

<b>Grade: 2</b>	<b>Subject: Math</b>
<b>Materials: computers, Time whiteboards, counting 1s, 5s, 10s, and what's in the bank game</b>	<b>Technology Needed: individual computers</b>
<b>Instructional Strategies:</b> <ul style="list-style-type: none"> <li>ø Direct instruction</li> <li>ø Guided practice</li> <li>ø Socratic Seminar</li> <li>ø Learning Centers</li> <li>ø Lecture</li> <li>ø Technology integration</li> <li>ø Other (list)</li> </ul>	<b>Guided Practices and Concrete Application:</b> <ul style="list-style-type: none"> <li>ø Peer teaching/collaboration/cooperative learning</li> <li>ø Visuals/Graphic organizers</li> <li>ø PBL</li> <li>ø Discussion/Debate</li> <li>ø Modeling</li> <li>ø Large group activity</li> <li>ø Hands-on Technology integration</li> <li>ø Imitation/Repeat/Mimic</li> <li>ø Independent activity</li> <li>ø Pairing/collaboration</li> <li>ø Simulations/Scenarios</li> <li>ø Other (list)</li> </ul> <p>Explain:</p>

**Standard(s)**

2.MD.7- Tell and write time to the nearest five minutes (including quarter after and quarter to) with a.m. and p.m. using analog and digital clocks.

**Differentiation**

For this lesson plan there will be a team teaching element where we break the students into four groups based on their first math assessments and corresponding scores. We will be focusing on four different aspects of math including counting money, counting sets, and computer math investigations. We will rotate the students through each of the four stations, and I will be working with the students on telling time.

**Below Proficiency:**

- With students who are below proficiency, I will review how to read time on an analog clock and practice with the students using the clock whiteboards available in the room.

**Above Proficiency:**

- Students who are above proficiency will learn to tell time on both an analog and digital clock. These students will also be asked more difficult clarifying questions about AM and PM times.

**Approaching/Emerging Proficiency:**

- Emerging learners will focus on telling time on an analog clock and answer tough clarifying questions on how to say time. In addition, these students will also begin learning how to read a digital clock.

**Modalities/Learning Preferences:**

- **Visual:**

Visual learners will excel with the hands-on activities associated with the whiteboard clocks and visually looking at the times on digital and analog clocks.

- **Auditory:**

Auditory learners will succeed with the help of clarifying questions and learning to verbalize time themselves when it could come up in conversation for example.

- **Kinesthetic:**

Kinesthetic learners will succeed do to the moving around and rotating to different stations. In this way the math learning for the

<p><b>Objective(s)</b> The learner will interpret time using a hand clock or digital clock to the nearest 5 minutes while also using words like quarter to, half past, and quarter after.</p> <p><b>Bloom's Taxonomy Cognitive Level:</b> Evaluate</p>	<p>day will keep them on their toes and not be stagnant or stale.</p> <ul style="list-style-type: none"> <li>· <b>Tactile :</b> Tactile learners will have many opportunities to draw and depict time with the help of the whiteboard time clocks.</li> </ul>
<p><b>Classroom Management- (grouping(s), movement/transitions, etc.)</b></p> <ol style="list-style-type: none"> <li>1. Students will be formed into 4 groups based on their first Math assessment scores.</li> <li>2. Students will rotate through the four math stations in about an hour's time. (about 15 minutes per station)</li> <li>3. Students will visit each of the four stations one time.</li> <li>4. Students will return to their desks after the lesson, and after they have made sure all stations are left cleaned up.</li> </ol>	<p><b>Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)</b></p> <ol style="list-style-type: none"> <li>1. Students are asked to have their voice levels low while the teacher is talking and explaining.</li> <li>2. Students are asked to be in their desk or standing very close to their desk unless otherwise allowed to do so.</li> <li>3. Students are expected to participate in discussions with their peers and teachers.</li> <li>4. Students are asked to respect the personal space of others and keep their own space clean before and after each transition to a new station and new teacher.</li> </ol>
<p><b>Minutes</b></p>	<p><b>Procedures</b></p>
<p>2</p>	<p><b>Set-up/Prep:</b></p> <ul style="list-style-type: none"> <li>· Have the four groups of students split apart on the board so it will be easy to organize and transition to the first stations.</li> <li>· Have each station and its materials ready and available.</li> <li>· Make sure cooperating teachers know what station they will be working with.</li> </ul>

