

BELIZEAN STUDIES SAMPLE UNIT PLAN FIRST FORM – ENVIRONMENT

Unit Title: This Country: Belize
 Big Question: What connects humanity and nature?
 Duration 3 weeks, 12 lessons (40 mins)
 Learning Outcomes¹:

1.1	Explain how evidence can be used to evaluate how true a statement is.
1.2	Describe the absolute and relative location of Belize and specified places within it.
1.3	Describe the physical geography of Belize in terms of the features of its basic geology, land, inland water bodies, coastal and marine areas.
1.4	Describe the ecological, climatic, tectonic and other regions that Belize is part of.
1.5	Explain how Belize's physical geography influences where people live.
1.6	Communicate a range of information on the connections between physical geography and a selected human settlement in Belize.

Goal By the end of the unit, students will have linked human settlement to the physical geography of Belize.

Key Skills²

- Use technology to research information
- Explain key geographical concepts
- Describe connections between people, places and the environment
- Extract information from maps and other sources of data

Key Concepts

WEEK ONE

LO 1.1 Explain how evidence can be used to evaluate how true a statement is. (1-2 lessons)³

- Some main types of evidence used to investigate people, places today and in the past, for example documents (e.g. newspapers, maps, legal documents, wills and so on), artefacts (objects), written and oral stories and testimonies and so on.

Specific Content: Embedded in lesson

Sample Lesson

Introduction: Share with students the pictures of the reality of everyday life. Have students discuss whether the message in the image is true or false and to determine what evidence would validate its truth. Generate class discussion.

Development: Explain to students that we know what we know because through our senses we have observed, collected, analysed, compared and noticed patterns in our experiences. Introduce the concept of ‘evidence’ as the product of this process of knowing. Refer back to the introductory activity by explaining to students that artefacts aren’t the only type of evidence. Teacher will explain to students that there are different types of evidence eg oral stories, testimonies, maps, legal documents, wills, newspapers etc. Display this evidence in the classroom since it will be needed in the next activity.

Using emojis, have students form groups of threes. Each group will be given a question related to the Environment Strand that they must classify as ‘truth’ using the evidence the teacher provides. Each group is expected to sort through the ‘evidence’ to find information that would answer the question they have.

Have each group share what they have found. Teacher will then use the lottery method to call on students to summarize the key concepts learnt and then remind students that it is very important to be aware of evidence that is biased or published for propaganda reasons.

Conclusion: In their same groups have students complete the ‘Relay Summary’ or ‘Synectics Review’ (See Summarizers).

Extended Activity: Have students find the evidence and create a collage of evidence to validate why they are a Belizean. In this case students would refer to testimonies from elders, identification documents such as passport and birth paper, map of where they live in Belize etc.

¹ Learning outcomes must be taught. Everything else in this document should be treated as advisory.

² It is important that these skills are developed throughout the unit. They are extracted from the curriculum framework.

³ This learning outcome is continuously taught throughout the program. The use of evidence can be introduced into every unit.

LO 1.2 Describe the absolute and relative location of Belize and specified places within it. (2-3)

- Review of coordinate systems, including latitude and longitude; coordinates of various places in Belize and the wider world.

Specific Content: Latitude (parallels) are horizontal lines that represent the distance of any point, north or south of the equator, its direction is east to west. When plotting coordinates this line is read first. Major lines of parallels are: Equator (0° Latitude), Tropic of Cancer (23.5° N), Tropic of Capricorn (23.5° S), Arctic Circle (66.5° N) and the Antarctic Circle (66.5° S). On the other hand, longitude (meridians) are vertical lines indicating the distance of any point, east or west of the prime meridian, its direction is north to south. Major meridian line is the Prime Meridian or Greenwich Meridian. Where these lines intersect can accurately locate a place on Earth. The address of these places is known as its absolute location; where these places are in relation to another place is known as its relative location.

