SOLAR LESSON PLAN FORMAT CLOCK OR TIME

Age Level: 3-5

Subject(s) Area: Math (Measurement and Data)

Materials Needed: Clock, counting pegs, clock handouts

Standards:

Code and description:

1.MD.3 Tell and write time to the hour and half-hour (including o'clock and half past) using analog and digital clocks.

Objectives:

What will the students know or be able to do? At what Bloom's Taxonomy- descriptive words. To what accuracy?)

Student will be able to place counting pegs (1-12) in order around an analog clock. After completing this task, they will match analog and digital time. Student will use terms such as quarter hour and half hour.

Learning Activities:

Technology: variety of technology used in the lesson

none

Required Vocabulary (list of age appropriate definitions):

Time: A point of time as measured in hours and minutes past midnight or noon.

Clock: A device indicating or measuring time.

Analog Clock: clock that has moving hands, and hours marked from 1 to 12, to show you the time.

Digital Clock: clock that display the time in numerical digits rather than by hands.

Half past Quarter past Half-hour

Opening Element: (Anticipatory set, setting a purpose for learning, assessment of background

knowledge, Review, Etc.)

What do you use to tell time?

What time do you think the clock says right now?

Instructional Methods:

*This lesson will have three levels of difficulty. Based on the readiness of the child, the teacher can choose whether to continue onto another level of difficulty.

Difficulty Level 1

- 1. Present the Clock. Child should know how to count well and can easily recognize numeral symbols 1 through 12.
- 2. Assemble the clock with the numbers 12 through 1 in the appropriate spaces. Bring the clock to child's work area. Take off each number 1 through 12. Slowly, put the numbers back starting with 1 and working back to 12.
- 3. Ask the child, "Would you like to do the exercise." If not, put away the clock and present it later.

Control of Error: The numbers don't line up in proper order.

After the student has mastered this exercise you can start teaching him/her how to tell time.

Difficulty Level 2

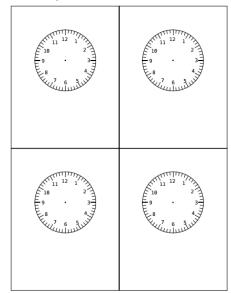
- 1. Put the long hand on the 12 and the short hand on another number, such as 3. And tell the child that this is called 3 o'clock.
- 2. Show another time, such as 5 o'clock.
- 3. Ask the child, "Can you show me 3 o'clock, and 5 o' clock?"
- 4. Next show the time, such as 10 o'clock. Ask the student, "What time is this?"

If they have difficulty with this, do the above exercise some more.

5. Finally, let the student find the time using the clock hands. For example, "Please find 3 o'clock." etc.

When this is mastered you can use a clock stamp or use these print outs (attached – click on hyperlink).

Difficulty Level 3



clockface printout.pdf

- 1. Put the time (o'clock to begin with) under each clock- such as 1 o'clock, 3 o'clock
- 10 'clock, 6 o'clock) under each clock. Write it out as 1 o'clock and 1:00. This step will help with the transition to reading digital clocks.
- 2. Present to the child the steps for filling out the clock picture.
 - a. Demonstrate finding the time on the clock and then drawing the hands on the print out. The long hand on the 12 and the short hand on the 1. (I put an arrow at the end of the clock's hand)
- 3. Ask the child if he or she would like to do the next one.

Difficulty Level 4

- 1. Present half hour and then quarter hour
 - a. Use the pegs, 15, 30, 45, 60 to represent the amount of minutes that corresponds with half hour and quarter hour.
- 2. Do minutes last-5's, 10's and 1's.
- 3. Count the minutes in a clock by ones, fives, twos, and tens.
- 4. Using the clock hand-outs write half-past 3, quarter to 4, etc.
 - a. Demonstrate find the time on the clock and then draw the hands on the print out. The long hand on the 3 and the short hand on the 6.

Guided Practice Strategies: Levels of scaffolding, various elements broken into parts, etc.

I do – I show them how to put the pegs in, move the hands, and use the clock hand-outs.

We do – Through reflecting questioning, the student and I will discuss the pegs, moving the hands, and the clock hand-outs.

You do - The work is put on the shelf and the children may choose it independently during the work cycle.

Independent Concrete Practice/Application: *practice of skills in practical ways* Telling Time independently, counting, growth in vocab (quarter past, half past)

Differentiation:

Always begin with Difficulty Level 1. Teacher decides if child is ready to move onto the next level.

If the student is having matching the long and short hand to the correct number color code the hands with the correct number. The hour hand coordinates with the hour numbers in color; the minute hand with the minute

Reflective Questions: (Questions asked to help students process or reflect upon content)

- How did you know it is 2 o'clock? (or choose any time)
- How did you know that is where the long hand is placed? How do you know that is where the short hand needs to be placed?
- How did you know to say half hour instead of quarter hour?

Wrap-Up:

Show students where the work will be placed on the shelf. "Now you can do the work whenever you want."

${f A}$ ssessment:

Formative- How does your assessment show individual measurability?

Does the student correctly put the pegs in order (1-12)? Does the student correctly put the short hand and long hand to correctly correspond with the time? Is the child able to correctly use the hand-outs? Does this lesson need to be retaught? Do they use the materials properly?

Summative: Include examples of what you would assess at the end of learning.

Child can independently choose work and complete the task.

Reflection:

Summary of strengths, weaknesses, changes made during implementation, changes to be made in the future, review of what the children learned, etc.

I started with difficulty level one with my lesson. The girl I worked with was easily able to place the pegs 1-12 around the clock. I quickly replaced the pegs on the table and mixed them up. In her hurry to complete it she grabbed whatever number was closer to her and had a hard time finding the spots for the peg. I said to her, "I wonder if you put the pegs in order from 1-12 it would be easier. Let's start over." I removed the pegs she had put on and we restarted. After successfully completing this step we moved on to the next difficulty level. When I moved the hour and minute hand to show her 1:00 and 3:00. She was able to repeat that the clocks read were 1:00 and 3:00, when I asked her to show me 1:00 she couldn't do it. I reshowed her 1:00 and 3:00, this time when I asked she was successful. Next I asked her to show me 5:00, she was able to do it with me guidance. When I got out the clock worksheets all she wanted to do was color them. I knew she wasn't ready for the worksheets so I told her that Miss Cate will show you the next step when she thinks you are ready.

Before I taught this lesson, I thought it was going to be really difficult. But when I split the lesson up into different levels of difficulty I thought it would work better. I would love to see how this lesson works when a student is able to complete all the difficulty levels.