

## Geography File: Geographic Sketch

### Using a geographical sketch in the study of a landscape

**NOTE:** This is an older Geography file and some links to external sites may no longer work.

The term “geographical sketch” appears in the *Techniques* section of the **new secondary school geography program** (page 288). The purpose of this file is to provide you with a few concepts and examples of sketches that could be used in your classroom. This file also contains suggestions for the use of technology tools to develop the cross-curricular competency “Uses information and communications technologies.”

#### What is a geographical sketch?



A geographical sketch is a freehand schematic drawing of the main elements that make up a landscape. It supports the interpretation (deconstruction) of an actual landscape or photo of a landscape based on the geographical realities of that landscape: buildings, landforms, major rivers and highways, etc.

The sketch can also be used as a diagram illustrating one’s ideas in order to understand the organization of a territory or interpret a territorial issue.

See also the LEARN Student How-To entitled:



at <http://www.learnquebec.ca/make-a-geographic-sketch>

#### In the program

The following are the steps to follow to prepare a geographical sketch according to the program:

- Identify the elements to be represented: buildings, landforms, major rivers and highways, vegetation, etc.
- Order the elements according to the purpose (select the essential elements and define the three planes: foreground, middle ground and background)
- Make a simplified representation
- Provide a title that expresses the purpose
- Create a legend

#### Rules of geographical sketches

- The sketch must have a purpose (its purpose is to demonstrate a principle not merely to represent an image of the landscape). The title introduces an issue related to the type of territory studied.
- Do not try to represent everything. A drawing containing too many elements can only lead to confusion. Include only what is useful or relevant to the purpose or issue.
- You must generalize and therefore sacrifice precise positional accuracy.

## Examples of the study of a landscape using a sketch



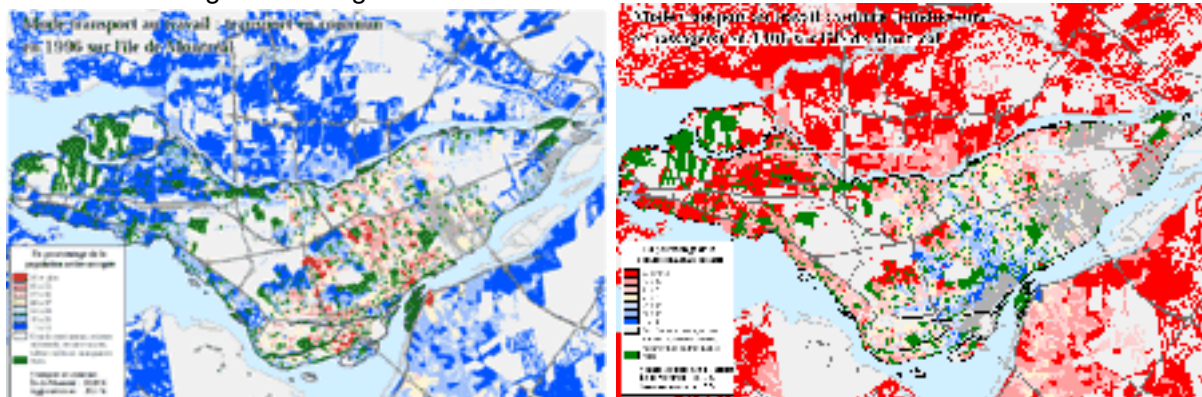
Image source: <http://www.hollenthoner.com/gallery/Canada/Montreal/Montreal%20Upstream.JPG>

**Use the following questions to help students deconstruct the landscape and identify an issue:**

- 1) What does this photo represent?
- 2) Can you locate this city on a map?
- 3) What do you observe in the middle ground on the right-hand side of the image?
- 4) Two distinct inhabited spaces can be observed in this image. What are they?
- 5) What surrounds and delineates the city of Montréal?

