



Devon Primary Schools  
FAIRTRADE Conference  
February 2020

CHOCOLATE



Preparation for the 2020 Conference.

Notes to accompany the PowerPoint.

## Slide

- 1 The Conference, presented by Fairtrade Devon and Devon Development Education, also focuses on SDG 13 (Sustainable Development Goal 13)
- 2 Having learned that our visitors are from Ghana, the question is: Where is Ghana?
- 3 A view of our world – can the children locate the UK, identify the continent of Africa and name any individual countries? Use locational language N, S, E, W.
- 4 Ghana and its surrounding countries are marked on this. Can the children map identify which part of Africa this is? (West Africa). Children are asked to find Ghana and to try to remember its shape. They should describe its location on the south coast of West Africa –refer back to Slide 3 if necessary.
- 5 Find Ghana on the satellite image of West Africa, identifying the shape as well as the name. Elicit ideas about what the colouring denotes, possibly naming the Sahara Desert.
- 6 Again find Ghana, without its name label. Also find the UK and see how many European countries the children can recognize by shape and then name.
- 7 Introduces some names that are (mostly) located on the next slide – ‘nesting’, like a Russian doll.
- 8 Use this map to distinguish between ‘country’, ‘capital city’, ‘city’ and ‘port’, the names on the previous slide.
- 9 ‘Postcards’ from Sekondi-Takoradi. Note the high rise buildings, roads and traffic.
- 10 ‘Postcards’ from Accra and Kumasi.
- 11 Find the places again on this physical map of Ghana that also names the regions. Notice that the land in the SW is higher than the land in the rest of the country. Discuss the meaning of ‘basin’, ‘uplands’ and ‘plateau’ and the differences between them.
- 12 Locates our visitors in the city of Kumasi, on the Kwahu Plateau.
- 13 Introduces the fact that cocoa comes from a pod that grows on trees.
- 14 Illustrates tree, pod, pulp and bean.
- 15 Cacao or cocoa? Explains the difference. As this is confusing you may wish to leave this out and just refer to cocoa.  
‘The cacao tree is native to tropical regions in Central and South America, and its fruit was consumed by pre-Columbian cultures like the Mayans over 4,000 years ago. "Cacao" originates from the Olmec word "ka-ka-w," and Aztec ruler Moctezuma II famously enjoyed drinking a frothy, bitter beverage made from ground cacao seeds called *xocolātl*. Today, 70% of cacao is grown in West Africa.’ (From: <https://www.bonappetit.com/story/what-is-cacao> ).
- 16 Where does chocolate come from? Where are the trees grown? What conditions do they need?
- 17 Some information about origin of cacao and the climatic needs of the tree.
- 18 We know cacao trees grow in Ghana. What can we work out about the growing conditions in Ghana?  
On this globe with grid lines marked, find Ghana, the Equator, both Tropics and the Prime Meridian. Describe Ghana’s position in relation to these. What weather and climate does Ghana’s location indicate? Slightly nearer the Equator than the Tropic of Cancer – tropical with rainy

season (also indicated by the green coloration on the satellite images, dry desert conditions further north).

You might like to point out that Ghana is on the Primary/Greenwich Meridian, so it has the same time as the UK (except in our summer when we are an hour ahead). – GMT (Greenwich Mean Time) and BST (British Summer Time).

- 19 The cocoa-tree growing area is largely within the tropics. Children should be able to place Ghana in West Africa. The Equator passes just south of the coast of West Africa.
- 20 Expect children to interpret the key to this rainfall map of Ghana. Ask where the wettest and driest regions of Ghana are. Can they explain this? Link it with the location of the dry Sahara (in the GoogleEarth satellite images) and possibly the location of rain forests (equatorial) if they have already studied these. Try to indicate the location of Kumasi.
- 21 Expect/help children to interpret the key to this temperature map of Ghana. Ask where the hottest and coolest regions of Ghana are. Can they suggest reasons why the north is hotter than the south although it is further from the Equator? Link it with the location of the Sahara (in the GoogleEarth satellite images) and that uplands and plateau (in the S and SW – see Slide 9) are cooler because of altitude. Link it with the hot/wet south and cooler/dry north and the rainy seasons. Try to indicate the location of Kumasi.  
'In Ghana, the climate is tropical, with a dry season in winter and a rainy season in summer due to the African monsoon. The rainy season lasts from May to September in the north, from April to October in the centre, and from April to November in the south.'  
From: <https://www.climatestotravel.com/climate/ghana>
- 22 Slides 20 and 21 show 'average' rainfall and temperature. A Tropical climate has 2 seasons, hot wet and hot dry.
- 23 'From bean to bar – from producer to consumer'. See Fairtrade PowerPoint at: <https://schools.fairtrade.org.uk/resource/where-does-chocolate-come-from-new-for-fairtrade-fortnight-2019/> and other resources.
- 24 Is climate change having an effect on the cocoa farmers of Ghana? Elicit the children's ideas.
- 25 Predicted climatic effects – research suggests that the dry season in the cocoa growing areas in southern Ghana will be 3, not 4, months long. There will be less rainfall - there's usually some rain in the dry season. There will also be higher temperatures that will increase evapotranspiration, increasing humidity and countering the reduced rainfall. However, the higher dry season temperatures will stress the trees.  
(Evapotranspiration: the process by which water is transferred from the land to the atmosphere by evaporation from the soil and other surfaces and by transpiration from plants.)
- 26 Adaptation – planting shade trees, although there are some concerns that these will use valuable water and soil moisture.
- 27 Predicted changes to cocoa growing along the coast of West Africa.
- 28 Unfortunate consequence.  
The research concludes 'that adaptation strategies for cocoa in West Africa need to focus at several levels, from the consideration of tolerance to high temperatures in cocoa breeding programs, the promotion of shade trees in cocoa farms, to policies incentivizing the intensification of cocoa production on existing farms where future climate conditions permit and the establishment of new farms in already deforested areas.'

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*Margaret would be pleased to come into school to present this powerpoint and topic to your class. Please contact Devon Development Education, [dde@globalcentredon.org.uk](mailto:dde@globalcentredon.org.uk), 01392 438811*