

# Sustainable palm oil

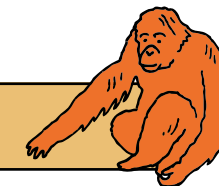
Conservation

Term: Autumn/ Spring/ Summer

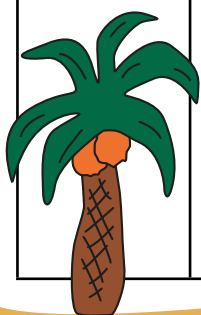
Subject: Geography 1

Use four figure grid references on  
Topic: rainforest maps

Year: 4



	National Curriculum Links	Overview	Assessment / Questions	Resources
LESSON	<p><b>Geography</b></p> <p><b>Locational Knowledge</b></p> <ul style="list-style-type: none"> <li>Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and <b>South America</b>, concentrating on their <b>environmental regions, key physical and human characteristics</b>, countries, and major cities</li> </ul> <p><b>Place knowledge</b></p> <ul style="list-style-type: none"> <li><b>Understand geographical similarities and differences through the study of human and physical geography</b> of a region of the United Kingdom, a region in a European country, and a region within North or <b>South America</b></li> </ul> <p><b>Human and physical geography</b></p> <ul style="list-style-type: none"> <li>Describe and understand key aspects of:</li> <li><b>Physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle</b></li> <li><b>Human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water</b></li> </ul> <p><b>Geographical skills and fieldwork</b></p> <ul style="list-style-type: none"> <li>Use the eight points of a compass, <b>four and six-figure grid references, symbols and key</b> (including the use of</li> </ul>	<p><b>Prior learning</b></p> <p>In year 4 it is hoped children will have: Used maps, atlases, globes and digital/ computer mapping to locate countries and describe features studied. Used fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</p> <p>See cross curricular Year 5 work on the rainforest and sustainable and unsustainable palm oil plantations.</p> <p>Children may have been introduced to an OS map key (Legend) and learned how to recognise some typical map symbols (See resources).</p> <p>Children may have had some practise in working out 4 figure grid references.</p> <p>Children should be familiar with what the geographical terms 'human features' and 'physical features' mean and should be able to give a range of examples for each term, in relation to rainforests (See year 4 Geography 1 lesson).</p> <p>The children may have undertaken a KS2 KWL (Know, Want Learn) impact activity sheet in which they would have discussed or recorded what they already knew about four-figure map references and map legends.</p> <p><b>Introduction</b></p> <p>See PowerPoint: 'Four Figure grid references on Rainforest Maps' to guide the teaching and learning during the lesson.</p> <p>See slide 2. Introduce the learning objective and success criteria for the lesson.</p> <p>See slide 3. Introduce aerial photograph of the Amazon rainforest (in South America) and ask the children:</p> <p><i>'Does anyone think they know where this rainforest is located in the world?'</i></p> <p>Class teacher could use 'Google Maps' or 'Google Earth' to show the children where it is. Ask the children:</p>	<ul style="list-style-type: none"> <li>Does anyone think they know where this rainforest is located in the world?</li> <li>What is the climate like in the rainforest?</li> <li>Which features do you think may be physical geographical features?</li> <li>Which features do you think may be human geographical features?</li> <li>Which features can you see in the legend on the map?</li> <li>Can you match features on the map to the same features on the aerial photograph?</li> <li>What is the location of the non-coniferous trees?</li> <li>What is the location of the river?</li> <li>Which physical features can you locate?</li> <li>Which human features can you locate?</li> <li>What four-figure grid reference have you recorded for a physical or human geographical feature?</li> </ul>	<p><b>Prior learning resources:</b></p> <ul style="list-style-type: none"> <li>KS2 KWL (Know, Want Learn) impact activity sheet.</li> <li>'Ordnance Survey' provides educational resources for schools. These include access to OS maps and downloadable activities and worksheets to develop children's geographical skills: <a href="http://www.ordnancesurvey.co.uk">www.ordnancesurvey.co.uk</a></li> </ul> <p><b>Lesson resources:</b></p> <ul style="list-style-type: none"> <li>'Google Maps' or 'Google Earth'</li> <li>Chester Zoo's video 'What is the climate like in the rainforest?': <a href="http://www.chesterzoo.org/schools/resources/what-is-the-climate-like-in-the-rainforest">www.chesterzoo.org/schools/resources/what-is-the-climate-like-in-the-rainforest</a></li> <li>Teacher's may wish to see more information on legend and symbols on this resource: <a href="http://www.ordnancesurvey.co.uk/documents/resources/25k-raster-legend.pdf">www.ordnancesurvey.co.uk/documents/resources/25k-raster-legend.pdf</a></li> <li>PowerPoint: 'Four Figure grid references on Rainforest Maps'</li> <li>Steve Backshall and Ordnance Survey YouTube Tutorial: 'How to write a four-figure grid reference': <a href="https://www.youtube.com/watch?v=c0du8v4EE_Y">https://www.youtube.com/watch?v=c0du8v4EE_Y</a></li> <li>Worksheet: 'Using 4 figure grid references to locate human and physical geographical features of the rainforest'</li> </ul>



LEARN AT **CHESTERZOO**  
[chesterzoo.org/learning](http://chesterzoo.org/learning)