**Use maps to illustrate the issue:**

Click on the images to enlarge them



Map source: [Ville de Montréal](http://ville.montreal.qc.ca)

**Use images to illustrate the issue:**

Click on the images to enlarge them

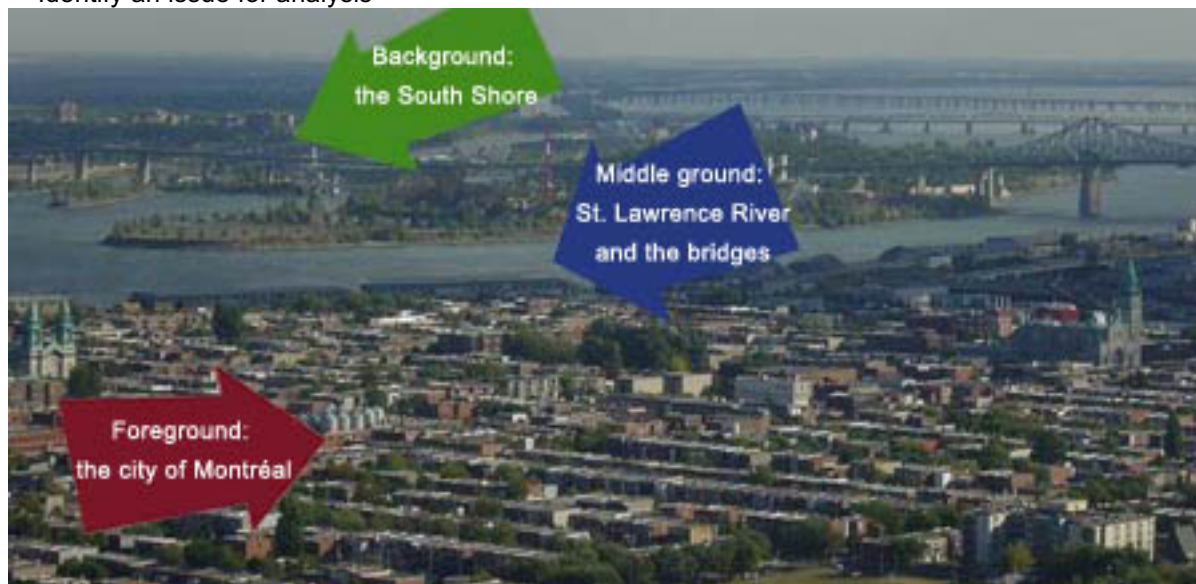


Image source: [Le Québec en images](#)

**A few statistics:** [Montréal in numbers](#)

**Observe a photo and formulate questions about it:**

- Identify its location, era, author and purpose
- Estimate the scale
- Identify the various planes (foreground, middle ground and background)
- Identify the various elements that make up the landscape
- Identify an issue for analysis



### Research

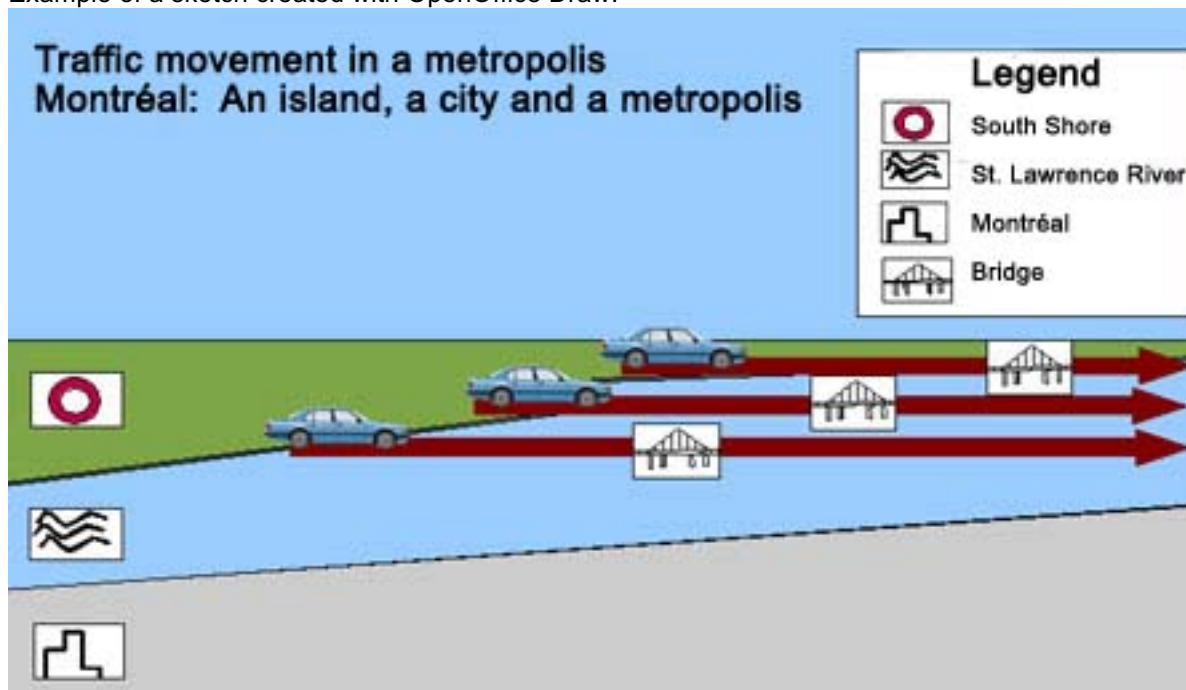
- Gather information about the territory ([Website of the city of Montréal](#))
- Gather information about the elements that make up the landscape
- Define the issue (for example, focus on means of transportation: [another bridge or more public transit in Montréal](#))

