

Unit 11 Investigating Brazil

About the unit

In this unit pupils carry out a detailed study of Brazil as an example of a less economically developed country (LECD). They use their geographical skills to investigate Brazil's location, its distinctive character (regional differences) and the physical and human processes that shaped the country. They begin to learn how to evaluate a country's state of economic development and also consider important environmental issues within the context of sustainable development.

Many of the activities involve pupils in active learning. Numerous writing activities offer the opportunity for pupils to develop their literacy skills.

This unit is expected to take 12–20 hours.

Key aspects

Geographical enquiry and skills

Pupils will:

- ask geographical questions
- suggest investigation sequences
- collect/record/present evidence
- analyse evidence and draw conclusions
- appreciate values and attitudes
- communicate appropriately
- use extended geographical vocabulary
- use atlases/globes/maps
- use secondary evidence
- draw maps, plans and graphs

Knowledge and understanding of places

Pupils will:

- locate places and environments
- describe scale contexts
- describe and explain physical and human features
- investigate change in places
- explore interdependence and global citizenship

Knowledge and understanding of patterns and processes

Explored through:

- countries in different states of economic development
- population distribution and change
- development
- environmental issues

Knowledge and understanding of environmental change and sustainable development

Pupils will study:

- environmental change and management
- sustainable development

Expectations

At the end of this unit

most pupils will: suggest ways in which Brazil is linked with the UK; describe Brazil's location and geographical context; describe and begin to explain how physical and human processes operating within Brazil create distinctive features and geographical patterns at a range of scales and how these processes or scales may lead to changes in places (including changes in population); recognise how conflicting demands on the rainforest have arisen and describe and compare different approaches to managing that environment; describe and begin to explain Brazil's state of economic development and how it compares with other selected countries; suggest how Brazil might change in the future; suggest relevant geographical questions and an appropriate sequence of investigation; select and use appropriate skills and sources of evidence; suggest plausible conclusions to their investigations and present their findings both graphically and in writing

some pupils will not have made so much progress and will: recognise some of the ways in which Brazil is linked with the UK; begin to describe Brazil's location; begin to recognise and describe how some physical and human processes operating within Brazil can lead to similarities and differences between Brazil's regions; begin to understand how these can change the features of places, including changes in the population of regions, and how these changes affect the lives of people living there; understand how people can both damage and improve the environment; explain their own views and the views other people hold about environmental change; begin to recognise and describe Brazil's state of economic development and how it compares with other selected countries; offer some suggestions as to how Brazil might change in the future; suggest suitable geographical questions and use a range of skills and sources of evidence to help them investigate and communicate their findings both graphically and in writing

some pupils will have progressed further and will: identify ways in which Brazil is linked with the UK; accurately describe its location and geographical context; begin to describe interactions within and between physical and human processes in Brazil and show how these interactions create geographical patterns at a range of scales and help change places, environments and population; begin to recognise how Brazil's links with other countries have affected its historical and economic development; understand that many factors, including people's values and attitudes, have influenced decisions about the use of the rainforest and use this understanding to explain how it has changed and is changing; appreciate how the rainforest environment and the lives of its inhabitants are affected by actions and events in other places; recognise that human actions may have unintended environmental consequences and that conflict may ensue at different scales; appreciate the need for considerations of sustainable development in planning and management of the rainforest for the future; identify geographical questions and establish their own sequence of investigation; select and use, with increasing accuracy, a wide range of skills and begin to critically evaluate sources of evidence; present well-argued summaries and begin to reach substantiated conclusions

Prior learning

It is helpful if pupils have:

- a knowledge of longitude and latitude
- an ability to measure distances
- a knowledge of employment structure – primary, secondary, tertiary
- an ability to use percentages
- an understanding of drawing and interpreting graphs
- a knowledge of ecosystems

Language for learning

Through the activities in this unit pupils will be able to understand, use and spell correctly words relating to:

- population, *eg migration, intramigration, diversity, population pyramids, indigenous population*
- differences between more economically developed countries (MEDCs) and LEDCs, *eg inequalities, economic activities, GNP, indicators (social, economic), viewpoints*
- links between countries, *eg interdependence, debt, transnational companies (TNCs), World Bank, colonial, conflict*
- the environment, *eg sustainable, deforestation, ecosystems, interactions, resources, impact, management, management strategies*
- techniques of analysis, *eg time line, flow map, patterns, processes*

