Sample Grade 2 Unit—Time

Unit Introduction

In this unit, students:
☞ Explore concepts of time.
☞ Tell time to the hour, minute, quarter-hour, half-hour, and the nearest 5 minutes.
☞ Model elapsed time.
☞ Complete and read a schedule.
☞ Estimate time using a one-handed clock.
☞ Make and read a schedule.
☞ Read a calendar.

KWL
Use a KWL chart to activate prior knowledge and set learning goals as a class. A reproducible KWL chart is provided on page BLM • 13.

Have students keep the KWL chart in their math folders and add to it as they work through this unit.

Focus on Vocabulary

<table>
<thead>
<tr>
<th>calendar (p. T-1)</th>
<th>half-hour (p. T-3)</th>
<th>quarter after (p. T-4)</th>
<th>second (p. T-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>clock (p. T-1)</td>
<td>hour (p. T-1)</td>
<td>quarter-hour (p. T-4)</td>
<td>week (p. T-1)</td>
</tr>
<tr>
<td>date (p. T-1)</td>
<td>hour hand (p. T-2)</td>
<td>quarter of (p. T-4)</td>
<td>year (p. T-1)</td>
</tr>
<tr>
<td>day (p. T-1)</td>
<td>minute (p. T-1)</td>
<td>quarter past (p. T-4)</td>
<td></td>
</tr>
<tr>
<td>elapsed time (p. T-11)</td>
<td>minute hand (p. T-2)</td>
<td>quarter to (p. T-4)</td>
<td></td>
</tr>
<tr>
<td>half past (p. T-5)</td>
<td>month (p. T-1)</td>
<td>schedule (p. T-9)</td>
<td></td>
</tr>
</tbody>
</table>

Write each vocabulary word on an index card. Make a word-search puzzle that incorporates the words and post it on a bulletin board. Use the word search to review the words by having students in turn choose a word card, find the word in the puzzle, and then use the word in a sentence or explain its meaning in their own words.

Heads Up!

Students may confuse the minute and hour hands on a clock. They may think that an hour has passed when the minute hand moves from one number to the next.

Have students practice moving the minute hand completely around the clock in order to move the hour hand from one number to the next to model time on the hour.

Assessment
A unit test in multiple-choice format is provided on page Assessment • 1.

Games for Practice and Review
Use the MeasureWorks Game Board to reinforce learning. Game rules begin on page BLM • 19.

"Clock-watching" from Lunch Money and Other Poems About School by Carol Diggory Shields 1999: Puffin Books

An amusing poem about watching the classroom clock, counting the minutes, and thinking about things to do once school is over.
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<table>
<thead>
<tr>
<th>Pages</th>
<th>Learning Goals</th>
<th>Demonstration clock</th>
<th>Student clocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-1–1</td>
<td>Review words used to measure time: <em>minute, hour, day, week, month, year, and date.</em></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>T-2–2</td>
<td>Review the hands of a clock. Tell time to the hour and time between hours. Estimate time by looking at the hour hand.</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>T-3–3</td>
<td>Tell time to the half-hour. Find the time 30 minutes later.</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>T-4–4</td>
<td>Tell time to the quarter-hour. Find the time a quarter of an hour later.</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>T-5–5</td>
<td>Develop benchmark relationships between quarter-hour, half-hour, and 1 hour. Use elapsed time to find new times.</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>T-6–6</td>
<td>Understand increments of time (5 minutes). Estimate whether activities will take more or less than 5 minutes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T-7–7</td>
<td>Read and write time to the nearest 5 minutes. Use elapsed time to find new times.</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>T-8–8</td>
<td>Estimate the time on a clock by looking at the hour hand. Understand the relationship between the hour hand and the minute hand.</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>T-9–9</td>
<td>Read a schedule. Complete a schedule.</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>T-10–10</td>
<td>Review how to read a calendar. Use calendars to answer questions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T-11–11</td>
<td>Model elapsed time. Determine the duration of events.</td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>
Tell Time to the Nearest 5 Minutes

Objective
Read and write time to the nearest 5 minutes. Use elapsed time to find new times.

Materials
• Demonstration clock
• Student clocks
• Red and blue crayons

Grouping
Whole class, then individuals or pairs

Open It Up
Write this number sequence on the board:
0, 5, __, 15, 20, __, __, 35, __, __, 50, 55, __
Give students 1 minute to determine the counting pattern and missing numbers. Have volunteers write the missing numbers. Then read the entire sequence together.

Demonstrate & Discuss
Model 7:25 on the demonstration clock. Tell students they will practice telling time to the nearest 5 minutes. Encourage them to recall that the numbers tell the hour and the dots between the numbers tell the minutes.
Say: Last night I had to be home by 7:30. The clock shows when I arrived. Let’s see if I was early, late, or on time. The hour hand is between 7 and 8, so it’s between 7 o’clock and 8 o’clock. The minute hand is on 5. We can skip count by 5s from the mark at 12 to the mark at 1 and so on. 5, 10, 15, 20, 25. The clock shows 25 minutes past 7, so I was early.
Write 7:25 on the board.
Reset the clock to 7:35. Retell the story.

Student Activity
Prepare ahead: Each student or pair will need a student clock and red and blue crayons.
Read the directions on the student page aloud to students. Students work independently or in pairs. They read and model the time on a student clock. Then they read the amount of time that will pass and use the student clock to show what time it will be. Students then draw the hands on the clock to show the time and record the time in the analog clock.
Remind students to count by 5s as they find what time it will be.

Informal Assessment
Encourage students to use math language to describe what they are doing and thinking.
Ask: What do the blue marks between the numbers tell you? [minutes] / COMPREHENSION /
How will you count to find what time it will be? [Count ahead by 5s.] / DESCRIBE /
How would you find 10 minutes before 3 o’clock? [Answers will vary.] / DESCRIBE /

Sum It Up
Say: Today we practiced telling time to the nearest 5 minutes.
Ask: For each new time you found, how many minutes past the hour is it? [10 minutes past 3 o’clock, 40 minutes past 4 o’clock, 55 minutes past 6 o’clock, 40 minutes past 9 o’clock] / INFER /

Extension
Show 2:15 on the demonstration clock and have a volunteer read the time. Ask students what time it was 5 minutes earlier. On the demonstration clock, show them how to move the minute hand backward as you count by 5s. Have them do the same on student clocks and read the new time. Repeat for other times and intervals.
## See You in 5!

**Try This**
- Read the time.
- Model the time on your student clock.
- Read how much time will pass.
- Use your student clock to model the new time.
- Draw the hands on the clock face. Use red for the hour hand. Use blue for the minute hand.
- Write the time.

### Time Now

<table>
<thead>
<tr>
<th>Time Now</th>
<th>Later</th>
<th>Draw</th>
<th>Write</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:00</td>
<td>In 10 minutes, it will be...</td>
<td>![Clock Face]</td>
<td>![Alarm]</td>
</tr>
<tr>
<td>4:25</td>
<td>In 15 minutes, it will be...</td>
<td>![Clock Face]</td>
<td>![Alarm]</td>
</tr>
<tr>
<td>6:50</td>
<td>In 5 minutes, it will be...</td>
<td>![Clock Face]</td>
<td>![Alarm]</td>
</tr>
<tr>
<td>9:15</td>
<td>In 25 minutes, it will be...</td>
<td>![Clock Face]</td>
<td>![Alarm]</td>
</tr>
</tbody>
</table>

### Remember:
Skip count by 5s to find the correct time.