as a solution to increased traffic volume?)

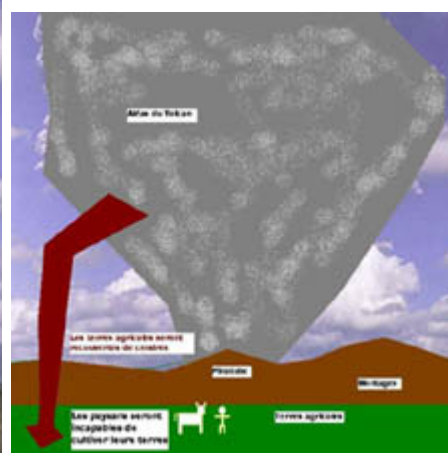
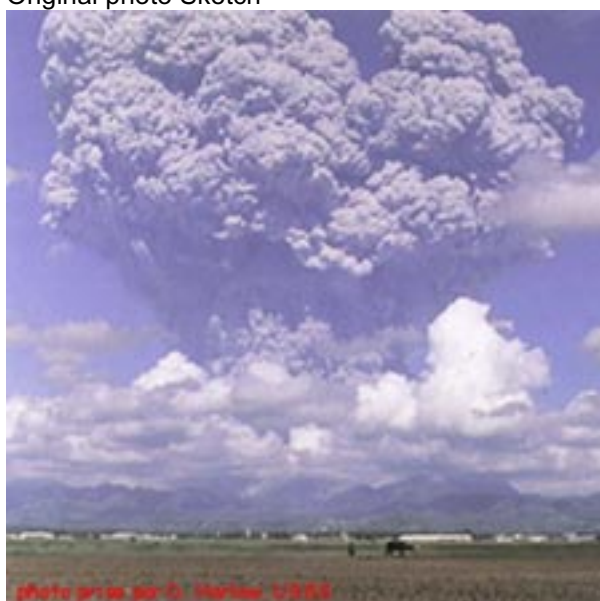
**Organize (The creations of a geographical sketch)**

- Create symbols of identification
- Use certain conventional signs (e.g., watercourses in blue)
- Trace the frame of the photo
- Draw the horizon line
- Use the various planes
- Place the various elements
- Provide the sketch with a meaningful title (related to the issue)

Example of a sketch created with OpenOffice Draw:



Another example of a sketch:  
 Pinatubo (Philippines) created using MS Paint  
 Original photo Sketch



Click on the images to enlarge them  
**Texts to help students draw their sketches**

Translated excerpt from the book *Grandir à Manille*

Excerpt from *An Overview of Disaster Management*, one of the training modules in the United Nations Disaster Management Training Program (DMTP)

**Draw a sketch illustrating the consequences of Pinatubo’s volcanic eruption on the population (using Word).**



Click on the images to enlarge them

Refer also the the Word document entitled:

“Pinatubo task”

See also the Annex section.

## Communicate

During this step, students must develop an argument related to the issue they have chosen by finding other sources of information that support their research hypotheses (e.g., to confirm that transportation is a public policy issue on the Island of Montréal). They must then suggest and assess possible solutions (public transit [French only] for example). They can also compare Montréal to other metropolises (such as [London](#) for example). Finally, the students can present their results using a schematic map produce a report or poster, engage in a debate, etc.

**Examples of images that could be used in the study of a landscape**

Click on the images to enlarge them



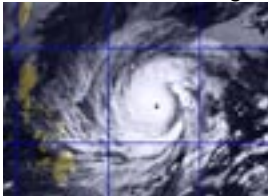
**New York**

*Understands the organization of a territory:* Manhattan, the bridges, Central Park, the port, the Hudson River, etc.



**Manila**

*Understands the organization of a territory:* Economic centre vs. shantytowns, precarious dwellings built on piles, etc.



