the students before giving the Time Daily Grade. TTW have the students write a story about a time they saw a tornado using time. TSW tell the order of events using time. TSW trade their story with their partner. TSW draw each time using an analog clock. TSW trade back to the original story writer for them to check.

Independent:
TTW administer the Time Daily Grade.
TTW administer the Facts Test.

Materials:
Time Daily Grade. Facts Test, Smart Board, pencils

Assessment:
Time Daily Grade

Enrichment:
TTW have students research military time as a jigsaw to share with other students.

Remediation:
TSW work on time word problems when finished.
Accommodations/Adaptations:
Student 3 will sit in the back of the room away from other students for Facts Test.
Student 7 will sit alone with whisper phone for tests.
Day 6

CCSS.MATH.CONTENT.2.MD.C.7
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

SLOs:
TSW identify a time and decide if the time is a.m. or p.m. based on the activity. (Knowledge)
TSW construct an a.m./p.m. sequence chart. (Application)

Procedures:
**To prepare for Tuesday’s lessons, TTW have students use the Elapsed Time Chart to document the time classroom activities start and stop.

Spiral Review:
TSW complete Math Meeting Master reviewing old skills. TTW review.
TSW complete Problem of the Day. TTW check with class.
TSW complete Facts Sheet for the week in three minutes. TTW check with class.

Whole Group:
TTW pose the question, “When does a new day start?” TTW record TS answers on the board.
TTW explain to TS that a new day starts at 12:00 a.m. (discuss meaning of a.m.).
TTW create a chart listing every hour starting with 12:00 a.m. (midnight).
TTW continue the chart to list the times 12:00 a.m.-11:00 p.m.

Independent:
TSW create an a.m./p.m. strip. TSW determine whether an event is a.m. or p.m using A.M./P.M. Tree Map. TSW place them in order and write the word form of each time. TSW glue them on a piece of construction paper in order from start to end of the day.

Whole Group:
TSW practice writing quarter past, half past, and quarter til. TTW show the students a time on the clock. TSW write the time in number and word and identify as quarter past, half past, or quarter til.

*TSW fill out an exit slip before leaving for recess.

Materials:
Analog clock, paper, pencils, Elapsed Time sheet, A.M./P.M. Tree Map, Exit Slip
Assessment:

Exit slip: The class will eat pizza at lunch in the cafeteria today. What time could the class be going to lunch? (A) 11:40 a.m. (B) 5:30 p.m. (C) 11:40 p.m. (D) 5:30 a.m.

Enrichment:

TSW create a timeline of their day including a.m. and p.m.

Remediation:

TSW write a time such as 4:30 using numbers and words. TSW write the time and give an example activity for a.m. and p.m. in their math notebooks.

Accommodations/Adaptations:

TTW guide the students in the a.m./p.m. sequence chart step-by-step and evaluate during.
Day 7

**CCSS.MATH.CONTENT.2.MD.C.7**
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

**SLOs:**

TSW construct an open number line to determine the amount of time that has passed between two times. (Application)

TSW practice telling time using empty analog clocks. (Application)

TSW explain the water cycle through discovery learning. (Science: Evaluation)

**Procedures:**

**Spiral Review:**

TSW complete Math Meeting Master reviewing old skills. TTW review.

TSW complete Problem of the Day. TTW check with class.

TSW study Facts for the week with partner.

**Whole Group:**

TTW introduce elapsed time using the following story: A thunderstorm came by my house last night. The thunderstorm started at 5:30 p.m. and ended at 8:00 p.m. How long was the thunderstorm?

TSW solve the problem independently and share a strategy they used.

TTW remind the students about the open number line and will model solving the problem using the open number line.

**Centers (Rotation 1&2):** *15 minutes each

*Rotations 3&4 Thursday*

1. **Sampson:** TSW explore elapsed time by participating in a cloud in a jar activity. TTW remind the student about their study of weather. TTW share with the students that they will be looking at part of the water cycle process as well as tracking elapsed time. TTW give each student a mason jar with water filled 2/3 of the way. TTW put shaving cream on the top of the jar. Each student will receive a dropper. TTW have the students observe the cloud before and discuss how they will demonstrate the process of rain by using the dropper to drop food coloring through the cloud. TSW observe the “rain” fall through the clouds. TTW ask the students to record a start time, time when the rain falls through the clouds, and time when the coloring has filled the jar. TSW calculate the elapsed time between each using an open number line.
2. **Stephens**: TSW review their Elapsed time chart from yesterday. TTW guide students into determining the amount of time that passes between each activity throughout the day.

3. **Independent**: TSW practice writing time using an empty analog clock with given digital times.

4. **Independent**: Small group time card match. TSW match the analog clock with the written time.

**Materials:**

Five mason jars, droppers, food coloring, timer, paper, pencils, Elapsed Time chart, math notebook, time cards

**Assessment:**

TTW assess using the Elapsed Time chart.

**Enrichment:**

TSW research the advantages/disadvantages of military time by creating a T-chart based on their results to present to the class.

**Remediation:**

TSW write activities under the a.m./p.m. sort in their math notebook in addition to the squares already glued.