Supported by  
**FERRERO**



Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world

**Learning Objective(s)**

- To use figure grid references to locate human and physical geographical features of the rainforest
- Use of legends

**Success Criteria**

I can:

- Use a key /legend to find out what map symbols represent
  - Recognise a range of map symbols
  - Match features on a map to the same features on an aerial photograph
  - Use four- figure grid references to identify geographical features on a map
- Geographical skills and fieldwork
- Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world

**Learning Objective(s)**

- To use figure grid references to locate human and physical geographical features of the rainforest
- Use of legends

**Success Criteria**

I can:

- Use a key /legend to find out what map symbols represent
- Recognise a range of map symbols
- Match features on a map to the same features on an aerial photograph
- Use four- figure grid references to identify geographical features on a map

*'What is the climate like in the rainforest?'*

Class teacher to share this webpage which includes a short video from Chester Zoo talking about the African and Madagascan rainforests which are typical of the world's rainforests:

[www.chesterzoo.org/schools/resources/what-is-the-climate-like-in-the-rainforest/](http://www.chesterzoo.org/schools/resources/what-is-the-climate-like-in-the-rainforest/)

See slide 4. Recap over the terms 'physical geographical features' and 'human geographical features'. Show the children a slide showing an image with these features.

If the slide is clicked the following question is asked:

*'Which features do you think may be physical geographical features?'*

Review and discuss the children's suggestions for which features are 'physical features' on the image. It should be made clear that physical features are the natural features (such as the forest, mountain, vegetation, rivers, seas etc.). Physical features can also refer to the climate and its effects. (This explanation of physical geographical features and actual physical features are highlighted when the slide is clicked on again).

When the slide is clicked again, the children are asked the last question:

*'Which features do you think may be human geographical features?'*

Review and discuss the children's suggestions for which features are 'human features' shown on the image. The children should learn that the human features include those created by humans or those caused by human interaction with nature e.g. buildings and farmland planted as a result of deforestation e.g. unsustainable oil palm plantations. Discuss how rainforest coverage has been changing drastically in recent years due to the increase of palm oil farming. (This explanation of human geographical features is revealed on the slide, when clicked again).

See slide 5. Recap / introduce how to use a legend, the symbols and what they mean (previously taught in the year 4 Geography lesson 1).

Ask the question:

*'Which features can you see in the legend on the map?'*

LEARN AT **CHESTERZOO**  
[chesterzoo.org/learning](http://chesterzoo.org/learning)

Supported by  
**FERRERO**



Ask the children:

*'Can you match features on the map to the same features on the aerial photograph?'*

Take feedback from the children and discuss.

See slide 6. **Activity 1**

Show the children an image of the aerial view of the rainforest next to the map of the same image. (Children could be given print outs of this slide to make it easier to compare and match features within the two images).

Ask the children:

*'Can you match features on the map to the same features on the aerial photograph?'*

Take feedback from the children and discuss the different symbols and drawings they may recognise.

Children could work individually, in pairs or groups.

See slide 7& 8. These slides explain to children how to write a four-figure grid reference, it also summaries the process in four stages.

The image on the slide is hyperlinked to the YouTube tutorial with Steve Backshall and Ordnance Survey on 'How to write a four-figure grid reference':

[https://www.youtube.com/watch?v=c0du8v4EE\\_Y](https://www.youtube.com/watch?v=c0du8v4EE_Y)

See teaching notes on each slide for more details.

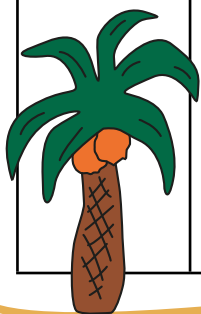
**Teaching point:**

Ordnance Survey (OS) is the national mapping agency for Great Britain, making detailed maps of places in Great Britain.

Each map has a specific letter and number reference to tell you which part of Great Britain you are in; the example in the video is SU 24 10

OS maps give a clear depiction of the physical landscape, detailing a range of geographical features, landmarks, field boundaries, valley contours, summit heights, rivers, roads, railways, villages and towns.

OS maps typically feature grids with numbers, which run from left to right (x-axis), west to east and are called 'eastings' (along the corridor). They also feature numbers



up the grids, which run south to north (y-axis) and are called 'northings' (up the stairs).

To mark a specific point on a map a quirky way to remember it is the saying 'Along the corridor and up the stairs'

See slide 9. **(Main) Activity 2**

Show the children sketch map of a rainforest, ask the questions:

*'Which physical features can you locate?'*

*'Which human features can you locate?'*

Hopefully, from work covered in previous sessions on the rainforest/ oil palm plantations and map legends, the children will be able to identify:

- the physical features: river, rainforest, climate and vegetation.
- the human features: farmland, building, road, deforested land, logs

Ask the children to (individually or in pairs) to record the four-figure grid reference next to the symbol on the legend on the 'Four-Figure Grid References on Rainforests worksheet'.

The children will feedback what grid references they identified for the different physical and human features.

See slide 10. Ask children:

*'What four-figure grid reference have you recorded for a physical or human geographical feature?'*

Take children's answers and give feedback. Possible answers for each geographical feature are listed in the PowerPoint notes.

**Plenary**

See slide 11. Review the learning objective. Ask the children to check their work against the success criteria with another individual or pair of children. Review as a class.