SPRITE'S QUESTINE LOST FEATHERS

Introduction

Using the Game Overview of Components

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This document is designed to support grade 7 geography teachers when using the Ministry of Education's Sprite's Quest video game in their classroom. The game requires players to travel through six locations where they will encounter and be challenged by a variety of natural processes. Each of these locations has four levels of play. This game offers a wide range of learning activities that address expectations in both the geography and language curricula.

Teachers who teach geography and language can weave these activities through both programs thereby ensuring that expectations from both curriculum documents are met. For teachers who teach only geography, these activities ensure that as the geography expectations are addressed, the literacy demands embedded in these expectations are effectively supported. Teachers can also use these activities when planning cross-curricular integration with the language teacher.

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Teachers are encouraged to use their professional judgment on how best to incorporate the game and supporting resources into their program. How it is used depends on the available classroom time and access to technology.

An extensive use of the game might require three 40-minute periods per location—two to play the levels and do the During Game Play activities. In addition, the culminating activity will take at least one additional period.

This, however, can be streamlined according to your available classroom time. For example, you can have your students play through all four levels for a location in a single period, and then complete one selected culminating task for that location's set of levels.

You may also wish to look for opportunities for cross-curricular integration, such as incorporating the perspectives activity into your language program or the climate graphs into your data management mathematics strand.

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PART I

During Game Play Activities: Think About It!

These tasks require students to think about what they have experienced during game play. For each location in Sprite's Quest, the teacher resources include three *During Game Play* activities.

- 1. What's Where? Why There? Why Care?
- 2. How the Earth Works: Natural Processes
- 3. Through the Eyes of the Artist
 - These activities should not require more than 5 10 minutes for students to complete.
 - NOTE: Through the Eyes of the Artist is best used after the fourth level of a location.
- 4. Learning Goals/Success Criteria/ Expectations

What's Where? Why There? Why Care?

Geography is a study of spatial significance. Students become geographers by selecting an object they have seen in the level and answering key geographic questions: "What is where? Why is it there? Why should we care?"

Example

• What is where? Students make a declarative statement: "I saw a yak and yak wool in the Himalayas."

- Why is it there? Students hypothesize reasons that explain why the item is found in this location: "This is yak habitat. Yak must like to live in cold, mountainous areas where grasslands provide enough food."
- Why should we care? Students make connections to deepen their understanding: "Yak are
 useful for the people in this region they can be used for farming and for their hair. Yak
 habitat may be or become endangered because of expanding human settlements."

How the Earth Works: Natural Processes

In this *During Game Play* activity, students uncover the natural processes (e.g., weathering and erosion, deposition, plate tectonics, water cycle) depicted in the selected game level. Students will complete a response to the game play using a labelled diagram to practice using geographic vocabulary and further explain the impact these processes have on human activity–opportunities and challenges.

Example

- The student identifies that erosion is occurring in the selected location.
- Using an organizer, students explain how the land is worn away by rain, ice, wind, or moving water.
- They infer how this natural process could help or hinder the people who live nearby.

Through the Eyes of the Artist

This During Game Play activity is best completed after the fourth level.

As students play the game, they collect stars. In this activity, they select any one location where they found a star and find a photograph of the actual place. They will use descriptive language to make comparisons between the real photograph and the game artist's interpretation. Through this activity, students will practice their critical thinking.

Example

- In Japan, they may select the star location at the seawall. They would conduct an image search of the actual seawall. In a written passage, they would compare the image they found to the visual of the seawall in the game.
- Through a comparison of the images—real and game art—they would gather evidence to prove how well the game depicts the actual item.

Learning Goals, Success Criteria, Expectations

	What's Where? Why There? Why Care?	How the Earth Works: Natural Processes	Through the Eyes of the Artist
Learning Goal	I will learn how to describe the relationship between a selected object and its geographic location.	process and how it affects the selected location.	I will learn how to interpret and analyse the information in geographic images. I will learn how to select evidence that

			supports a particular point of view.
Success Criteria	I can analyse and explain the importance of the relationship between an object and its location.	I can use and apply the geographic vocabulary specific to a natural process. I can describe the impact of a specific natural process to the location. I can describe the challenges and opportunities provided by the selected natural process.	I can show my critical thinking by stating my point of view. I can make comparisons using descriptive language. I can evaluate
			the quality of information in geographic images.
Expectations	by the physical environment and ways in which people have responded to them A1.1 describe various ways in which people have responded to	A3. Understanding Geographic Context: demonstrate an understanding of significant patterns in Earth's physical features and of some natural processes and human activities that create and change those features A3.2 describe some key natural processes and human activities that create and change landforms	A2. Inquiry: use the geographic inquiry process to investigate the impact of natural events and/or human activities that change the physical environment, exploring the impact from a geographic perspective A2.4 interpret and analyse data and information relevant to their investigations, using various tools and spatial technologies

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PART II

Class Discussion: Reflect On It!