Speaking and listening – through the activities pupils could:

- listen for a specific purpose, note down the main points and consider their relevance

Reading – through the activities pupils could:

- select relevant information and link to other information from a range of sources

Writing – through the activities pupils could:

- organise facts/ideas/information in an appropriate sequence

Resources

Resources include:

- suitable websites, *eg*:
 - www.rainforest-alliance.org/
 - www.undp.org/hdro
 - www.worldbank.org
 - www.ibge.gov.br/
 - www.oneworld.org/sejup
 - <http://edcwww.cr.usgs.gov/earthshots/slow/tableofcontents>
- a class set of atlases
- *Brazil in the school* pack (Keith Orrell and Pat Wilson, 1996) distributed free to schools initially and now available from the Brazilian Chamber of Commerce, price £13, and the website www.brazil.org.uk
- ‘Ten (plus one) go to Brazil’, *Teaching geography*, Vol 24, No 4, October 1999 (Geographical Association)
- supporting video programme: *The geography programme – Brazil 2000* (BBC Schools)

Future learning

This unit gives an introduction to:

- measuring development; this is explored further in unit 16 ‘What is development?’
- an LEDC case study, which can be used as a comparison when studying an MEDC in year 9
- environmental issues and management strategies; these can be explored further in unit 23 ‘Local action, global effects’

This unit provides a basis for GCSE units concerned with population, development and management.

The literacy objectives integrated into this unit provide sound preparation for their further development in year 9.

Links

The activities in this unit link with:

- other geography units – unit 9 ‘Shopping – past, present and future’, unit 16 ‘What is development’, unit 23 ‘Local action, global effects’ and other units involving the study of countries, *eg unit 17 ‘The changing economic geography of France’, unit 20 ‘Comparing countries’*
- mathematics – using and interpreting scales, ratios and proportions (maps), measuring accurately, solving problems, interpreting data (graphs and tables)
- ICT – using word-processing, video presentation and dtp packages; using CD-ROMs and GIS
- citizenship – learning about the global community, desktop publishing, justifying a personal opinion
- history – work on time lines
- art and design and music – investigating cultural links and characteristics

What do we already know about Brazil?

- | | | | |
|--|---|--|--|
| <ul style="list-style-type: none"> • about the existing knowledge and perceptions of the class • how to record and classify information • to identify links between ideas | <ul style="list-style-type: none"> • Ask pupils to brainstorm the word 'Brazil' and collate the results on the board. • Using the results, ask the class to discuss and propose, in groups, how ideas can be linked and grouped (concept mapping). • Ask pupils to produce a concept map and write paragraphs linking three to five ideas. | <ul style="list-style-type: none"> • link and classify information about Brazil correctly | <ul style="list-style-type: none"> • Homework activity: to produce a mental map of Brazil. • Many of these ideas are illustrated in an article in <i>Teaching geography</i> (see 'Resources'). |
|--|---|--|--|

How are our lives in the UK linked to Brazil?

- | | | | |
|--|--|---|--|
| <ul style="list-style-type: none"> • to appreciate that places are linked • to explore the idea of the world as a global community | <ul style="list-style-type: none"> • Ask pupils to investigate how life in the UK is linked to Brazil, <i>eg food, clothes, work, leisure, music</i>. • Help pupils organise a classroom wall display from their findings. This can be added to throughout the unit. | <ul style="list-style-type: none"> • give examples of how the UK and Brazil are linked | <ul style="list-style-type: none"> • The school/department might like to link with a school in Brazil. The Central Bureau (supports curriculum development projects up to £5k) has a website with information and supports the establishment of e-mail and other links (see unit 20 'Comparing countries' for more information on establishing links). • Citizenship: this activity provides the opportunity for pupils to appreciate the world as a global community, and the political, economic, environmental and social implications of this. |
|--|--|---|--|

Where is Brazil located?