**Accommodations/Adaptations:**

TTW write the times for the students during the cloud in a jar activity for students 3, 16, and 8 on the class list. TSW then determine the elapsed time using the times TT provided.
Day 8
(Workshop day: Seven students left)

CCSS.MATH.CONTENT.2.MD.C.7
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

SLOs:
TSW practice telling time to the quarter hour, half hour, quarter til, nearest five minutes, and minute. (Analysis)

Procedures:
Spiral Review:
TSW complete Math Meeting Master reviewing old skills. TTW review.
TSW complete Problem of the Day. TTW check with class.
TSW study Facts for the week with partner.

Materials:
SmartBoard, pencil, paper, Elapsed Time recording sheet

Independent:
TTW give students choice cards (A,B,C,D). TTW show a PowerPoint including two analog clocks with a given times. TSW independently choose the correct elapsed time using the choices (A,B,C,D) under the clocks. TTW ask the students to choose a card quietly and reveal their cards when instructed.

TTW use a checklist to quickly mark the students who did not choose the correct answers as an assessment for the day.

Centers:
Sampson: TTW practice telling time to the quarter hour, half past, and quarter til by using clock sorts with manipulatives.
Stephens: TSW practice telling time to the minute using manipulatives.
Study Island: TSW use the computers to work on “Telling Time”.

Assessment:
TTW assess using the checklist from the PowerPoint of the day.
**Enrichment:**

TSW research weather and discover the elapsed time between storms.

**Remediation:**

TTW have the students work on problem solving problems that include time. TSW tell the difference in elapsed time of time written in word.

**Accommodations/Adaptations:**

TTW introduce another strategy using a T-chart to find the difference in elapsed time.
Day 9

CCSS.MATH.CONTENT.2.MD.C.7
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

SLOs:

TSW construct an open number line to determine the amount of time that has passed between two times. (Application)

TSW practice telling time using empty analog clocks. (Application)

TSW explain the water cycle through discovery learning. (Science: Evaluation)

Procedures:

Spiral Review:

TSW complete Math Meeting Master reviewing old skills. TTW review.

TSW complete Problem of the Day. TTW check with class.

TSW study Facts for the week with partner.

Whole Group:

TTW review time by having students participate in stop the clock. TTW give each student a piece of notebook paper. TSW fold the paper down three times starting with the paper laying landscape. TTW ask the students to look at the analog clock and write the correct time in numbers. TTW ask the students to raise their answers. TTW choose the answer according to the class. This process will continue until the game is finished. TTW assess which students can tell time by the minute.

Centers (Rotation 3&4): *15 minutes each

*Rotations 1&2 Tuesday

1. Sampson: TSW explore elapsed time by participating in a cloud in a jar activity. TTW remind the student about their study of weather. TTW share with the students that they will be looking at part of the water cycle process as well as tracking elapsed time. TTW give each student a mason jar with water filled 2/3 of the way. TTW put shaving cream on the top of the jar. Each student will receive a dropper. TTW have the students observe the cloud before and discuss how they will demonstrate the process of rain by using the dropper to drop food coloring through the cloud. TSW observe the “rain” fall through the clouds. TTW ask the students to record a start time, time when the rain falls through the clouds, and time when the coloring has filled the jar. TSW calculate the elapsed time between each.

2. Stephens: TSW review their daily classroom schedule chart from yesterday. TTW guide students into determining the amount of time that passes between each activity throughout the day.
3. **Independent**: TSW practice writing time using an empty analog clock with given digital times.

4. **Independent**: Small group time card match. TSW match the analog clock with the written time.

**Materials:**

Five mason jars, droppers, food coloring, timer, paper, pencils, Elapsed Time chart, math notebook

**Assessment:**

TTW assess using the checklist from the Stop the Clock activity.

**Enrichment:**

TSW create an ideal class schedule including the time starting from 7:00 a.m. to 2:30 p.m. TSW record the elapsed time.

**Remediation:**

TSW write activities under the a.m./p.m. sort in their math notebook in addition to the squares already glued.

**Accommodations/Adaptations:**

TTW write the times for the students during the cloud in a jar activity for students 3, 16, and 8. TSW then determine the elapsed time using the times TT provided.
Day 10

CCSS.MATH.CONTENT.2.MD.C.7
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

SLOs:

TSW identify and write time using digital and analog clocks. (Comprehension)

TSW create and order and sequence chart using a.m. and p.m. (Language Arts: Synthesis)

Procedures:

Spiral Review:

TSW complete Math Meeting Master reviewing old skills. TTW review.

TSW complete Problem of the Day. TTW check with class.

Independent:

TTW administer the Facts Test.

Whole Group:

TSW create a telling time flow map:

1. Write the time shown on each clock.
2. Add a.m./p.m. to the times.
3. Sequence the events from the story.
4. Create a flow map with the events. (add elapsed time to the arrows between the events)

TTW review telling time with the students (using words, other ways to say the time, a.m./p.m.).

Independent:

TTW have students complete exit card before leaving.

Materials:

Telling Time flow map, large analog clock, pencils, paper, Smart Board, exit card

Assessment:

TTW assess by using an exit card.

Enrichment:

TSW practice telling time using Study Island.
Remediation:
TSW use manipulative clocks with a partner to practice telling and writing time.

Accommodations/Adaptations:
TTW have lower math group sit at back table to complete flow map as a group.