Learning Goal

We are learning to use discussion to deepen our understanding.

Success Criteria

- I think about what others say.
- I participate actively in the discussion.
- I ask questions.
- I bring new and relevant information into the discussion.

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PART III

Culminating Activities: Express It!

A culminating activity is provided for each location. In addition, there are student handouts that support students when reading visuals/photographs, maps, and graphs. An extension activity is included for further study.

- 1. Location(s)
- 2. Extension Activity: Sprite's Quest¬-Design Location 7

Location(s)

The Himalayas: Geographic Perspectives

Learning Goal

We are learning to identify and express many geographic perspectives about human interaction with the environment.

Success Criteria

- I identify and explain different geographic perspectives about human activity on Mount Everest.
- I provide details supporting my interpretation of these perspectives.

The Nile: Reading Graphs

Learning Goal

We are learning to read, analyse, and make connections between graphs to describe some aspects of life on the banks of the Nile River.

Success Criteria

- I identify the key features on a graph.
- I explain the connection(s) between the axes on a graph.
- I relate information from one graph to a second graph.

Japan: Analysing Climate Graphs

Learning Goal

We are learning to read, analyse, and compare climate graphs and to describe some of the factors that affect climate.

Success Criteria

- I describe the patterns shown on a climate graph.
- · I compare different climates using climate graphs.
- I describe factors that can affect a location's climate.

Iceland: Reading Photographs

Learning Goal

We are learning to read photographs for information and meaning.

Success Criteria

- I use details in the photograph to build my understanding.
- I develop an understanding of what it is like to be there by reading the photograph.
- I build a sense of the place in the photograph.

Indonesia: Reading Topographic Maps

Learning Goal

We are learning to read information communicated in a topographic map.

Success Criteria

- I identify the features of the map.
- I read contours to visualize the landscape shown on the map.
- I build a sense of place in the map.

Costa Rica: Writing Persuasive Paragraphs

Learning Goal

We are learning to express our opinions about geographical issues by clearly stating our opinions and including supporting evidence and arguments to support these opinions.

Success Criteria

- I write a sentence that catches my reader's attention.
- I write a sentence that clearly states my opinion about my topic.
- I choose evidence and explain how that evidence supports my opinion.

Extension Activity: Design Location 7

When students have finished all the levels of the game and related learning activities, teachers may wish to engage them in a final task; students will design a seventh location for the game.

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What's Where? Why There? Why Care?

Geography is a study of spatial significance. Students become geographers by selecting an object they have seen in the level and answering key geographic questions: "What is where? Why is it there? Why should we care?"

Example

- What is where? Students make a declarative statement: "I saw a yak and yak wool in the Himalayas."
- Why is it there? Students hypothesize reasons that explain why the item is found in this location: "This is yak habitat. Yak must like to live in cold, mountainous areas where grasslands provide enough food."
- Why should we care? Students make connections to deepen their understanding: "Yak are useful for the people in this region they can be used for farming and for their hair. Yak habitat may be or become endangered because of expanding human settlements."

Graphic Organizer

Choose an object that you saw in the game. By answering the questions in the graphic organizer below, you will explain and analyze the spatial significance of the object you selected.

Record your thinking in writing in the chart below or share your ideas in a conversation with someone who has completed the same level and location.

What's Where? Why There? Why Care	?
Game location and level	
What is the object you selected?	
Where is it?	
Describe the location where the object was found. What's around it?	
Why should we care about it?	
Think about the ways this object is an example of the challenges and/or opportunities of the natural environment.	

