*Mathematics Instructional Plan – Grade 2*

# Check the Time

Strand:Measurement and Geometry

Topic:Telling and writing time to the nearest five minutes

Primary SOL:2.9 The student will tell and write time to the nearest five minutes, using analog and digital clocks.

Related SOL: 2.2 a, b

## Materials

* Story about time
* Analog Clock Template (attached)
* Scissors
* Brads
* Digital Time Cards (attached)
* Check the Time Recording Sheet (attached)
* “A Day as a Student” booklets (attached)
* Red and blue colored pencils
* Yarn (two pieces for each student)

## Vocabulary

*analog, digital, half-hour, half past, hour, minutes, quarter after, quarter till*

## Student/Teacher Actions: What should students be doing? What should teachers be doing?

*Note: This is a follow-up lesson to be taught after instruction on how to tell time to the nearest five minutes. Before beginning the activity, assemble a booklet for each student, using the attached pages.*

1. Begin by reading aloud a story about telling time.
2. Distribute copies of the Analog Clock Template, scissors, and brads. Model how to cut out the clock face and hands and make a paper analog clock. Direct students to make their own clocks. As the students are doing this, place digital clock cards facedown around the room.
3. Distribute the Check the Time Recording Sheet. Group students into pairs, and assign each student a role of “Expert” or “Time Teller.” Have each pair move to a digital clock card. The Time Teller peeks at the digital time card, keeping it secret from the Expert, and sets his/her paper analog clock to the time shown on the card. The Expert sets his/her analog clock to the same time and reads the time aloud. The Expert then looks at the digital clock card to confirm that the time set on the paper analog clock is correct. Partners record both the digital time and the analog time on their recording sheets. They then move on to a new digital clock card, switch roles, and repeat the process. Continue the process until each pair has read every digital time card.
4. Once everyone is back in their seats, give each student two pieces of yarn. Have students take one piece of yarn and lay it across the clock lengthwise, with one part touching the 12 and the other part touching the 6. Ask students what they notice about their clocks; you are looking for the idea that it is a line of symmetry or divided in half. Tell students that when the minute hand is on the 6, it has traveled half the distance around the clock, and we call that time half past. Have students model this with the minute hand on their clocks. Next, have the students replace the first string if they removed it and take the second string across the width of the clock, 3 to 9. Ask students what they notice about the number of sections on the clock now. Then ask, “What can we call that section?” When we talk about a whole divided into four equal parts, we think about money where four quarters make a dollar. When the minute hand is on the 3, we call that time quarter after; have students model quarter after on their clocks. If the minute hand is on the nine, we call that time quarter till; again, have students model.
5. Give each student a Day as a Student booklet, a red pencil, and a blue pencil. Explain that students will be completing a booklet about a day at school. Direct students to record on the analog clocks in the booklet the times that match the digital times given, drawing the hour hand with a red pencil and the minute hand with a blue pencil. Have them fill in the blanks to personalize the stories. As they work, circulate to make sure they correctly record analog times to match the digital times. Use the completed booklets as a written assessment.

## Assessment

* Questions
* What does the minute hand tell us?
* What does the hour hand tell us?
* Do you see any connection between telling the time and skip counting? If so, what is it?
* Do we skip count when we tell time?
* Can you explain why this digital time matches this analog time?
* Journal/Writing Prompts
* Write about five things you do on Sundays, and write the digital and analog time that you do each thing.
* Plan a schedule for a perfect day, writing the digital and analog time you would do each activity. Explain why this would be a perfect day.
* **Other Assessments**
  + For added practice once five minutes has been taught, an index card can be placed on the students’ desks for a “time check.” The teacher then periodically throughout the day says, “Time Check”. The student then writes down the digital time that corresponds to the classroom clock or one that the teacher sets.

## Extensions and Connections (for all students)

* Have students use their paper analog clocks to play the game “Pass the Clock.” Students sit in a circle, and one student holds a paper analog clock. As music plays, students pass the clock from one to another until the music stops. At that point, the person holding the clock looks at the teacher, who shows a digital time. The student must make the analog clock match the digital time shown, then hand the clock to the player on the right, and return to his/her seat to use his/her own paper analog clock to make the digital times shown by the teacher. Play continues until only one player is left.
* Create a real classroom schedule for an entire day. Then have the students create “The BEST Day Ever” schedule, including anything they want. Have the students record times in digital and analog format on the schedule.

## Strategies for Differentiation

* Have students label an analog clock face with small dot stickers, counting by fives.
* Put tape along the length of the minute hand of a large wall clock, and write the word *minute* along it. Do the same for the hour hand.
* As a quick warmup, have students pretend their bodies are clocks and their arms are the hands on the clocks. Review the vocabulary *o’clock* and *thirty*. Hold up time cards that show “o’clock” times and “thirty” times. Have students raise both arms up in the air (as if pointing to the 12) if the card shows an “o’clock time.” Have students put both arms down in front of them (as if pointing to the 6) if the card shows a “thirty” time.
* To help ensure accuracy with hour and minute hands, provide students with geared clocks.
* Provide a word bank for students to use during the booklet-completion activity.
* Redirection and corrective feedback should be given throughout lesson.

**Note: The following pages are intended for classroom use for students as a visual aid to learning.**

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**Digital Time Cards**

Print on card stock.

| **1:55** | **2:05** |
| --- | --- |
| **3:45** | **4:15** |
| **5:35** | **6:25** |
| **7:00** | **8:10** |
| **9:50** | **10:20** |
| **11:40** | **12:30** |
| **1:30** | **2:35** |
| **3:00** | **4:30** |
| **5:40** | **6:55** |
| **7:25** | **8:45** |
| **9:15** | **10:50** |
| **11:05** | **12:00** |
| **2:40** | **3:25** |
| **5:55** | **7:20** |
| **10:10** | **12:15** |
| **11:25** | **6:35** |

## Analog Clock Template

## 

**Check the Time Recording Sheet**



| **A Day as a Student**  **At**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(school name)  **Elementary School**  **By** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **1** |
| --- |
| I get to school at **8:15**.  My transportation is by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (bus, car, or walking)  **ClockFace**  **2** |
| At **8:35** I see my friend \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (name).  \_\_\_\_\_\_\_ (He or She) is playing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (game) on the playground.  **ClockFace**  **3** |
| Snack is at **10:45**.  I hope that I have \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (favorite snack) in my book bag!  **ClockFace**  **4** |
| When it is **12:10**, we take a trip to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (favorite place at school).   I love going here because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  **ClockFace**  **5** |
| We already ate lunch. It is **1:20**, and I am ready for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  (subject after lunch). I love learning about \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (my favorite subject)  most of all!  **ClockFace**  **6** |