- | | | | |
|--|---|--|--|
| <ul style="list-style-type: none"> • to use atlases and globes to give details of a country's location and global context • to communicate in different ways including using ICT • to compile an information booklet by following the route for enquiry | <ul style="list-style-type: none"> • Ask pupils to imagine that there is an important conference on the environment in the Brazilian capital and that a group of British environmentalists will be attending. Their task is to prepare a briefing booklet, which provides the delegates with important factual details of location, in preparation for their visit. Ask pupils to consider the sort of detail it would be essential to include, before embarking on the task. • Make sure pupils have a sound grasp of the geographical skills required to complete the task, <i>eg drawing maps to show location, understanding how to use latitude and longitude, using scale to measure distance between cities in the UK and Brazil and working out time differences</i>. Discuss with pupils what the booklet might look like. Weaker writers may need more structured guidance. | <ul style="list-style-type: none"> • use atlas skills to describe and locate Brazil in a continental and global context | <ul style="list-style-type: none"> • ICT: this activity provides pupils with an opportunity to use a word-processing or desktop-publishing package. • Telephone directories provide information on countries and cities' time zones, based on GMT. • Mathematics: <ul style="list-style-type: none"> – use and interpret maps and scales – measure accurately – solve problems using ratio and proportion |
|--|---|--|--|

Learning objectives

Pupils should learn:

Possible teaching activities**Learning outcomes**

Pupils:

Points to note**What is it like?**

- | | | | |
|---|--|---|--|
| <ul style="list-style-type: none"> • to select and use secondary sources of evidence • to investigate the physical and human features that give rise to the distinctive character of places • to identify and describe physical and human processes, and their impact on places and environments | <ul style="list-style-type: none"> • Assign pupils, in groups, to research a particular aspect of Brazil's geography, <i>eg rivers, industry, population, climate, ecosystems</i>. Provide a variety of stimuli, <i>eg CD-ROM, internet sites, videos, travel brochures, textbooks</i>, to enable them to gather the information. Remind pupils of reading strategies for successful research. • Ask groups to give a presentation of their findings to the class. Provide them with a frame/structure to complete a fact file when listening to the presentations. A neat version of this could be added to their briefing booklet (see above). • After the presentations, lead a class discussion to consider the interactions between the human and physical environment. As environmentalists, ask them to note, in particular, how the environment affects people and how people's activities have intended and unintended impacts on the natural environment. Ask them to make a brief summary of the discussion using a preferred method of note making. | <ul style="list-style-type: none"> • access, select and record relevant information from a variety of sources for the presentations on Brazil • locate and describe key features of Brazil's natural and human environment • demonstrate understanding of interactions between the natural and human environments in a summary diagram | <ul style="list-style-type: none"> • Presentation: remind pupils that there should be a different presenter from last time. • ICT: there are a number of opportunities to enhance the activity with ICT, such as using a video camera or a presentation package to develop a concise but effective multimedia project. |
|---|--|---|--|

Are there differences within the country?

- | | | | |
|--|--|--|--|
| <ul style="list-style-type: none"> • to identify the regional differences within a country and their causes and consequences • to compare two contrasting regions • about the causes and effects of changes in population of regions, including migration | <ul style="list-style-type: none"> • Provide pupils with maps of the five regions of Brazil to show settlement, ecosystems, resources, <i>eg gas, oil</i>, and population density. Ask them to summarise the key points in note form on an outline map which shows the regions. Weaker writers may choose to produce this as a verbal report for radio or television. • Ask pupils to compare two regions and discuss with them what headings they might use. Then direct pupils to follow their own enquiry, choosing appropriate resources from a bank provided for them. A structure/frame/table might be useful to help them gather and sort the information. • Ask them to use their notes to produce a leaflet consisting of a piece of comparative writing, in continuous prose, in which they use appropriate connectives to compare features, <i>eg unlike..., while..., in contrast to....</i> Weaker writers may need more support. • Now focus on how contacts between two regions may lead to changes in population totals, <i>eg national rates of increase/migration</i>. Emphasise inequalities between north-east and south-east Brazil, <i>eg lifestyle, health, wealth</i>. | <ul style="list-style-type: none"> • name and locate the five regions of Brazil, noting their key human and physical features • select and note information to use later in writing • compare and contrast two regions of Brazil • describe, explain and compare in discussion, and in continuous writing, the causes and effects of changes in population of two selected regions | <ul style="list-style-type: none"> • The <i>Brazil in the school</i> pack has various photocopiable base maps (see Resources section). • Language for learning: this activity provides the opportunity for pupils to select relevant information and link to other information from a range of sources, and to organise in writing facts/ideas/information in an appropriate sequence. A minimum length of 300 words is suggested. |
|--|--|--|--|

