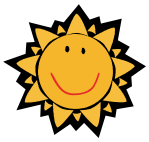
Name: _____ Date: _____

Weekly Weather

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						
48^0	44^0	42^0	41^0			46^0

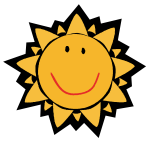
Mrs. Teller challenged her students to figure out the missing temperature for Thursday and Friday. She gave them these clues:

- The range of the temperatures is 10.
- The median of the temperatures is 42^0
- The mean of the temperatures is 43^0
- Friday was warmer than Thursday.

What were the temperatures on Thursday and Friday? Explain how you know.

Name: Possible Solution Date: _____

Weekly Weather

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						
48^0	44^0	42^0	38^0			46^0

Mrs. Teller challenged her students to figure out the missing temperature for Thursday and Friday. She gave them these clues:

- The range of the temperatures is 10.
- The mode of the temperatures is 42^0
- The median of the temperatures is 42^0
- The mean of the temperatures is 43^0
- Friday was warmer than Thursday.

What were the temperatures on Thursday and Friday? Explain how you know.

- The range of the temperatures is 10. The difference between the highest temperature (48^0) and the lowest temperature (38^0) is 10.
- The mode of the temperatures is 42^0. There is only one 42^0 listed in the chart so one of the missing temperatures must be 42^0
- The median of the temperatures is 42^0. Lining up the temperatures from least to greatest: 38 42 42 44 46 48. If 42^0 is the median, then there must be a missing temperature that is equal to or less than 42^0.

  38 ___ 42 42 44 46 48
- The mean of the temperatures is 43^0 which means that if I add up all of the temperatures and then divide by 7, I get 43^0. This also means that the sum of all seven temperatures is equal to 7 times 43 or 301. The sum of the five known temperatures is 218 plus 42 for one of the days gives 260. The seventh day must be 301 minus 260 or 41 degrees to reach that total.
- So, the missing temperatures are 41^0 and 42^0

ANSWER:

- Since Friday was warmer than Thursday, this means Thursday was 41^0 and Friday was 42^0