*Interprets a territorial issue and constructs his/her consciousness of global citizenship:* What explains the inhabitants' decision to live along the coast in a country that experiences torrential downpours and typhoons?



**Venice**

*Understands the organization of a territory:* The Grand Canal, St. Mark's Square, the Doge's Palace, the Adriatic, etc.



**Beijing**

*Interprets a territorial issue:* Heritage sites vs. urban expansion in Beijing. Also use news items from [Google News](https://www.google.com/news/).



### Québec

*Understands the organization of a territory:* Strips of trees around waterways, forest roads, etc.

*Constructs his/her consciousness of global citizenship:* Clearcutting, the consequences of large-scale exploitation in Témiscamingue, etc.

### Where to find images

To find image sites that could be used in the analysis of landscapes, visit the section “ [Tools / Images](#)” of the web site of the [Service national du RÉCIT de l'univers social](#): (French site) Also consider searching their two other collections and here: [Images of Québec and Canada](#) and here [Images of the rest of the world](#)

Another good collection of images of Quebec is Le Québec en images here <http://www.ccdmd.qc.ca/quebec/>

And of course verify Wikipedia's growing access points to various public domain image resources here:

[http://en.wikipedia.org/wiki/Wikipedia:Public\\_domain\\_image\\_resources](http://en.wikipedia.org/wiki/Wikipedia:Public_domain_image_resources)

## Step-by-step technology guides

These guides will introduce you to the computer tools mentioned.

### How to copy and save images from the Internet:

<http://www.d.umn.edu/~hrallis/guides/SampleImages/SampleImagesGuide.html>

### How to use drawing tools in Word:

[http://www.internet4classrooms.com/msword\\_toolbar\\_drawing.htm](http://www.internet4classrooms.com/msword_toolbar_drawing.htm)

<http://www.pitt.edu/~edindex/OfficeXPTutorials/Lesson3XP.pdf>

### How to use StarOffice Draw or OpenOffice Draw:

<http://docs.sun.com/app/docs/doc/817-7351/6mmm65g03?q=StarOffice+8&s=t&a=view>

[http://www.sun.com/aboutsun/comm\\_invest/giving/so8/docs/guide4-draw.pdf](http://www.sun.com/aboutsun/comm_invest/giving/so8/docs/guide4-draw.pdf)

### How to use drawing tools in AppleWorks:

[http://www.yesnet.yk.ca/schools/wes/software\\_page/awdraw.pdf](http://www.yesnet.yk.ca/schools/wes/software_page/awdraw.pdf)

### How to use MS Paint (available with Windows)

<http://www.lkwdpl.org/classes/MSPaint/paint.html>

### Presentation or training documents

These are documents provided by the Service national du RÉCIT de l'univers social to train teachers on how to draw geographical sketches in the study of landscapes. This document is in French, but the graphic presentation is self-explanatory.

[Training document for secondary schools \(PowerPoint document\).](#)

### How to draw sketches and study a landscape

#### About sketches

An example of a geographical sketch originally from this site <http://www.ncaction.org.uk/subjects/geog/> can be viewed directly here

same: [http://www.ncaction.org.uk/images/subject/geog/sketch\\_big.jpg](http://www.ncaction.org.uk/images/subject/geog/sketch_big.jpg)

In theory:

[http://sirius.ac-strasbourg.fr/microsites/hist\\_geo01/CartoManuels/croquis.html](http://sirius.ac-strasbourg.fr/microsites/hist_geo01/CartoManuels/croquis.html)

<http://www.discip.crdp.ac-caen.fr/histgeo/carto/cartscan/procedeg.htm>

### Study of a landscape

Studying the landscape (pedagogical guide):

<http://histoire-geographie.acbordeaux.fr/college/sixieme/mallardnath/benidorm/benidorm2.htm>



## ANNEXES INCLUDED:

NOTE: WORD VERSIONS OF THESE MAY BE AVAILABLE IN LEARN GEOGRAPHY SECTION.

# Sketching Volcanic Risks

(Working document of the Service national du RÉCIT de l'univers social)

[www.recitus.qc.ca](http://www.recitus.qc.ca)

## 1) Observe photos

With the help of various texts and images, draw a geographical sketch of the consequences of a volcanic eruption.



- Give the photo a title.
- What proportion exists between the natural and human elements in this photo?
- Describe your emotions when looking at this photo.
- Write a few words about the man in the foreground (lifestyle, work, housing).

