Just in Time Quick Check
Standard of Learning (SOL) 3.9c

Strand: Measurement and Geometry

Standard of Learning (SOL) 3.9c
The student will identify equivalent periods of time and solve practical problems related to equivalent periods of time.

Grade Level Skills:
- Identify the number of minutes in an hour and the number of hours in a day.
- Identify equivalent relationships observed in a calendar, including the approximate number of days in a given month (about 30), the number of days in a week, the number of days in a year (about $365\frac{1}{4}$), and the number of months in a year.
- Solve practical problems related to equivalent periods of time to include:
  - approximate days in five or fewer months;
  - days in five or fewer weeks;
  - months in five or fewer years;
  - minutes in five or fewer hours; and
  - hours in five or fewer days.

Just in Time Quick Check

Just in Time Quick Check Teacher Notes

Supporting Resources:
- VDOE Mathematics Instructional Plans (MIPS)
  - 3.9c - Calendar Math (Word) / PDF Version
- VDOE Word Wall Cards: Grade 3 (Word) | (PDF)
  - Calendar

Supporting and Prerequisite SOL: 2.10a, 1.9b

SOL 3.9c - Just in Time Quick Check

1. Juan stayed with his grandparents for twenty-one days. How many weeks did Juan stay with his grandparents? Explain how you know.

2. Avery watered her plants every day for five months. About how many days did Avery water her plants? Explain your answer.

3. Elliott played baseball for three hours. How many minutes are equivalent to three hours? Justify your answer.

4. Pepe went on a trip for two days. How many hours are equivalent to two days? Explain your answer.

SOL 3.9c - Just in Time Quick Check Teacher Notes
Common Errors/Misconceptions and their Possible Indications

1. Juan stayed with his grandparents for twenty-one days. How many weeks did Juan stay with his grandparents? Explain how you know.

   Students may have an incorrect answer because they do know that there are 7 days in one week or they may calculate incorrectly. Students may need additional opportunities to explore a calendar and to participate in discussions with peers that focus on understanding the relationship between days and weeks.

2. Avery watered her plants every day for five months. About how many days did Avery water her plants? Explain your answer.

   Since the number of days in a month is about 30, answers from 150 – 155 should be accepted. Students may have an incorrect answer because they do know the approximate number of days equivalent to one month or because they calculated incorrectly when adding 30 five times. The explanation that students give should give insight into the error they have made. Having students explore a printed calendar and record the number of days for each month will help them to recognize that 30 is a good estimate for the number of days in a month. These students will also benefit from additional opportunities to solve practical problems related to the relationship between days and months. Facilitating discussions that allow students to hear their peers' strategies and reasoning will be helpful as students make sense of these relationships.

3. Elliott played baseball for three hours. How many minutes are equivalent to three hours? Justify your answer.

   Some students may write 60 because they determined the number of minutes in one hour. They did not take into account that the problem seeks to find the number of minutes in three hours. These students will benefit from opportunities to hear peers' strategies and reasoning as they attack practical problems such as this. In addition, strategies such as 'three reads' may be helpful as students make sense of and solve problems associated with the relationships among different units of time.

4. Pepe went on a trip for two days. How many hours are equivalent to two days? Explain your answer.

   Some students may write 24 because they determined the number of hours in one day. These students are still making sense of practical problems and will benefit from opportunities focused on exploring practical problems (i.e., reading the problem, identifying what they know, what they wonder, and what they still need to figure out, etc.). Students will benefit from real world experiences that engage them in exploring the relationships between units of time.