Locations	Suggested objects for student response
Himalayas	 Prayer flags Yak working in a field (human activity) Yak patties South-facing homes Yak wool
Nile	 Sugar refining (processing) factories Cargo ships Cultivated crops (rubber, cotton) Tourism, rafting, sightseeing Reservoir, dam, hydroelectric lines Irrigation Pyramids Reservoir
Japan	 Hot spring or onsen bathhouse Seawall, dams, and barrages Shipping containers
lceland	Lichen Mountaineering equipment Geothermal power plant
Indonesia	 Infrastructure for trade (port, cargo ship, crane etc.) Terrace farms Agriculture (palm oil, rice) Peaked roofs (monsoon season)

	Oil extraction	n e
Costa Rica	Fog netsGondolasZipline	

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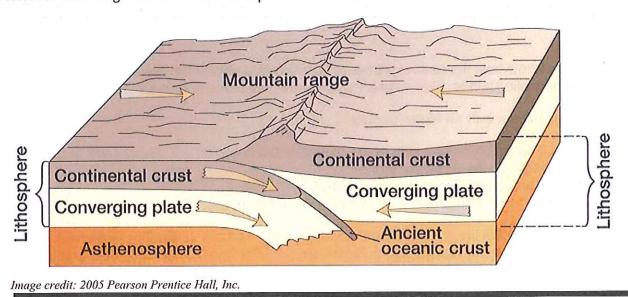
Discussion

Culminating Activities

How the Earth Works: Natural Processes

Himalayas

The Himalayas levels show the natural process of mountain building that is generated by plate tectonics. This diagram shows how this process works.



Discuss these questions with an elbow partner.

- 1. Where on this diagram would you find a person?
- 2. If the person dug a hole, what would that look like on this diagram?
- 3. What do the arrows on the diagram show?

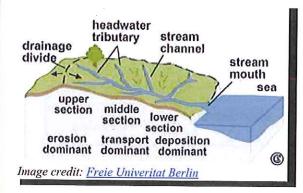
The Himalayas levels show the impact of the natural process of plate tectonics and mountain building. Use appropriate geographic terminology (e.g., tectonic forces, faults, physical characteristics, landforms, spatial patterns, site) to explain what evidence of this process you see in the game.

How could plate tectonics affect other natural processes (e.g., weathering and erosion, deposition, glaciation, ocean currents, wind systems, river processes) of this area?

How might this process of plate tectonics and mountain building affect the people who live in or visit this area? What challenges and opportunities does it offer?

Nile

The Nile levels show the natural river processes of erosion, transportation, and deposition. This diagram shows how this process works.



Discuss these questions with an elbow partner.

- 1. Which direction is the water flowing? How do you know?
- 2. Where might the water flow more quickly?
- 3. Where might the water flow more slowly?

The Nile levels show the natural river processes of erosion, transportation, and deposition. Use appropriate geographic terminology (e.g., fertile soil, agriculture, dams, river systems, irrigation) to explain what evidence of this process you see in the game.

How do river systems affect other natural processes (e.g., weathering and erosion, deposition, glaciation, ocean currents, wind systems) of this area?

How might this river system affect the people who live in or visit this area? What challenges and opportunities does it offer?

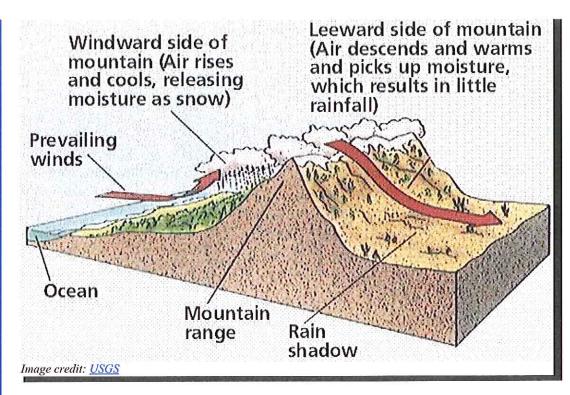
Japan

The Japan levels show how the natural processes of climate and weather are influenced by landforms and prevailing winds. This diagram shows how this process works.

Discuss these questions with an elbow partner.

- 1. Why might it be green on one side of the mountain but beige on the other? Look at the arrows.
- 2. What movement do the arrows indicate?
- 3. What is not carried over the mountains? Why?
- 4. How does this movement affect the leeward side of the mountain?

The Japan levels show the impact of the natural process of climate and weather patterns. Use appropriate geographic terminology (e.g., patterns, site, spatial significance, spatial characteristics, landforms, climate, ocean currents, wind systems) to explain what evidence of this process you see in the game.