## 2) Identify the consequences of a volcanic eruption as described in written texts

Use the following grid (complete grid available in appendix):

Volcanic Hazards	Consequences for the Population
1)	

### Text 1: Pinatubo's Eruption

And suddenly all hell broke loose. We had barely arrived and we were already heading towards Pinatubo. On the car phone we heard that the Americans had had time to evacuate 14,500 of the 16,000 people in their air base. Mud flows—those famous lahars made up of water and ash—surged down the slopes of the volcano at over 100 km/hr, sweeping everything in their path. We progressed with more and more difficulty towards the slopes of the volcano in growing darkness despite the fact that it was 11:30 in the morning. Mercinier was filming the peasants' road full of carts and cars overflowing with furniture, fleeing in the face of Pinatubo's wrath and other surreal scenes—like the parked cars, abandoned by their owners and now covered in over two metres of grey ash—these images would later be broadcast around the world and make the headlines of all the 8 o'clock news shows in Europe. Sky and earth shook with the volcano's explosions. Ash fell like rain. It took us five hours to travel the 70 kilometres to the city of Olongapo, where the extent of the damage was dramatically evident. Houses had been crushed under the weight of the falling ash; rivers had reached flood levels; concrete bridges had been swept away by lahars. And the volcano continued to spit death. The number of casualties was unknown but was sure to be high. (Several days later, the Volcanology Institute was to report 963 fatalities in that single day, June 16, 1991.) Violent explosions erupted once more, hurling columns of ash to heights of over 40 kilometres, which fell hundreds, if not thousands, of kilometres from Pinatubo—this ash was visible as far away as North Vietnam and Singapore. Debris covered the rice fields and crops for over 1,000 kilometres in all directions. The summit of Pinatubo was eventually destroyed by these repeated explosions; the volcano shrank by 165 metres as a result.

The earth still shook; tremors were felt as far away as Manila. Gilbert Mercinier and the sound man, Max Iffergane, filmed water buffalo submerged under ash up to their horns and fields that were completely covered in ash. Lines of buses escaping towards the capital were crammed with people, bags and furniture. The air was filled with sulphur oxides and reeked of rotten eggs. In total darkness at 11:30 a.m., we drove with our lights on: we were the first Western television crew on the scene, as the Manila airport had been closed for 48 hours; 10 centimetres of white powder covered the main airstrips and all the large carriers were forbidden from taking off or landing.

Translated excerpt from C. Brincourt and G. Lambert, *Grandir à Manille : Les 75 000 enfants du père Tritz* (Paris: Bayard Éditions / Centurion, 1995), p. 17–19.

## Text 2: Consequences of a Volcanic Eruption

### General characteristics

[...]

Damage results from type of material ejected such as ash, pyroclastic flows (blasts of gas containing ash and fragments), mud, debris and lava flows.

### Factors contributing to vulnerability

Settlements on the flanks of volcanoes.

Settlements in the historical paths of mud or lava flows.

Structures with roof designs not resistant to ash accumulation.

Presence of combustible materials.

Lack of evacuation plan or warning systems.

### Typical adverse effects

*Casualties and health:* Death from pyroclastic flows, mud flows and possibly lava flows and toxic gases. Injuries from falling rock, burns; respiratory difficulties from gas and ash.

*Settlements, infrastructure and agriculture:* Complete destruction of everything in the path of pyroclastic, mud or lava flows; collapse of structures under weight of wet ash; flooding, blockage of roads or communication systems.

*Crops and food supplies:* Destruction of crops in path of flows; ash may break tree branches; livestock may inhale toxic gas or ash; grazing lands may be contaminated.

### Possible risk reduction measures

Land use planning for settlements around volcanoes.

Protective structural measures.

### Typical post-disaster needs

Warning and evacuation; medical assistance, search and rescue; provide food, water and shelter; relocate victims; provide financial assistance.

