

Blizzards and avalanches

Snow is easily carried by the wind, forming blizzards when the wind is strong. Snow piles up, or drifts, in sheltered places.



Q1. Why is snow so easily carried by the wind?



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Q2. How much more bulky is snow compared with rain?



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Q3. Snow settles more on the side of trees and buildings facing away from the wind. Look at the snow on the roof in the diagram above. Draw on it which way you think the wind has been blowing.

Q4. Snow settles where the wind is slack. On the diagram above, colour in places where you think snow might pile up.

Q5. Would a fence be useful in helping to prevent snow from drifting onto a road?



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Answers

1. **Because its large surface area makes it act like a parachute.**
2. **Twelve times.**
3. **From left to right.**
4. **Drawings should show snow behind the fences, behind the tree, behind the house. They may also show smaller amounts of snow in front of these obstacles.**
5. **Yes, but only if it is placed some way away from the road, e.g. in a field. Roadside hedges cause snow to pile up on roads, rather than protecting them from snowdrifts.**

Notes

The comparison of the bulk of rain and snow is only a guide, and varies enormously depending on the shape of the snowflakes, and so on. The point is that snow is bulky – and it doesn't disappear after each storm unless the temperature rises above freezing.

Snow is moved by the airflow. Most snow settles on the leeward side of an obstacle, but some also accumulates on the windward side of the obstacle. (Link to Science.) This is shown in the diagram in the student book. It is a more sophisticated point, however, that should only be discussed with the more able students.