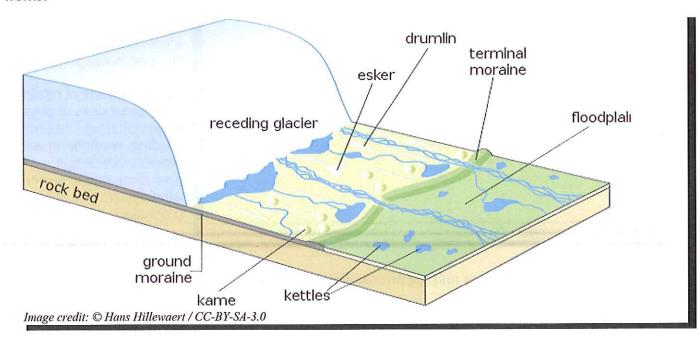


How do climate and weather affect other natural processes (e.g., weathering and erosion, deposition, glaciation, ocean currents, wind systems, river processes) of this area?

How might this process of weather and climate affect the people who live in or visit this area? What challenges and opportunities does it offer?

Iceland

The Iceland levels show the geographic process of glaciation. This diagram shows how this process works.



Discuss these questions with an elbow partner.

- 1. If you were to place an arrow on the glacier, in which direction would you have it pointing to show movement,
- 2. Why might a receding glacier leave lakes and drumlins behind?
- 3. What do you think terminal means when used in the geographic term "terminal moraine"?
- 4. Do you know where in Ontario you may find signs of a receding glacier?

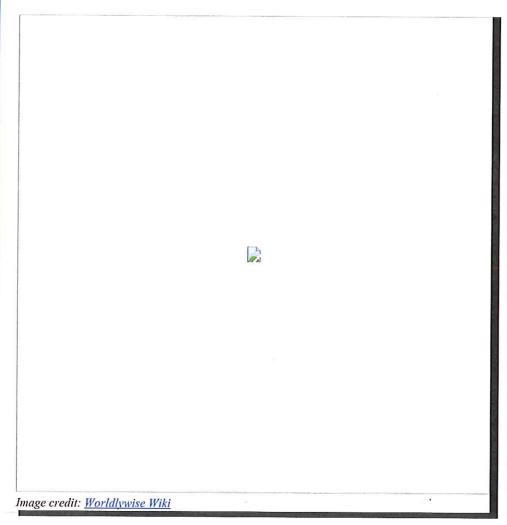
The Iceland levels show the impact of the geographic process of glaciation. Use appropriate geographic terminology (e.g., weathering and erosion, pressure, climate, weather, landforms, physical characteristics, patterns) to explain what evidence of this process you see in the game.

How is glaciation related to other processes of physical geography(e.g., weathering and erosion, deposition, ocean currents, wind systems, river processes, climatic processes) of this area?

How might this process affect the people who live in or visit this area? What challenges and opportunities does it offer?

Indonesia

The Indonesia levels show the natural process of volcanism. This diagram shows how this process works.



Discuss these questions with an elbow partner.

1. If you had to put numbers on this diagram to show order, what would the numbers be?

The Indonesia levels show the geographic process of volcanism. Use appropriate geographic terminology (e.g., plate tectonics, pressure, faults, mountain building, landforms, spatial characteristics, fertile soil, agriculture) to explain what evidence of this process you see in the game.

How is volcanism related to other processes of physical geography(e.g., mountain building, weathering and erosion, deposition, glaciation, ocean currents, wind systems, river processes) of this area?

How does volcanism affect the people who live in or

visit this area? What challenges and opportunities does it offer?

Costa Rica

The Costa Rica levels demonstrate how the combination of both climatic and hydrological processes works together at this latitude. This diagram shows how these processes work.

Discuss these questions with an elbow partner.

- 1. What does cycle mean to you?
- 2. How are these both examples of a cycle?
- 3. Why might the rainforest water cycle have an impact on how quickly trees grow?
- 4. Where do the nutrients for these trees come from?

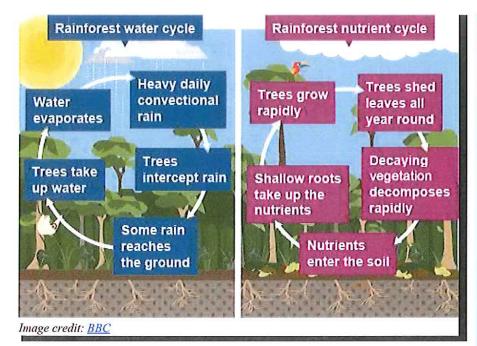
The Costa Rica levels show how the climatic and hydrological processes work together at this

latitude. Use appropriate geographic terminology (e.g., climate and weather, fertile, vegetation, physical characteristics, biodiversity, interrelationship, convection, precipitation, evaporation) to explain what evidence of this process you see in the game.