(An Overview of Disaster Management, [http://www.undmtp.org/modules\\_e.htm](http://www.undmtp.org/modules_e.htm), page 36)

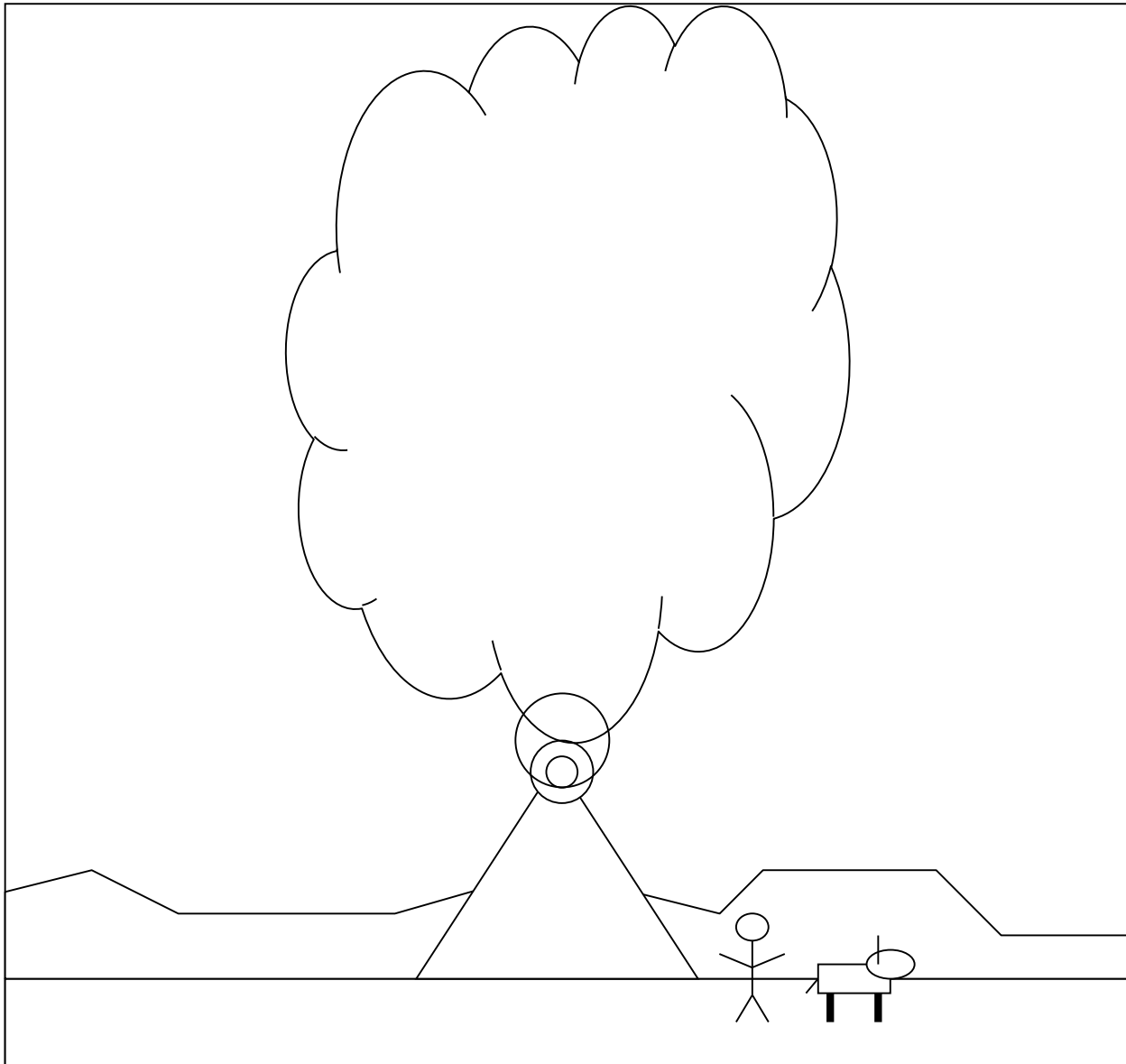
### 3) Pinatubo



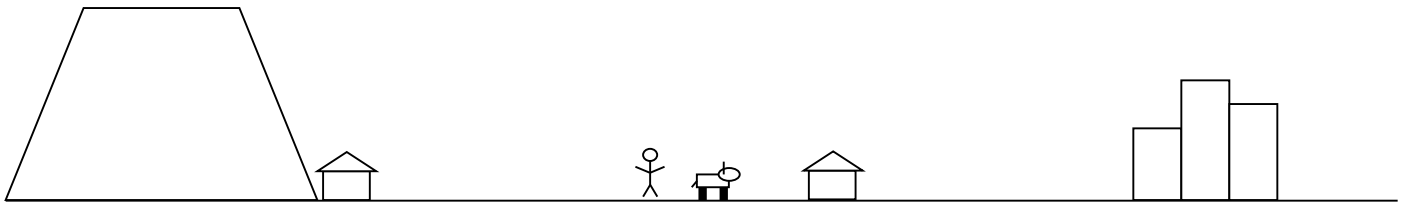
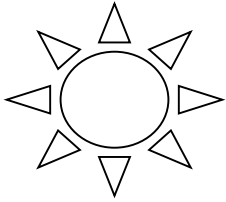
**Pinatubo's Eruption in the Philippines**

- Sketch and identify the elements that make up the landscape.
- Identify the natural and human elements of the landscape.
- Illustrate the consequences of the volcanic eruption for the man in the foreground.
- What does this image teach you about the consequences of volcanoes?