Learning objectives

Pupils should learn:

Possible teaching activities**Learning outcomes**

Pupils:

Points to note**How developed is Brazil?**

- | | | | |
|---|---|--|--|
| <ul style="list-style-type: none"> • to use an extended geographical vocabulary • to identify differences in development within and between countries • to evaluate the effects of differences in development on the quality of life of different groups of people | <ul style="list-style-type: none"> • Ask groups to brainstorm the concept of 'development'. Discuss with pupils the various ways of identifying development/lack of it, including the advantages and disadvantages of common development indicators, <i>eg gross domestic product (GDP)</i>, alongside others. Help them to appreciate the problems of accurate definition. • Ask pupils to choose some development indicators and, using a ranking exercise, to compare Brazil with the UK and another chosen country. Ask them to present the results as graphs or in tables. A spreadsheet can be used to speed up the ranking process and provide data in a form which can be graphed quickly. • Discuss with pupils the question of wealth distribution and how statistics mask this. Using a range of resources, <i>eg tables, graphs, maps</i>, and photo and textbook images, ask them to describe a typical day in the life of two very different people, <i>eg an indigenous rainforest inhabitant and a bank manager in São Paulo</i>. Ask them to include their own views about such inequalities. | <ul style="list-style-type: none"> • use development indicators to assess Brazil's global position and critically evaluate their use • describe two different lifestyles, showing a sensitive awareness of massive inequalities masked by statistics | <ul style="list-style-type: none"> • Development is also considered in unit 9 'Shopping – past, present and future' and unit 16 'What is development?'. • Inequalities within Brazil can be shown using Lorenz curves or data from the <i>Brazil in the school</i> pack (see 'Resources'). • ICT: this activity provides an opportunity to use CD-ROM to access development statistics and to use a geographic information system (GIS) to map distributions of variations in the quality of life. • Mathematics: interpret data in graphs or tables and draw conclusions. |
|---|---|--|--|

How does Brazil compare with the UK?

- | | | | |
|--|--|---|--|
| <ul style="list-style-type: none"> • to identify similarities and differences between countries | <ul style="list-style-type: none"> • The class could be divided into two halves – one half to investigate similarities and the other differences. They will need access to a range of appropriate resources. • Pair one pupil from each group. Ask them to share their findings and to record these in a summary table. Ask them to conclude whether the similarities outweigh the differences or vice versa, and justify their conclusion in a paragraph. | <ul style="list-style-type: none"> • give appropriate examples of similarities and differences in a table • present conclusions consistent with evidence in a summary paragraph | <ul style="list-style-type: none"> • Homework activity: write up conclusions. |
|--|--|---|--|

Learning objectives

Pupils should learn:

Possible teaching activities**Learning outcomes**

Pupils:

Points to note**How did Brazil get like this? Why did it happen?**

- | | | | |
|--|---|--|---|
| <ul style="list-style-type: none"> • to assess significant events in a country's history • to identify the physical and human features which give rise to the distinctive characteristics of a country • to assess the effects of migration on population characteristics and change, and a country's culture • to determine Brazil's geographical context | <ul style="list-style-type: none"> • Ask pupils how they might best record important events in a country's history, eg <i>time line</i>, using various resources. • Organise pupils to undertake project work, in groups, to illustrate Brazil's distinctive character. Ask some pupils to focus on physical aspects and others on human features, eg <i>physical features – design a tour to visit Brazil's most distinctive landforms, a map for natural resources; human features – a 'living graph' to show the impact of population size, a population pyramid, a flow map for international migration and Brazil's main trade links, a divided bar graph for employment structure</i>. Contributions may be added to a whole-class wall display. • Remind pupils about geographical patterns and processes. Ask them to use the completed display to identify the patterns and processes that may have been responsible for Brazil's distinctive characteristics. Ask them to summarise their findings in a piece of explanatory writing entitled 'Brazil is a melting pot of many different cultures', or 'Brazil's distinctive character owes much to other cultures'. Discuss with them how they might interpret these statements and help them organise their thinking. Preparation in mixed ability groups may be helpful for weaker writers, who may also need to be supported by a writing structure/frame. | <ul style="list-style-type: none"> • record Brazil's important historical events • identify and illustrate elements of the distinctive character of Brazil • explain how human activities have shaped Brazil's distinctiveness, including the impact of international processes | <ul style="list-style-type: none"> • History: transfer of recording technique – time line. • Citizenship: this activity provides an opportunity for pupils to appreciate the world as a global community, and the political, economic, environmental and social implications of this. • Art and design and music: exploring cultural characteristics provides an opportunity to link with these subject departments. |
|--|---|--|---|

How is Brazil changing? How might Brazil change and with what impacts?