How are water and nutrient cycles related to other processes of physical geography (e.g., mountain building, weathering and erosion, deposition, ocean currents, wind systems, river processes) of this area?

How does this process affect the people who live in or visit this

area? What challenges and opportunities does it offer?



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Through the Eyes of the Artist

As students play the game, they will collect stars. At the end of the level, they select any one particular place where they found a star. With this visual in mind, they will conduct an image search on the Internet to find a photograph of the matching real-world location. They will make a comparison of the art used in the game and in the found photograph.

Through this activity, they will develop spatial acuity and build their understanding of spatial significance – the importance of places and the unique relationship that exists in and between the human and natural environments.

This activity requires students to activate and practice critical thinking skills to make comparisons.

Example

- In Japan, they may select the star location at the seawall. They would conduct an image search of the actual seawall. In a written passage, they would compare the image they found to the visual of the seawall in the game.
- In a written passage, or through discussion with a partner or small group, they would compare the image they found to the visual of the seawall in the game.
- Through a comparison of the images—real and game art—they would gather evidence to prove how well the game depicts the real item. Criteria might include some or all of the following:
 - Scale of the object in relation to the surrounding objects in the artwork
 - Amount and accuracy of detail in the artwork

- What is included or omitted in the artwork
- Use of colour in the artwork
- Other criteria
- Students state their final evaluation of the game artwork. How well does the artist illustrate the real world?
- Students are asked to look carefully and critically at a particular location. Through their analysis of the photograph and the game artwork, they consider the big geographic questions:
 - How is this location significant (e.g., to people, plants and/or wildlife)?
 - What is the importance of this place and the unique relationship that exists in and between the human and natural environments shown in the game artwork?

NOTE: Depending on how familiar students are with the task of gathering information from visuals, they may benefit from reviewing <u>Tips for Reading Visuals</u>.

Students who have unlocked all available star locations will have the following scenes from which to choose.

Star #	Feature	
5	Mountain	
6	Erosion	
7	Glacier	
Nile Iceland		

Graphic Organizer

Choose one of the 'star' locations that you unlocked in this country's levels and find an actual photo of that location. Answer the following questions about your photo.

Based on the photo, complete the graphic organizer below to evaluate a sample of the game's artwork. Make conclusions about

- how successful the game designers are at creating a video game version of that 'star' location;
- how this location is significant to people, plants, and/or wildlife.

Through discussion, evaluate the game artwork. Discuss how successful the game designers are at creating a video game version of that 'star' location and how this location is significant to people, plants, and/or wildlife.

If you feel it would be helpful, review <u>Tips for Reading Visuals</u>.

What 'star' location did you choose?	
What is the web address of the <i>real or</i> actualphoto that you found?	
Describe the photo. What does it show? Consider • scale of the object in relation to the surrounding objects in the artwork • amount and accuracy of detail in the artwork • what is included or omitted in the artwork • use of colour in the artwork • other criteria	
State your final evaluation of the game artwork. How well does the artist illustrate the real world? Include your reasons that support this conclusion.	
Write a caption that explains the significance of this location for a person seeing the photograph for the first time.	
You are asked to look carefully and critically at a particular location. Through your analysis of the photograph and the game artwork, answer the big geographic questions.	
How is this location significant e.g., to people, plants and/or wildlife? What is the importance of this place and the unique relationship that exists within and between the human and natural environments shown in the game artwork?	-5

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Discussions

Discussion questions are used to allow the teacher continuous dialogue with their class about the game, the geographical concepts, the assessments (During Game Play activities), and evaluations. For each level and location, questions are provided to seed the discussion.

Overview

Learning Goal

I will practice critical thinking when I explore new ideas, review concepts, and compare experiences.

I will practice the skill of reflection.

Success Criteria

- I show my critical thinking by stating a clear point of view and providing supporting details.
- I apply my background knowledge when answering questions.

Discussions

Himalayas

Level 1

- 1. What evidence did you see in the game that people of the Himalayas live in a sustainable way?
- 2. What can happen if a community is not sustainable?
- 3. What could you do to make your school community more sustainable?