Draw a sketch that illustrates a consequence of Pinatubo's volcanic eruption.



Draw a sketch that illustrates several consequences of a volcanic eruption for the surrounding populations.



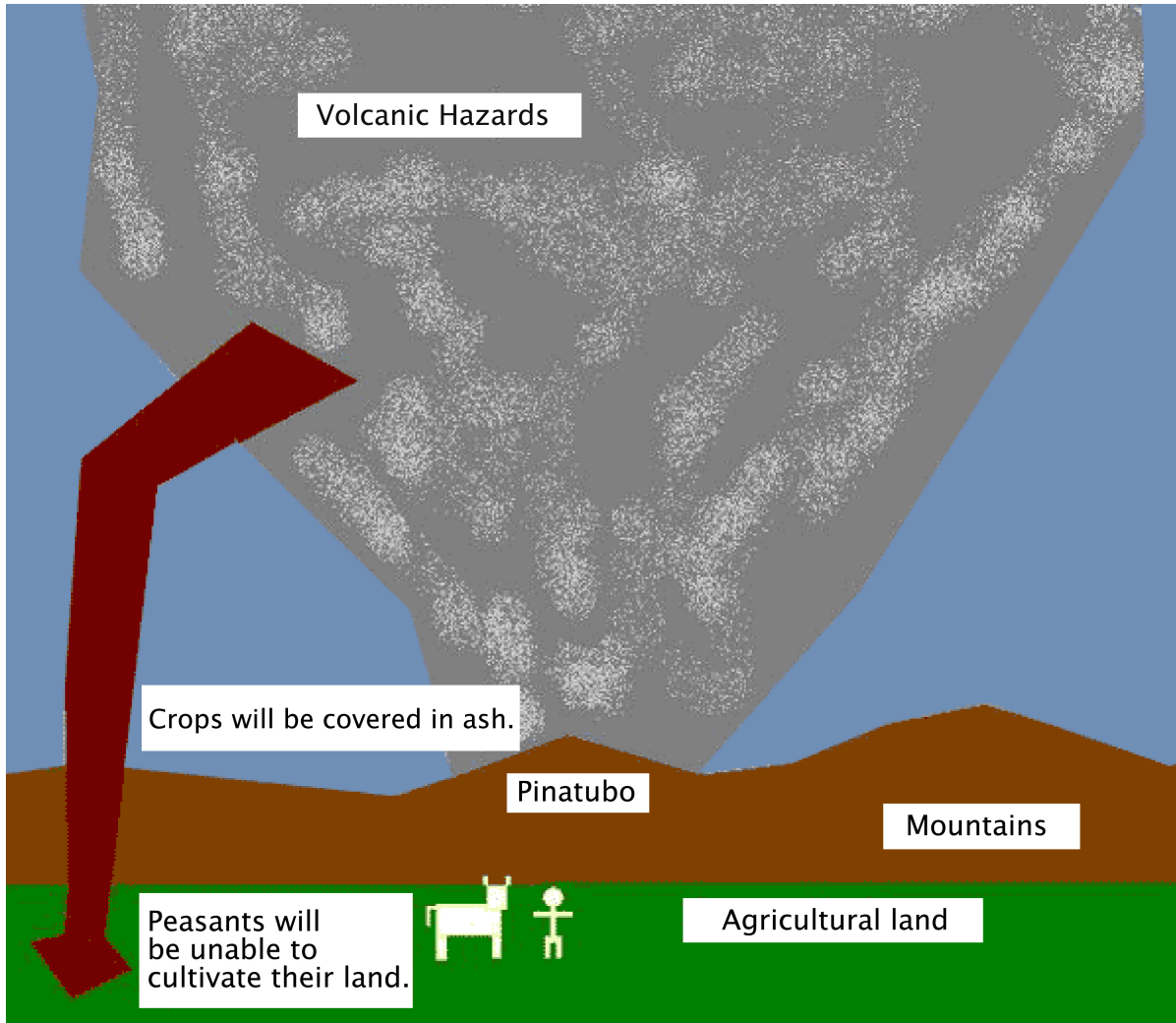
## Appendix

### Reading grid:

Volcanic Hazards	Consequences for the Population
1)	
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	