Sample Lesson

Introduction: Using ‘opposites’, have students find a partner. Provide each pair with a brown paper bag to: 1. Complete the jigsaw puzzle. 2. Label the 7 continents 3. Label the map title, the compass rose, the scale, the legend/key, the scale, the lines of latitude and the lines of longitude. Play soft music while students work and when the music ends students can then find another pair to ‘Give One Get One and Move On’.

Development: Teacher will go over answers with students and make clarifications where necessary. Teacher will explain that today’s lesson will focus on lines of latitude and longitude. Have students stay with their partner and provide each pair with a venn diagram graphic organizer to complete based on information shared in the video. Teacher will pose questions on the board that students will respond to by completing the graphic organizer. Teacher will then use the ‘lottery method’ to call on students to share their responses. Teacher will make clarifications as necessary to ensure that students have the right concepts. Teacher will then project statements on the board of the characteristics of lines of latitude and longitude and have students do a specific movement if it is latitude or longitude eg stand or sit or move left or right. Continue activity by explaining to students that looking at the bottom left hand corner of the square where the lines intersect can help one to identify a particular place on Earth. Teacher will demonstrate technique of finding the line of latitude then longitude where the grid square intersects at the bottom left hand corner. Have students use their map to identify the specified places. Summarize lesson orally by writing the key concepts on the board or you can play the funny video to remind students of the importance of using coordinates to locate a place.

Conclusion: Have students create a radio announcement that tracks the hurricane using the hurricane tracking chart.

Links: <https://www.youtube.com/watch?v=swKBi6hHHMA> (very informative explanation of latitude and longitude)

https://www.youtube.com/watch?v=wBrCT_tcuNc (great link for using Google Maps to locate places)

<https://www.youtube.com/watch?v=O8P2Oyg6m9c> (funny video of Jamaican girl giving directions)

- Descriptions of where a place is in relation to other places: for example, straight line distance, road distance, travel time, 16pt compass, and so on.

Sample Lesson

Specific Content: A 4 point compass shows the cardinal directions of North, South, East and West. A 16 point compass shows N, NE, NNE, ENE, E, ESE, SSE, SE, S, SW, SSW, WSW, W, NW, NNW, WNW. When giving the direction of two places the location where it says ‘from’ or ‘of’ is your central location; eg Where is the Caribbean Sea from Belize City? The question says ‘from’ Belize City so Belize City is my central location which means that from there I look to the direction of the Caribbean Sea which is East. So the Caribbean Sea is east of Belize City.

Introduction: Show students video of Jamaican girl giving directions (See link below). Elicit from students what they think the lesson will be about based on what they saw.

Development: Gather class outside and provide each person with a blank 16 point compass worksheet to complete. Review the 4 point compass using the districts as their guide eg North – Corozal, South – PG, West - Cayo etc. Use select students to stand in the direction of the 4 point compass (a student faces North, another faces South, etc). Explain to students that there is also a 16 point compass direction. Provide random students with these 12 other compass directions and then have them stand where they think they belong; teacher can decide whether or not the rest of the class can offer assistance. Teacher will then make adjustments as needed and allow students to complete their worksheet with the correct answers. Have students briefly share with a friend a technique to remember the directions, then call on another set of students to recreate the 16 point compass as a review of that concept. Teacher will then ask the direction of places on the compound from where students are eg What is NE of where we’re standing? What direction is the cafeteria from where

we are? Etc After reviewing this skill orally for mastery, have students complete the worksheet to identify the general direction of villages in Belize. As a summarizing activity, go over answers orally and providing as much clarification as necessary.

Conclusion: Have students find a partner of their choosing. Students will be tasked to use one of their homes as a landmark to develop a map that shows what is in all 16 directions of their home. Students will complete map as assignment to share at the beginning of the next class.