- | | | | |
|---|--|--|---|
| <ul style="list-style-type: none"> • to communicate in ways appropriate to task and audience • to identify factors that influence development and change • to predict future changes in a country and to justify their ideas | <ul style="list-style-type: none"> • Ask pupils to brainstorm changes in the UK over the past five years and help them to classify the changes, eg <i>social, economic and environmental changes</i>. • List changes in Brazil and ask pupils to classify them. Through discussion, questioning and input, where necessary, ask pupils to find out about how and why the changes have happened and to summarise them in a diagram. • Ask pupils to produce a newspaper front page, which shows a typical day in Brazil in 2010. Ask them to demonstrate their understanding of the impact of change. Remind them of the need for clarity, accuracy and fluency in newspaper reports and how they might set them out. Include eye-catching graphics/illustrations. | <ul style="list-style-type: none"> • understand and use accurately the terms 'social', 'economic' and 'environmental' to classify changes in Britain • predict what might happen in Brazil in the future and why | <ul style="list-style-type: none"> • ICT: this activity provides pupils with the opportunity to word process and to desktop publish their reports. |
|---|--|--|---|

Learning objectives

Pupils should learn:

Possible teaching activities**Learning outcomes**

Pupils:

Points to note**Who will be making the decisions about Brazil's future?**

- | | | | |
|---|--|--|---|
| <ul style="list-style-type: none"> • to use an extended geographical vocabulary • to identify groups of people/ organisations involved in decision making and to assess their relative influence • to consider issues related to environmental change and its management | <ul style="list-style-type: none"> • Introduce pupils to a current issue in Brazil, <i>eg use of the rainforest or reducing the gap between rich and poor</i>. Ask pupils to suggest who/which groups might be involved in solving problems/making decisions about Brazil's future, <i>eg TNCs, World Bank, environmentalists, government, residents, neighbouring countries, world powers</i>. • Provide pupils, in groups, with a worksheet that presents the viewpoints of different groups. Ask pupils to match views to named groups. Ask pupils, in groups, to focus on a particular issue, to talk about it and make notes about how this particular issue should be managed. They may add their own views/ suggestions. Then ask them to evaluate the relative powers of those involved and predict how the issue might be resolved. | <ul style="list-style-type: none"> • name different groups of people likely to be involved in decision making at a national scale • recognise that different groups will have different views about the same issue and how it might be managed • explain how some groups have more influence than others in the decision-making process | <ul style="list-style-type: none"> • Language for learning: this activity provides pupils with the opportunity to listen for a specific purpose, note the main points and consider their relevance and validity. |
|---|--|--|---|

Will these strategies be sustainable? What do you think?

- | | | | |
|--|--|---|--|
| <ul style="list-style-type: none"> • to clarify and develop their own values and attitudes about issues • to explore the idea of sustainable development and recognise its implications for people, places and environments, and pupils' own lives | <ul style="list-style-type: none"> • Ask pupils to produce a piece of writing in which they present views just discussed, using phrases like 'on the one hand', 'on the other hand', 'however', 'nevertheless', 'in comparison', 'in contrast', 'on balance', etc, and add and justify their own views. As preparation for writing, discuss useful linking phrases with the class. A possible title for the writing might be 'Caring for Brazil's tropical rainforests – which is the best way forward for Brazil and the rest of the world?' Pupils may add and justify their own views. | <ul style="list-style-type: none"> • express the views of others appropriately and add and justify their own opinion | <ul style="list-style-type: none"> • Language for learning: this activity provides pupils with the opportunity to organise facts/ideas/information in an appropriate sequence. • Citizenship: this activity provides pupils with the opportunity to consider the world as a global community, and the political, economic, environmental and social implications of this. Also, to justify orally and in writing a personal opinion about such issues, problems or events. |
|--|--|---|--|