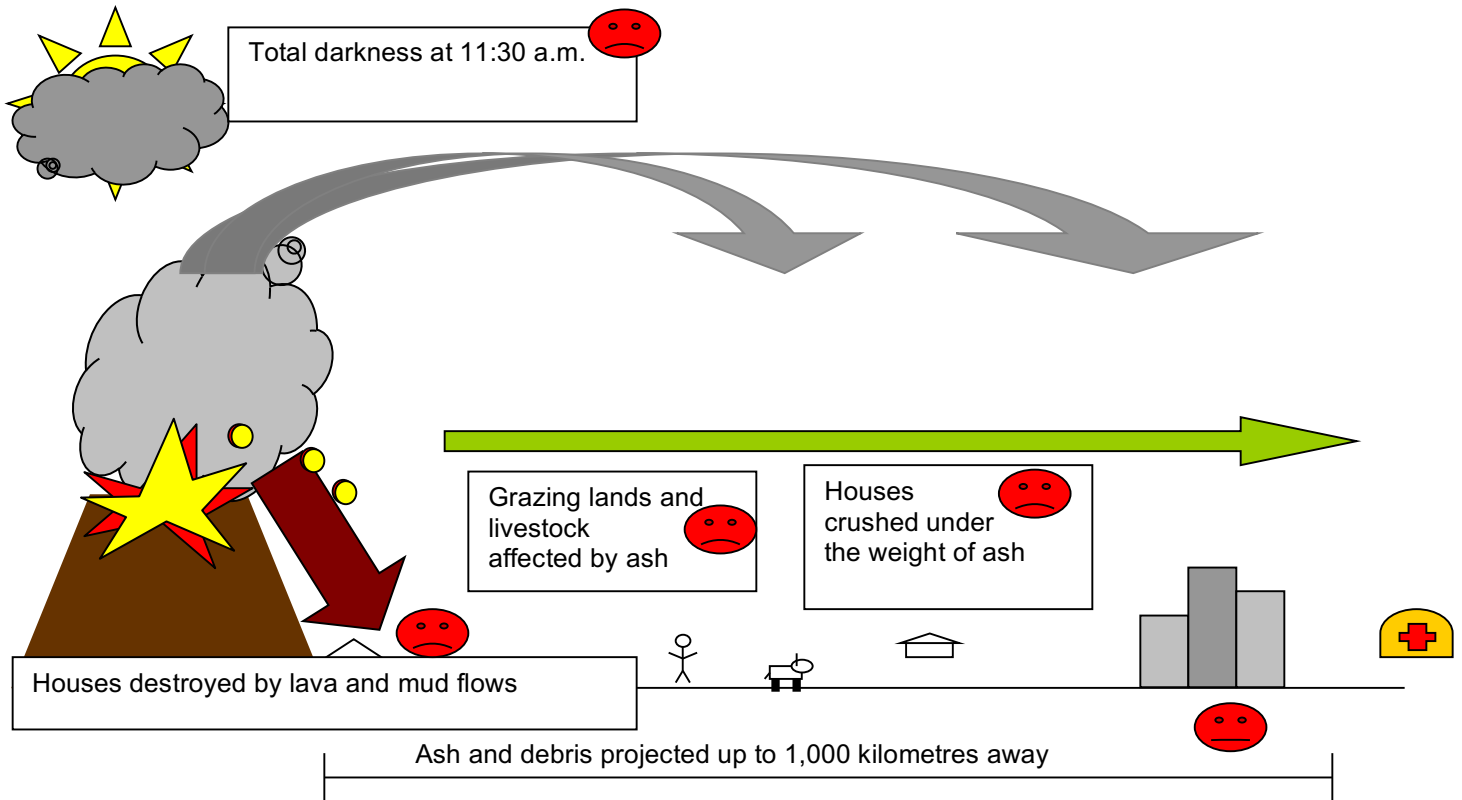


Example of a sketch:



Example of a sketch:

## Risks of a Volcanic Eruption for Surrounding Populations



### Legend

