



Lesson Plan: El Nino flooding in Kenya (School Geography Challenge)

Objectives:

- To help your students learn about the lives of young people in developing countries, by looking at the lives of children living in Nakuru, Kenya
- To help your students learn about El Nino, and the impacts of flooding caused by El Nino on developing countries
- To give your students an understanding of the challenges when responding to crises in developing countries

Starter: Life in Nakuru, Kenya

Despite Kenya's reputation as the economic hub of East Africa, 45% of the population live below the poverty line, surviving on less than 80p per day.

Nakuru, where our partner schools are located, is the fourth largest city in Kenya. Small-scale agriculture, manufacturing, and tourism are the backbones of the local economy. We work with local schools in order to provide a free education and daily meal to over 5,000 children, many of whom live in slum areas around the edge of the town's Hilton dumpsite.

Susan, aged 13, lives with her grandmother and two brothers, aged 18 months and four years old, at the Hilton dumpsite. Her grandmother earns a little bit of money by scavenging for materials to sell on the dumpsite. Susan and her brothers attend one of African Adventures' partner schools, The Walk Centre, where they receive a free education and daily meal. After school, Susan helps her grandmother scavenge for materials, and looks after her siblings. 500 other families also live at the dumpsite.

Task (10 minutes):

Share the information above with your students, displaying the photos of the dumpsite and The Walk Centre, together with the maps of Kenya and Nakuru on the board (appendices I, II and III). Discuss the resources as a class. You could use the following questions to prompt a discussion:

- Has anyone visited Kenya before?
- What is the first thing you notice in these photos?
- If this was your home, how would you feel?
- If this was your daily routine, how would you feel?



Main activity: The impact of El Nino flooding on Nakuru

The term “El Nino” is used to describe a change in weather conditions that occurs every 5-7 years in the Pacific Ocean. A reverse in the direction and strength of winds over the Pacific reverses normal weather patterns. El Nino brings wet weather and flooding to South America, whilst Australia experiences dry weather and drought. El Nino effects weather patterns all over the world, with countries such as Kenya experiencing high rainfall and flooding.

It is an El Nino year, and heavy rains have hit Kenya, causing a wide range of impacts across the town of Nakuru. The residents of the Hilton dumpsite have been badly impacted by the flooding, and many makeshift homes have collapsed.

In times of emergency, The Walk Centre (appendix II) is used as a temporary aid distribution centre for the local community.

Task A (10 minutes):

Share the information above with your students, displaying the photos of the homes at the Hilton dumpsite before and after the flooding (appendix IV) on the board. Ask your students to write one word on a post-it note to describe how these photos make them feel, then ask them to stick this on the whiteboard next to the photos.

Task B (10 minutes):

Appendix V details 16 impacts of the flooding caused by El Nino on the community in Nakuru. Display the impacts on the board and ask your students to choose the nine impacts that they believe to be the most significant.

Task C (10 minutes):

Ask your students to rank their nine chosen impacts in a diamond (appendix VI) and ask them to annotate the diagram with their reasons for prioritising certain impacts over others.



Plenary: Responding to the crisis

To respond to the crisis caused by El Nino flooding, The Walk Centre has been set up as a temporary aid distribution centre.

Task (10 minutes):

Tell your students that they will be working alongside the staff at The Walk Centre to meet the needs of the local community.

Your students must decide how they would allocate a budget of 1 million Kenyan Shillings to provide aid to the local community at the Hilton dumpsite. They must use the price sheet (appendix VII) and planning sheet (appendix VIII) to list their chosen items (e.g. 10 x food for 100 people for one week) and the reasons for their choices. They should link their decisions back to the nine impacts they identified. This activity can be completed individually or as a group.

