

Max's Deep-Freeze Temperature Log

Learning objective: To understand and order negative numbers in a real-world context, identifying values below zero on a thermometer.

Max the monkey is helping his friends track the temperature in different parts of the world. Use this log to record your findings. Read the temperature clues carefully, identify if the numbers are positive or negative, and complete the calculations to show how much the temperature has dropped or risen.

Word bank: Negative · Positive · Below zero · Above zero · Decrease · Increase · Interval · Thermometer

1. Temperature Check: Write down the temperature for a location that is 4 degrees below zero. Explain how you would write this as a negative number. (2 marks)

2. The Cooling Effect: If the temperature in the Arctic is -3°C and it drops by 5 degrees overnight, what is the new temperature? Show your working out. (3 marks)

3. Ordering Values: Write these temperatures in order from the coldest to the warmest: -2°C , 5°C , -8°C , 0°C , 3°C . (2 marks)

4. The Difference: What is the difference in degrees between -7°C and 2°C ? Count the steps on a number line to find your answer. (3 marks)

5. Real-world Application: Max has £5 in his pocket. He buys a hot chocolate for £6. How much money does he have left? Write your answer as a negative number to show his debt. (2 marks)

Extension challenge: Imagine you are designing a new thermometer for Max. Draw a scale that goes from -10 to 10 and mark three different temperatures on it using arrows.