

Rain, snow, dew and frost

Read pages 16 and 17 in your book and answer the following questions.

Q1. What are the two words for water as an invisible gas in the air?

 M..... and V.....

Q2. What is the general word that includes all of these: rain, snow, dew and frost?

 P.....

Q3. What is snow made from? 

Q4. What is in the air that allows condensation to occur?



Q5. How can we tell the difference between fog and mist?



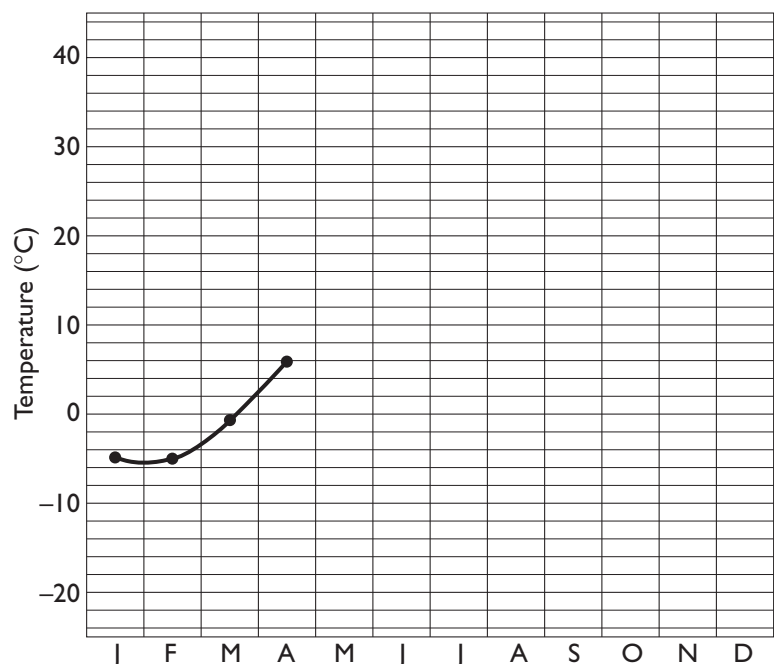
Q6. Complete the graph for Toronto, Canada. Ring those months when it would be most common for snow to lie on the ground. Explain your reasons.



▼ Table of average monthly temperature in Toronto, Canada.

Month	Average Temp. (°C)
Jan	-5
Feb	-5
Mar	-1
Apr	6
May	12
Jun	18
Jul	21
Aug	20
Sep	16
Oct	9
Nov	3
Dec	-3

▼ Temperature graph for Toronto, Canada.



Background

Get the whole class to draw a line showing freezing (0°C). Months below this are snow months. (Snow will also lie, from time to time, in months just outside this core period.)

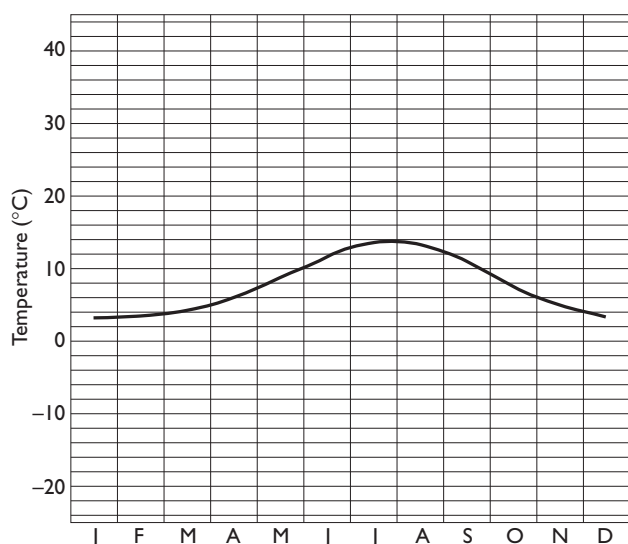
Encourage students to look at their local area climate chart and see why they might, or might not, get snow lying for long periods each year.

Compare Aberdeen and Toronto. In Aberdeen, only January is cold enough, on average, for lying snow, but February is almost as cold. Toronto is below freezing for four months of the year.

Using an atlas, look at the latitudes of Toronto and Aberdeen. They can come back to this data later and see the huge differences between maritime and continental climates.

▼ Table and graph for monthly average temperature in Aberdeen, United Kingdom.

Month	Average Temp. ($^{\circ}\text{C}$)
Jan	3.2
Feb	3.4
Mar	4.5
Apr	6.3
May	8.8
Jun	11.8
Jul	13.6
Aug	13.4
Sep	11.5
Oct	8.7
Nov	5.6
Dec	3.9



Answers

- Q1. Moisture and Vapour**
Q2. Precipitation
Q3. Ice crystals
Q4. Dust (the term dust is used in a very general way here).
Q5. Fog has a visibility of less than 1 km.
Q6. See finished graph below. Students should have selected the winter months – November to March in particular – to show when snow is most likely to lie on the ground. You would expect snow to lie on the ground when the air temperature was close to, or below, freezing.

▼ Table and graph for monthly average temperature in Toronto, Canada.

Month	Average Temp. ($^{\circ}\text{C}$)
Jan	-4.9
Feb	-5.0
Mar	-0.7
Apr	5.9
May	12.2
Jun	17.8
Jul	20.8
Aug	19.9
Sep	15.8
Oct	9.3
Nov	3.2
Dec	-2.5