Appendix I – Photos of the Hilton dumpsite in Nakuru, Kenya



Appendix I (Continued) – Photos of the Hilton dumpsite in Nakuru, Kenya



Appendix II - The Walk Centre in Nakuru



Appendix III - Maps showing the location of Kenya and Nakuru



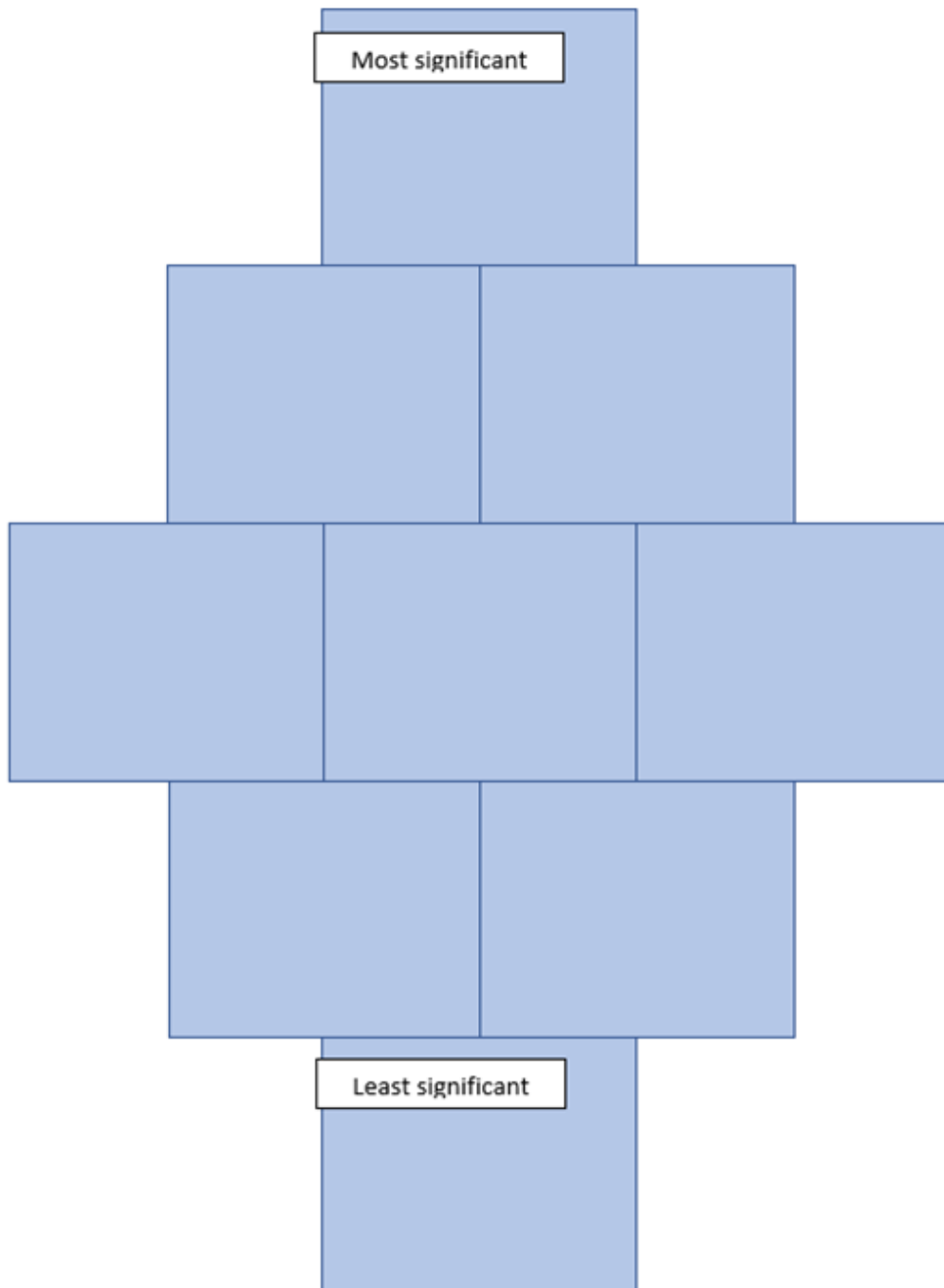
Appendix IV - Homes at the Hilton dumpsite before and after El Nino flooding



Appendix V - The impacts of El Nino flooding

A Spread of waterborne disease	B Decrease in food production	C Mudslides	D Damage to agricultural land
E Damage to transport links	F Collapse of makeshift homes	G Local schools are closed	H Loss of life
I Overcrowding in hospitals	J Lack of access to clean drinking water	K Overflowing sewage systems	L Decrease in tourist numbers to Nakuru National Park
M Reduction in wildlife populations	N Riots in the local community	O Malnutrition of local children	P Migration of workforce

Appendix VI - Ask your students to rank their nine chosen impacts in a diamond

A diamond-shaped template for ranking nine impacts. It consists of nine light blue squares arranged in a diamond pattern: one square at the top, two in the second row, three in the third row, two in the fourth row, and one at the bottom. The top square contains a white box with the text "Most significant". The bottom square contains a white box with the text "Least significant".

Most significant		
Least significant		

Appendix VII - Price Sheet

Food for 100 people for 1 week 52 000 KSh	Bottled water for 100 people for 1 week 70 000 KSh	Basic medical supplies to treat 100 people 50 000 KSh	10 x family tents (6-man) 145 000 KSh	5 x fuel-efficient wood burning stoves 150 000 KSh
Clothes for 100 people 20 000 KSh	10 x hand-crank torches 7 500 KSh	5 x doctors for 1 week 120 000 KSh	1 x hand-crank weather radio 1 500 KSh	25 x basic toolkits 28 000 KSh
1 x temporary animal shelter 50 000 KSh	50 children's activity packs 7 500 KSh	1 x temporary school and resources 25 000 KSh	1 x rescue boat 100 000 KSh	1 x generator for electricity 75 000 KSh
100 x sleeping bags 44 000 KSh	1 x flooding expert for 1 week 20 000 KSh	100 x mosquito nets 30 000 KSh	1 x wildlife vet for 1 week 20 000 KSh	1 x temporary medical centre 60 000 KSh



Appendix VII - Price Sheet

Item:	Quantity:	Total cost:	Reasons:
TOTAL COST:			Are you within the budget? Yes / No