



<b>SUBJECT and GRADE</b>	<b>SOCIAL SCIENCES – GRADE 9 GEOGRAPHY</b>		
<b>TERM 4</b>	Week 4– Lesson 4		
<b>LINK TO TEACHING AND ASSESSMENT</b>	<b>TOPIC: Surface forces that shape the earth</b> (Physical Geography) <b>Content and concepts:</b> Features of erosion and deposition along a river course		
<b>AIMS OF LESSON</b>	<p><b>You must know:</b></p> <ul style="list-style-type: none"> <li>the definition of the concepts erosion and deposition.</li> <li>what is a river course?</li> <li>the elements of a river course.</li> <li>the features of river erosion and river deposition and how it happens.</li> </ul>		
<b>INTRODUCTION</b>	<i>You should know from previous grades*/current grade**/previous lessons***:</i>		
<b>SKILLS</b>	<p><b>You must be able to:</b></p> <ul style="list-style-type: none"> <li>Distinguish between erosion and deposition.</li> <li>identify and recognize the different types of erosion and deposition processes from sources.</li> <li>distinguish between different types of erosion and deposition processes from sources.</li> <li>describe and explain the different types of erosion and deposition processes from sources.</li> <li>read and interpret sources to answer data response questions.</li> <li>write a paragraph and explain any one of the erosion and deposition processes.</li> </ul>		
<b>RESOURCES (if necessary)</b>	<b>Paper based resources</b>		<b>Digital resources</b>
	<ul style="list-style-type: none"> <li>Lesson on page 2</li> <li>Activity on pages 3</li> <li>Textbook*: Surface forces that shape the earth (features of erosion and deposition along a river course)</li> </ul>	<ul style="list-style-type: none"> <li>Video: The long river profile <a href="https://www.youtube.com/watch?v=8JM71mcw_LI">https://www.youtube.com/watch?v=8JM71mcw_LI</a></li> <li>Video: What types of landforms are made by rivers <a href="https://www.youtube.com/watch?v=XJ_FNS8Z_ek">https://www.youtube.com/watch?v=XJ_FNS8Z_ek</a></li> <li>Video: How a waterfall is formed <a href="https://www.youtube.com/watch?v=ilJzge07mcs">https://www.youtube.com/watch?v=ilJzge07mcs</a></li> <li><a href="https://www.thelearningtrust.org/asp-treasure-box">https://www.thelearningtrust.org/asp-treasure-box</a></li> </ul>	
<b>ACTIVITIES/ ASSESSMENT</b>	<p><b>Complete the:</b></p> <ul style="list-style-type: none"> <li>activity to this lesson on pages 3</li> <li>additional activities in your textbook</li> </ul>	<b>CONSOLIDATION</b>	<i>Answers and Feedback on learner task</i>

## Features of erosion and deposition along a river course

<b>The river course</b>	<ul style="list-style-type: none"> <li>• A river flow from the source to the mouth (usually from the mountain to the sea)</li> <li>• The river moves rocks and other material down stream.</li> <li>• This material erodes the river channel and lower the landscape</li> <li>• The river load is eventually deposited when the flow is slow, and the gradient is gentle.</li> <li>• Both the erosion and deposition processes will form new landforms.</li> </ul>		
<b>Top view of the river with contours</b>  <b>A = source</b>  <b>B = mouth</b>			
<b>Longitudinal profile (side view)</b>	<b>Upper course</b>	<b>Middle course</b>	<b>Lower course</b>
<b>Cross section (shows the shape of the river channel)</b>			
<b>Illustration of each course</b>			
<b>Valley shape</b>	Deep, narrow "V" shape	Wider, "U" shape	Broad and flat
<b>Gradient</b>	Very steep -steep	Gentler, less steep	Gentle, flat
<b>River flow</b>	Turbulent and fast	Less turbulent, laminar in places	Laminar and slow
<b>Work done by river</b>	Vertical erosion (downwards)	Lateral erosion is dominant over vertical erosion	Very little erosion, more deposition
<b>Landforms formed</b>	Steep sided valleys Potholes Rapids Waterfalls	Wider valleys Meanders	Very wide valley (floodplain) Wide meanders Oxbow lakes Levees (built up river banks) Deltas

Compiled by Andre Jacobs

## Learner assessment task: Features of erosion and deposition along a river course

USE THE INFORMATION ON PAGE 3 AND YOUR TEXTBOOK TO COMPLETE THE FOLLOWING TASK IN YOUR WORKBOOK.

1. Name the three sections of a river
2. Describe the erosive activity that takes place in the
  - 2.1 Upper course of a river
  - 2.2 Middle course of a river
  - 2.3 Lower course of the river
3. In a paragraph of six lines explain the relation between the valley shape, gradient, river flow and work of water of the lower course of the river
4. Match the following features with the specific river course in which it would appear:
  - 4.1 Pothole
  - 4.2 Ox-bow lake
  - 4.3 Rapids
  - 4.4 Waterfall
  - 4.5 Floodplain
5. Use your textbook or any other resource and draw a labelled diagram to explain how a waterfall is formed.
6. Draw a diagram to show the shape of the river valley in both the upper and lower course.
7. Use your textbook or other resources and study the shape and elements of river bends (meanders). Draw a labelled diagram of a cross-section of a river showing the following features: *Slow water flow, fast water flow, erosion, deposition, outer bend, inner bend, slip slope, under cut slope, river cliff*
8. Self study : Use different resources and write short notes (three bullets) on the following landforms
  - Steep sided valleys
  - Potholes
  - Rapids
  - Meanders
  - Floodplain
  - Oxbow lakes
  - Levees
  - Deltas