Level 2

- 1. In the real world, erosion is a very slow process; how does this make living in a mountainous area possible?
- 2. What kind of energy (fossil fuel, renewable, etc.) does your family use to heat and cool your home? How might it compare with the Himalayan use of yak patties as a fuel to meet their needs?
- 3. Why won't our typical local farming techniques (tractors and large fields) work in mountain ranges? Why are different crops grown in different regions?

Level 3

- 1. How do the people of the Himalayas make the community sustainable?
- 2. Pose questions that you could ask a Himalayan resident in order to explore both the positive aspects and the hardships of living in the Himalayas.

Level 4

- 1. What role do precipitation and freeze/thaw cycles play in erosion? What other forces of nature cause erosion? How do they work?
- 2. You may have noticed that the natural vegetation changes from high in the mountains to the low valleys. What natural factor(s) could be used to explain these changes?
- 3. How much "hidden water" would you use in a day? What action might you take to reduce this amount?
- 4. What aspect of the physical or human geography of the Himalayas do you want to learn more about?

Nile

Level 1

- 1. Large rivers, like the Nile, are a collection of tributaries that join to make one main river. What could be the advantages of living on a tributary rather than on the main stream?
- 2. Explain why you would prefer living in either the Himalayas or the Nile River Valley.

Level 2

- 1. Going downstream, the river loosens and picks up sand and rocks and then deposits it further downstream. Why would this deposition be significant to the people who live along the Nile River?
- 2. How has human activity created change along the Nile River system?

Level 3

- 1. What is the likely impact of irrigation on the economy of the Nile region?
- 2. Look at all the silt that's been collected in the reservoir. Before the dam, the silt would have been deposited along riverbanks during floods. What do you think about this change: control of flooding but loss of natural fertilizers?

3. What effect can a dam have on a river system, both upstream and downstream?

Level 4

- 1. Notice how the farmers are able to farm far away from the riverside using irrigation.
- 2. What do you think about changing the natural environment for human benefit?
- 3. An algae bloom may make the water murky. What human activities did you see in the game that would cause or contribute to the growth of the algae bloom? What would you do to protect the water from further growth of the bloom?

Japan

Level 1

- 1. The lake at the base of the volcano flows into a waterfall that then becomes a mountain stream/river (water flows downhill). Why would you want to live near water?
- 2. Why might vacationers be drawn to natural hot springs or onsen?
- 3. Onsen are a large tourist draw as are ecotourism, luxury, and relaxation. How do the physical features and climate make Japan a desirable destination for ecotourism?
- 4. Would you feel comfortable living near a dormant volcano?

Level 2

- 1. Should tourists be encouraged to see wildlife in its natural habitat? What might change your perspective?
- 2. What types of climate and landforms lend themselves to the development of a tourism industry? What impact can tourism have on that environment?
- 3. How could you explain the similarities between the climate in Japan and in Ontario?

Level 3

- 1. Why is it important to control natural flooding?
- 2. Which looks more appealing to you as a place to live-rural Japan (at the beginning of the level) or urban Japan (at the end of the level)?

Level 4

- 1. The bay shown in this level of the game has a large industrial zone with many key shipping ports, lots of ocean freighters, shipping cranes, and trains. What Japanese products do you know of that are exported to Canada?
- 2. Disaster warning! How have the Japanese adapted to living in an environment that is at risk for earthquakes and tsunamis?
- 3. How might the population density and distribution along Japan's coastline affect the lifestyles for families in Japan?

Iceland

Level 1

- 1. What makes lichen and moss well suited to growing on rocky cliffs?
- 2. How would strong winds make tree growth a challenge?

Level 2

- 1. Would you think that there are more disadvantages or advantages to living in a place with geysers and hot springs?
- 2. How could plate tectonics be used to explain the hot springs found in both Iceland and Japan?

Level 3

- 1. If you enjoy rock climbing, why might you be more interested in these crevasses?
- 2. Crevasses are formed from thawing and freezing. Can you think of another place where water freezing and thawing (repeatedly) is a problem? How might you address that problem?

Level 4

- 1. What type of ecotourism would you want to do if you were planning a trip to Iceland?
- 2. Why is geothermal energy a viable process for the people in Iceland? What are the benefits and/or challenges of this process?
- 3. Recently an island appeared off the coast of Iceland. How would you decide to whom it, and the surrounding water, belongs? What perspectives might various groups have on this issue?
- 4. How might climate change affect Iceland's landscape and surrounding waters? Describe a specific change and the impact of it on the people there.

