Student Guide - Page 245

Student Guide - Page 246

Student Guide

What's Below Zero (SG pp. 245–246)
Questions 1–7

1.* 10°F

2.* 12°F. Possible answer: I started at –12 on the number line. Then I moved +12 to get to 0 and + 12 more to get to 24, and I ended up on 12°F.

3.* 26°; Positive change

4.* –6°F

5.* 17°F

6.
Monday	8°F
Tuesday	18°F
Wednesday	–32°F
Thursday	44°F
Friday	14°F

7. – 7 to 83 is 90° change in a positive direction.

*Answers and/or discussion are included in the lesson.

Homework (SG pp. 247–248)
Questions 1–10

1. −9°F

2. 7°F

3. −33°F

4. The temperature must rise 17°F.

5. −11°, −8°, 3°, 4°, 14°

6. **A.** 8°

   B. 7°

   C. 5°

   D.

   International Falls

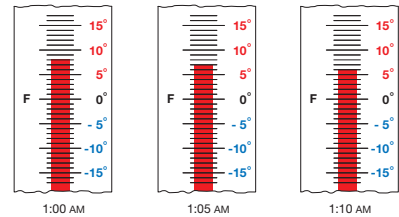 | Time | Temperature | Time | Temperature |
   |------|-------------|------|-------------|
   | 1:00 AM | 8°F | 2:05 AM | −5°F |
   | 1:05 AM | 7°F | 2:10 AM | −6°F |
   | 1:10 AM | 6°F | 2:15 AM | −7°F |
   | 1:15 AM | 5°F | 2:20 AM | −8°F |
   | 1:20 AM | 4°F | 2:25 AM | −9°F |
   | 1:25 AM | 3°F | 2:30 AM | −10°F |
   | 1:30 AM | 2°F | 2:35 AM | −11°F |
   | 1:35 AM | 1°F | 2:40 AM | −12°F |
   | 1:40 AM | 0°F | 2:45 AM | −13°F |
   | 1:45 AM | −1°F | 2:50 AM | −14°F |
   | 1:50 AM | −2°F | 2:55 AM | −15°F |
   | 1:55 AM | −3°F | 3:00 AM | −16°F |
   | 2:00 AM | −4°F | | |

7. −28°F. The temperature goes down 1° every 5 minutes. It goes down 12° every hour. Since it is −16° at 3:00 AM, it will go down another 12° by 4:00 AM, so the temperature will be ¬28°F.

8. 28° warmer

9. The temperature fell 8°F.

10. 29°F

Student Guide - Page 247

Student Guide - Page 248

Teacher Guide - Page 1

Name _____ Date _____

Professor Peabody Made a Mess

Professor Peabody was reading the morning paper and spilled his tea. The tea covered parts of the weekly weather report.

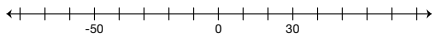1. Help figure out what the stained parts of the paper say. Use a number line to help you solve the problems.

Minnesota State Daily Weather Changes

	Day of Week	Temperature in Morning	Change in Temperature	Temperature in Evening
A.	Monday	42°F	drops 35°F	
B.	Tuesday	35°F		15°F
C.	Wednesday		drops 20°F	−6°F
D.	Thursday	27°F	rises 22°F	
E.	Friday	−12°F		−23°F

F. Show how to use the number line to solve Question 1C.

2. Label the following numbers on the number line: 55, −20, 73, −32

-50   0   30

Assessment Master   TG · Grade 5 · Unit 6 · Lesson 1   1

Teacher Guide - Page 2

Name _____ Date _____

Show how to represent and solve each problem with a number line.

3. Carla parks her car in a parking garage below a building. She parks 3 floors below ground level and takes the elevator up to the 29th floor. Find the total number of floors Carla traveled.

4. When Professor Peabody left Arizona, the temperature was 55°F. When he arrived in Minnesota, the temperature was −12°F. What is the temperature difference?

5. Submarine A is traveling at 10 feet below sea level. Submarine B is traveling at 6 feet below sea level. Which submarine is traveling deeper in the ocean?

6. The Dead Sea is −1348 feet below sea level. If the elevation of the Dead Sea is 1066 feet lower than Death Valley, what is the elevation of Death Valley?

Elevation

Location	Elevation (in feet)
Dead Sea	−1348
Death Valley	

2 TG · Grade 5 · Unit 6 · Lesson 1   **Assessment Master**
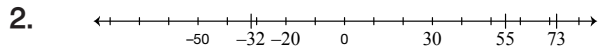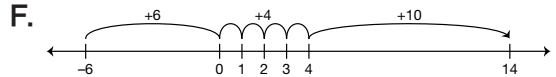

Teacher Guide

### Professor Peabody Made a Mess
(TG pp. 1–2)
Questions 1–6

Minnesota State Daily Weather Changes

1.

	Day of Week	Temperature in Morning	Change in Temperature	Temperature in Evening
A.	Monday	42°F	drops 35°F	**7°F**
B.	Tuesday	35°F	**drops 20°F**	15°F
C.	Wednesday	**14°F**	drops 20°F	−6°F
D.	Thursday	27°F	rises 22°F	**49°F**
E.	Friday	−12°F	**drops 11°F**	−23°F

F.

+6   +4   +10

−6   0 1 2 3 4   14

2.

−50 −32 −20   0   30   55   73

3. Carla traveled 32 floors.
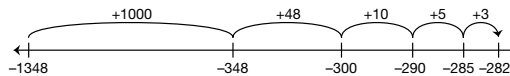
+3   +29

−3   0   29
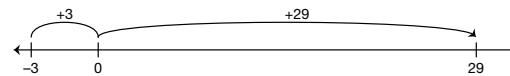
4. The temperature difference is 67°F.

−12   −50   −5

−12   0   50 55

5. Submarine A is traveling deeper in the ocean because Submarine A is 10 feet below 0 and Submarine B is only 6 feet below 0.

Sub A   Sub B

−10 ft   −6 ft   0
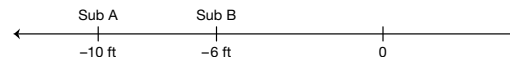
6. Death Valley is −282 feet.

+1000   +48   +10   +5   +3

−1348   −348   −300   −290   −285 −282