<p>5</p>	<p><b>Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)</b></p> <ul style="list-style-type: none"> <li>· Today for math we will be focusing on a couple of different areas including counting money, counting by ones, fives, and tens, our computer math investigations, and also how to tell time.</li> <li>· We will be breaking into 4 groups by your class number, and I have these groups written on the board. Each group will be working with the help of a teacher.</li> <li>· The group with me will be focusing on time. Can anyone tell me what time it is on this clock?... But wait, I thought it was half past 9... Am I wrong?</li> <li>· Each station will last about 15 minutes so when will we be rotating to our second station?</li> </ul>
<p>5 (per rotation)</p>	<p><b>Explain: (concepts, procedures, vocabulary, etc.)</b></p> <ul style="list-style-type: none"> <li>· Station #1 Math investigations, Station #2 What’s in the Bank?, Station #3 Counting by ones, fives, and tens, Station #4 Telling time</li> <li>· Analog clock</li> <li>· Digital clock</li> <li>· Hour hand</li> <li>· Minute hand</li> <li>· AM</li> <li>· PM</li> <li>· Quarter after, half past, quarter to</li> <li>· We use clocks to tell time and we use clocks on the wall, clocks on our nightstand, and watches on our hand to do it. Clocks can either be digital or analog, but we need to be able to read them in order to go about our daily lives.</li> <li>· You read a digital clock just as it says.</li> <li>· PM stands for evening, and AM for morning</li> <li>· An analog clock like you see on the wall often includes an hour and a minute hand. The hour hand is the shorter hand, and the minute hand is the longer one. On an analog clock each tick mark stands for sixty minutes and each number can either stand for five minutes or the hour it is.</li> <li>· When we tell time it is important we identify it so we can remember ourselves, but we also need to be able to tell others orally. This is when we use Quarter after, half past, and quarter to which correlate to minutes in the hour.</li> </ul>

<p><b>10 (per rotation)</b></p>	<p><b>Explore:</b> (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)</p> <ul style="list-style-type: none"> <li>· <b>Model time for the students so they have to write it out</b></li> <li>· <b>Model time for students so they have to say it orally</b></li> <li>· <b>Give students a time and have them depict it on their whiteboard</b></li> <li>· <b>Ask word problem clarifying questions to students which include time</b> <ul style="list-style-type: none"> <li>• <b>Review with each group of students</b></li> </ul> </li> </ul>
<p><b>5</b></p>	<p><b>Review (wrap up and transition to next activity):</b></p> <ul style="list-style-type: none"> <li>· <b>What were some things we learned today through our rotations?</b></li> <li>· <b>Where could we learn to further recognize time in our lives? (when we get up, when we go to bed, daily schedules)</b></li> <li>· <b>I challenge you to look at a clock each time you eat, get up, and go to bed this week. If you do this you will start becoming more confident telling time and even start paying attention to it at school for example.</b></li> </ul>
<p><b>Formative Assessment:</b> (linked to objectives, during learning)</p> <ul style="list-style-type: none"> <li>· <b>Progress monitoring throughout lesson (how can you document your student's learning?)</b></li> <li>· <b>Fist to five</b></li> <li>· <b>Thumbs up, thumbs down</b></li> <li>· <b>Observation as the teachers work with students</b></li> <li>· <b>Students contribution to discussion</b></li> <li>· <b>Students practical applications at each station</b></li> </ul>	<p><b>Summative Assessment</b> (linked back to objectives, <b>END</b> of learning)</p> <ul style="list-style-type: none"> <li>· <b>Chapter quiz or chapter test which includes time</b></li> <li>· <b>Example below</b></li> </ul>