Links: <https://www.youtube.com/watch?v=O8P2Oyg6m9c>

http://tcdsbstaff.ednet.ns.ca/scroache/Soc%20Studies/16_point_compass_rose_test.htm

Sample Lesson

Specific Content: A scale is a statement of the relationship between distances on a map and distances in real life. There are generally 3 types of scales found on a map. A word/statement scale tells exactly how much distance is represented by 1cm eg 1cm: 6km. A linear scale uses a special ruler to show what the distance on a map represents in the real world. A ratio scale is a ratio where one unit on the map represents a specific number of the same unit in the real world eg 1:50,000 means 1cm is equal to 50000 cm in the real world; ratio scale is always in cm. (Don't forget 100cm=1m, 1000m=1km, 100,000cm=1km)

Introduction: Provide students with a school map and ask them to guess the distance between two relatively close buildings. Have students write down their estimate and then take them outside to measure the distance.

Development: After being seated in class, direct students to the observation that the actual distance cannot be shown on the school map so a scale must be used to represent the actual distance. Using images, introduce students to the concepts of the linear scale, the statement scale and the ratio scale. Teacher will demonstrate how to convert from one scale to the next. Provide students with worksheets to practise this concept that includes word problems. As a summarizing activity, show students 3 calculations and have them work individually to identify the calculation that is wrong and justify why. Randomly call on a student to share her answer.

Conclusion: Have students create a scale to show the perimeter of their classroom; eg if the classroom is 6 m wide they can create a scale of 1cm: 1m or 1: 10,000 etc Students will use their scale to draw the perimeter of their classroom.

WEEK TWO

Describe the physical geography of Belize in terms of the features of its basic geology, land, inland water bodies, coastal and marine areas.

- Topography: features and location of the main mountains, hills, cave systems, valleys and low lying areas of the entire country.⁴
- Basic Geology: the main types of rocks found in Belize (granite, volcanic, shales and mudstones, alluvial deposit); location, age and features of these rocks (e.g. granite is a hard rock that does not easily erode, alluvial deposits are more recent and are good for farmers)
- Inland Water Features: what are the main rivers in Belize, the differences between northern longer rivers and southern shorter fast flowing rivers. Selected other features, for example rapids, waterfalls, meanders, river cliffs, river islands and lagoons with a focus on the locality of the school,
- Coastal features: beaches, mangroves, wetlands
- Marine features and location of the coral reef, including the cayes, atolls, lagoons: local ocean currents, sea depths.

WEEK THREE

LO 1.4 Describe the ecological, climatic, tectonic and other regions that Belize is part of. (1 lesson)

- Brief descriptions of the regions of Belize as follows: ecological, tectonic, climatic.⁵

LO 1.5 Explain how Belize's physical geography influences where people live.

LO 1.6 Communicate a range of information on the connections between physical geography and a selected human settlement in Belize.

(4 lessons)

⁴ The information in the unit was introduced into the primary school curriculum in some depth in 2016.

⁵ This is an overview, so identifying the boundaries of regions and their main features from maps is sufficient. The Atlas of Belize and the World has some useful maps. Note that Plate Tectonics was introduced at Standard 6 in 2016.

- Physical factors that influence human settlement patterns including access to water, food and other resources (including wood, minerals (e.g. salt, chert, obsidian, dolomite, and metals), soil fertility, security (e.g. hill top locations and rivers are good for defence), ease of transportation (e.g. for trade along rivers and the coast) and so on.
- Factors that influenced the location of a specific Belizean settlement, for example, the one where the school is located or the home settlement of the students.⁶

Sample Activities

Forensic Files

Garbage Can Game

Battleships / Treasure Hunt

Describe a journey without mentioning human constructions

Map colouring-by-numbers

Compare and contrast maps from the Atlas of Belize

Google Earth place pinning

Nowhere Land

Defining regions group work

Google Earth “flyover”

Information gap of relative location

Describe / draw what you can see from the roof (a high point)

Making a model of local topography (the shape of the land, rivers, streams)

Drawing a map with your house in the centre and physical features highlighted

Research a settlement story

Sources of Information for Students

Sources of Information for Teachers

Appendix – Content Notes

⁶ A project based on this unit can be the major assessment.