

# Trend Task: Hot and Cold



Approach: Independent  
Focus: Temperature changes  
Resources: Answer booklet

Year: 8

## Questions / instructions:



1. On May 19th, it was  $10^{\circ}\text{C}$  in Alexandra. That night it fell  $14^{\circ}\text{C}$ . On the 20th May, it rose  $8^{\circ}\text{C}$  from the night-time temperature.

What temperature did it get to on the 20th May?  $4^{\circ}\text{C}$

Answer:  
\_\_\_\_  $^{\circ}\text{C}$

% response  
2009 ('05)  
year 8  
59 (61)



2. In Auckland, it was  $10^{\circ}\text{C}$  but at Mt Cook it was  $-7^{\circ}\text{C}$ .

What is the temperature difference between Auckland and Mt Cook?  $17^{\circ}\text{C}$

Answer:  
\_\_\_\_  $^{\circ}\text{C}$

Total Score: 2  
1  
0

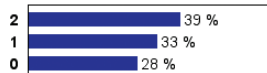
% response  
2009 ('05)  
year 8  
51 (56)  
40 (43)  
30 (30)  
30 (27)

## Subgroup Analyses:

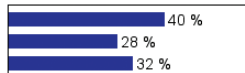
Year 8

Score  
Range

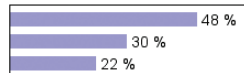
Boys



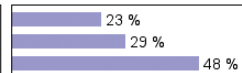
Girls



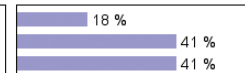
Pakeha



Māori



Pasifika



## Commentary:

With the temperature scales available, more than half of the students managed each computation. Performance was very similar in 2005 and 2009. On average, Pakeha students scored higher than Māori or Pasifika students.