**Reflection (What went well? What did the students learn? How do you know? What changes would you make?):**

During my practicum and observation experiences thus far, some of the math lessons have been transformed into math workshops where one strategy or even multiple strategies can be taught to students. I appreciated these workshops right away because they create an opportunity for students to get practice on things they need to work on. In addition, this idea of workshops works very well when there are multiple adults in the room who are able to lead each stage or station in the workshop. Workshops also allow for teachers to touch on multiple standards during the course of a lesson including daily standards and power standards. During my lesson which I chose to be in a workshop format I chose to touch on a power standard in my station dealing with telling time. The other stations in my workshop touched on different standards students were studying on their way to mastery. This hour-long math workshop lesson went along much as I expected it to. The workshop went well because there were several adults in the room to help in running the stations so that the students stayed on task. I was really pleased with how the students understood their expectations and stayed on task. Better yet when time was up at station, students packed up and transitioned nicely so that very little time was wasted during rotations. This allowed for more learning time which for my time station the students most definitely needed. On another positive note related to wasting little time, I felt like my time management during the lesson was very good and close to spot on. The students had equal amounts of time at each station and I did not give into the idea of letting certain stations and groups of students have more time at one station or another. In this way, the students had equal opportunities and learning experiences from each station. The time lesson itself was successful because of the ways I scaffolded information and connected students learning to real life probing questions that they see somewhere in their day to day lives. I knew the students learned many new strategies they could use in telling digital and analog time, AM vs PM time, and half past, quarter after, and quarter to ideas as they depicted and modeled examples using clock whiteboards and practice clocks. I was able to assess students learning by proposing a time problem for the students to answer. The students would model the time I asked them to and they put down their work and showed me individually what answers they were able to come up with. In this way I could see not only right and wrong answers but what the students were thinking and why they were thinking it. If the students were close to the right answer I could scaffold the information to lead them to the right answer. What made this lesson difficult was the fact that I was teaching different levels of students who were separated based on previous math assessment. One would think that splitting the students into homogenous groups would make teaching and learning easier. However, having no experience with knowing where the student's knowledge of time was I almost had to start from square one to assess where the group was yet. What's more, not all the students in a group were at the same level of learning, so it proved difficult to try and meet the needs of all the students in the station. If I had to change some pieces in my lesson, I would make sure I had a better idea of where individual students and groups of students were in regards to their understanding of time. If I was able to better understand where the students were with time, I could better tailor a lesson to suit individual and group needs. I also think my lessons could have had a better beginning and ending. A better beginning would start with a call to action or attention getter to draw the students in to understanding the importance of their learning. A better ending would include a summary or review of learning for all the groups after each station was completed. This way information would be fresh in students minds before moving to the next station and I wouldn't have to try and draw the students back together at the end of the entire lesson to talk only about time as a part of the whole math workshop.

2.MD.7

Math Summative Assessment

Name: \_\_\_\_\_

Date: \_\_\_\_\_

2.MD.7- Tell and write time to the nearest five minutes (including quarter after and quarter to) with a.m. and p.m. using analog and digital clocks.

I can tell time using a hand clock or digital clock to the nearest 5 minutes while also using words like quarter to, half past, and quarter after.

1. If you were walking into school in the morning and you saw this time on the clock what time would you say it is?



2. If you saw this time on your alarm clock how would you best tell your mom what time it is?



3. If you saw this time on the clock in the cafeteria in the afternoon, how would you best say what time it is?



Criteria	Proficiency Level
All questions are answered correctly using correct language.	3
All questions are answered correctly.	2.5
2 of 3 questions are answered correctly using correct language.	2
2 of 3 questions are answered correctly.	1.5
1 of 3 questions are answered correctly.	1