## Unit 5 Lesson 2: Changing Temperatures

### 1 Which One Doesn’t Belong: Arrows (Warm up)

#### Student Task Statement

Which pair of arrows doesn't belong?

1.
* 
1.
* 
1.
* 
1.
* 

### 2 Warmer and Colder

#### Images for Launch



#### Student Task Statement

1. Complete the table and draw a number line diagram for each situation.

|  | * start ($​^{∘}C$)
 | * change ($​^{∘}C$)
 | * final ($​^{∘}C$)
 | * addition equation
 |
| --- | --- | --- | --- | --- |
| * a
 | * +40
 | * 10 degrees warmer
 | * +50
 | * $40+10=50$
 |
| * b
 | * +40
 | * 5 degrees colder
 |  |  |
| * c
 | * +40
 | * 30 degrees colder
 |  |  |
| * d
 | * +40
 | * 40 degrees colder
 |  |  |
| * e
 | * +40
 | * 50 degrees colder
 |  |  |

* 1. 
	2. 
	3. 
	4. 
	5. 
1. Complete the table and draw a number line diagram for each situation.

|  | * start ($​^{∘}C$)
 | * change ($​^{∘}C$)
 | * final ($​^{∘}C$)
 | * addition equation
 |
| --- | --- | --- | --- | --- |
| * a
 | * -20
 | * 30 degrees warmer
 |  |  |
| * b
 | * -20
 | * 35 degrees warmer
 |  |  |
| * c
 | * -20
 | * 15 degrees warmer
 |  |  |
| * d
 | * -20
 | * 15 degrees colder
 |  |  |

* 1. 
	2. 
	3. 
	4. 

### 3 Winter Temperatures

#### Student Task Statement

One winter day, the temperature in Houston is $8^{∘}$ Celsius. Find the temperatures in these other cities. Explain or show your reasoning.

1. In Orlando, it is $10^{∘}$ warmer than it is in Houston.
2. In Salt Lake City, it is $8^{∘}$ colder than it is in Houston.
3. In Minneapolis, it is $20^{∘}$ colder than it is in Houston.
4. In Fairbanks, it is $10^{∘}$ colder than it is in *Minneapolis*.
5. Write an addition equation that represents the relationship between the temperature in Houston and the temperature in Fairbanks.

#### Activity Synthesis





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