Name: _____ Group: _____ Date: _____

NIGHT SKIING OR STARGAZING?

STUDENT BOOK:	**Chapter 9, pp. 285–292**
CONCEPTS:	OBSERVATIONS OF THE SKY
METHOD:	FORMATION OF AN OPINION

Owing to the efforts of certain pressure groups, it is no longer possible to go night skiing on Mont Orford. Those groups contend, for one, that night skiing causes light pollution, which interferes with activities at the Mont Mégantic Observatory, located only a few kilometres from the ski resort. Other groups say, however, that opening the ski trails at night would help attract new users, an important factor for regional economic development.

IDENTIFYING THE CONTROVERSY AND EXPRESSING YOUR VALUES

1. What question does this issue raise?

2. Would you favour or oppose this idea? Why?

Name: _____ Group: _____ Date: _____

3. Which of the following do you see as the key issues in this controversy? Explain why.

- ☐ Nature conservation
- ☐ Tourism development
- ☐ Housing development

GATHERING INFORMATION

Read the appendix to this activity for help answering questions 4–7.

Complete the table on the next page as you read. Remember to cite your sources of information.

4. What is Mont Orford Park?

5. What is the mission of the Mont Mégantic Observatory?

Name: _____ Group: _____ Date: _____

6. How would the project for illuminated night skiing on Mont Orford affect stargazing at Mont Mégantic?

7. What can be done to avoid adding to light pollution at Mont Mégantic?

Sources of information

Source	Source reliable or not?	Reason	Source impartial or not?

Name: _____ Group: _____ Date: _____

FORMING YOUR OPINION

8. Based on the information you gathered, take a position and write a short opinion piece. You are to point out the advantages and disadvantages of the Mont Orford project to light the ski trails at night.

REFLECTING ON YOUR APPROACH

9. What other information would help solidify your position in this controversy?

Name: _____ Group: _____ Date: _____

10. Has your opinion changed since you began this activity? Explain why?

11. Could this kind of debate happen in your area? If so, what would the issue be?

Name: _____ Group: _____ Date: _____

APPENDIX

1. LIGHTING SKI TRAILS

Because snow is a perfect reflective surface, lighting ski trails will definitely create a light halo having appreciable effects on the night-time environment and tranquility of local residents. The locals and visitors flock to a resort to enjoy nature in all its manifestations both day and night. Regardless of the efforts to minimize the impact of illuminated ski trails, the montainside faces Mont Mégantic and the light reflecting off the snow will affect the dark sky at that home base for major astronomy research projects.

The Mont Mégantic Observatory is a world-famous university research centre. Each year it welcomes crowds of visitors as well as amateur and professional astronomers drawn by the quality of its dark sky and its facilities, alone in their class in Québec and all of eastern North America. Much work is being done together with the Granit and Haut-Saint-François regional authorities and the city of Sherbrooke to push through a light-pollution abatement program in order to create one of the world's largest dark sky reserves. It is important to take account of these efforts while at the same time questioning the real need for this kind of project and its potential spinoffs.

Source: Fédération des astronomes amateurs du Québec (FAAQ), January 2005. [*Translation*]

Name: _____ Group: _____ Date: _____

2. THE PROJECT

Since March 2003 the Mont Mégantic ASTROLab has spearheaded the light pollution abatement program. This involves implementing a three-pronged action plan that seeks to create one of the largest dark sky reserves anywhere in the world. The prongs are: raising awareness, regulation (technical and regulatory guidelines) and the retrofit of lighting devices.

Awareness raising and regulatory efforts in the regions of Granit, Haut-Saint-François and Sherbrooke are proving highly successful, giving rise to broad regional consensus and shows of support from local, regional and provincial stakeholders. The awareness-raising measures and participation in public consultations have rapidly heightened the consciousness of the local population and governmental and paragovernmental organizations in Québec and Canada.

Source: Mont Mégantic National Park ASTROLab website, 2006. [*Translation*]

Name: _____ Group: _____ Date: _____

3. ASTROLAB RECEIVES HELPING HAND FROM TOWNSHIPS

"We are giving ourselves two years to get the job done. We hope to reduce light pollution at the observatory by 25 percent and conserve energy to the tune of 1.25 gigawatthours," says Chloé Legris, project leader at the Mont Mégantic National Park ASTROLab. This energy saving equals the energy consumed to light and heat 50 homes for a year ...

Light-pollution levels recorded at the ASTROLab have doubled over the past 20 years. What's more, scientific productivity of the lab telescope could be in jeopardy by 2015.

Source: Isabelle Pion, *La Tribune,* May 6, 2006, p. 31. [*Translation*]