Indonesia

Level 1

- 1. When a volcano erupts, it can destroy the area around the cone. Why might there be such lush vegetation after an eruption?
- 2. Many islands make up Indonesia. What challenges does this create?
- 3. What differences would you expect to find if you moved to a country that is made up of many islands?
- 4. What recreational activities could you do here based on the landforms? Which would you want to do most?

Level 2

- 1. What reasons would you give for choosing to live near an active volcano?
- 2. What precautions would local residents need to take? Would volcanologists take different precautions when studying the volcano? Why?

Level 3

- 1. What were the oxen doing in this level of the game? Oxen are often called beasts of burden. Why?
- 2. How does terrace farming enable a farmer to address the challenges and opportunities presented by the physical environment in Indonesia?
- 3. What are the short- and long-term effects of terrace farming where a steep slope is reshaped into steps?
- 4. Where else in the game did you see terrace farming? What characteristics make a place the best choice for terrace farming?

Level 4

1. Like a volcano, a mud volcano ejects hot mud rather than lava. Sidoarjo's eruptions provide a source of salt that local residents can sell, but it also destroys buildings and damages areas where there is mudflow. How would you make decisions for your family if you lived in the region of this mud volcano?

Costa Rica

Level 1

1. What words could you use to describe the vegetation in this level, which shows the undergrowth layer of the rainforest? What climate conditions (temperature and precipitation) would support this vegetation?

2. The darkness is a result of the huge trees above. If these trees were logged, how would that

affect the forest floor? What would you say to companies who plan to log here?

3. Did you notice a volcano in the background at the beginning of the level? What role do they have in changing landforms in both positive and negative ways?

Level 2

1. What reasons can you give to explain why there is so much plant diversity in the rainforest?

2. What words could you use to describe the vegetation in this level, which shows the understory layer of the rainforest? How are the creatures and plants more diverse in this layer than in the undergrowth layer?

3. Who would be collecting water in the fog nets? Why would they use this method of collecting

water? What does this tell us about availability of water resources in this area?

Level 3

1. What words could you use to describe the vegetation in this level, which shows the canopy layer of the rainforest?

2. The height and thick foliage of the trees create a series of umbrellas over the forest below. How

might the canopy affect climate, growth, and life below?

- 3. If you were trying to convince someone to purchase rainforest-friendly products, how could you use information from the game about the biodiversity of the rainforest ecosystem to persuade them?
- 4. Ecotourism and specifically zipline parks have made a big impact in preserving the rainforest ecosystem. What is another location that could benefit from ecotourism? What are some of the activities that a tourist would experience there?

5. Does the high number of water droplets included by the game developers better help you imagine the climate of the rainforest? What other methods (e.g., sounds, visual effects) could be a local page to continue the rainforest experience?

have been used by the developers to capture the rainforest experience?

Level 4

1. Did you notice that as you moved through the four levels of Costa Rica, going from the lowest layer of the rainforest to the highest layer, the temperature changed from 30°C to 28°C to 20°C to 16°C in the canopy rainforest? What factor or factors could account for this dramatic change in temperature as you rise vertically through the rainforest?

2. Costa Rica is a poorer developing country that sells almost all their coffee and cocoa produce

to wealthy, developed countries. Is this a fair and sustainable relationship?

3. Consider the impact of human activity: Costa Rica's economy once relied much more heavily on activities that required deforestation (logging, farming). Now ecotourism plays a greater economic role and requires greater protection of the rainforest. What do you think is the best argument for one of these two economic approaches?

4. Why do people have different perspectives about the environment and economic opportunities and challenges the physical geography of the area presents? Why do we need to consider various

perspectives when determining the impact of human activities?

SPRITE'S QUEST THE LOST FEATHERS

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Culminating Activities

Himalayas—A Geographic Perspective

There is meaningful debate about limiting the number of climbers who are allowed access to Mount Everest, due to the impact they have on the local environment. Mountaineering, though, also makes a significant contribution to the local economy. Geographers consider four viewpoints when developing their "geographic perspective" on any particular issue. The four people below represent the four viewpoints that, when taken together, form a geographic perspective on an issue. Brainstorm the points they would separately make about their position on the issue stated in the centre of the graphic.