Hi Janie

We had a great day out today – we tried the snowshoes. We had a good laugh at the people trying to walk in the snow without them – some of them were up to their knees! Some kids were sledging – we might have a go at that tomorrow. Someone passed us on skis, going really fast. It looked great fun!

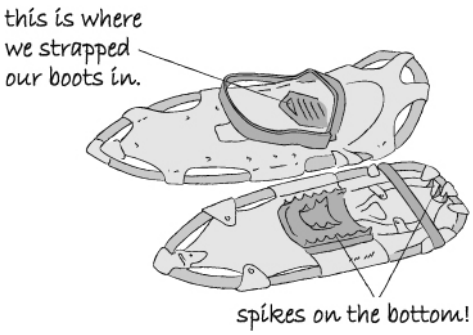
We went right to the top of the mountain. The snow was really hard near the top – luckily the snowshoes have little spikes underneath so we didn't slip at all.

There was a group of people near the top with an instructor. Some of them were trying to climb up an icy wall. They had spikes strapped to their boots, and ice axes that they dug into the ice. It looked too much like hard work to me. The others were sliding down the hill and then trying to stop themselves by digging their ice axes in. That looked like fun – some of them even set off head first!

We had lunch near the top. It was so cold I had to use my knife to cut the chocolate. It was nearly dark when we got back to the village. Some kid had tried skating on the pond and had fallen in. When we got there a man had put a ladder down on the ice and he was crawling out along it. There was a huge crowd! They all gave him a cheer when he pulled the kid out.

Anyway – time for dinner now. See you soon!

Alex



1 Snowshoes can reduce or increase the pressure beneath them.

a Explain why this is useful. (*Hint*: think about the different surfaces that Alex walked on.)

b Explain how the snowshoes can reduce or increase the pressure.

2 The ice climbers are using two different pieces of equipment. How do these help them to climb on hard ice? Use ideas about pressure in your answer.

3 Why did the people sliding down the hill need to use ice axes to stop themselves?

4 Why did the man rescuing the boy from the pond use a ladder? Explain in as much detail as you can.

5 Find two other events in the letter that show pressure being increased or decreased.

6 How do skis help you to go fast downhill?

I can…

- describe how pressure depends on force and area
- explain applications of pressure in different situations.

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