**Topo Map Review 2014**

Great Video References:

* <http://www.youtube.com/user/esteacher3/videos>

Pictures of Landforms:

* <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/lake_Pater_Noster.htm>
* <http://www4.uwsp.edu/geo/faculty/lemke/alpine_glacial_glossary/landforms/paternosterlakes.html>

Definitions:

* <http://geology.com/dictionary/glossary-p.shtml>

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1. Calculating Map Bearings
2. <http://www.youtube.com/watch?v=ed6ZVA5IKtg>
3. Describes how to calculate map bearings on a topographic map using a compass.
4. Content Guide Expectations:
5. Calculate Bearing
6. Converting RF to Verbal
7. <http://www.oakton.edu/user/4/billtong/eas100lab/mapscale.htm>
8. Describes how to convert from RF to verbal scale
9. Content Guide Expectations:
10. Identify fractional scale/representative fraction (RF) and convert into verbal scale
11. Calculating Map Distances Using Scale
12. <http://www.youtube.com/watch?v=vSRXwaIfSRU>
13. Explains how to measure the distance of a path using the edge of a piece of paper and the map scale.
14. Content Guide Expectations:
	1. Calculate distances using scale
15. How to read a topographic map
16. <http://www.youtube.com/watch?v=owwqUYx_o3k>
17. Explains the significance of contour lines.
18. Explains how to determine whether a slope is steep.
19. Shows the significance of a contour interval and where to find it on a map.
20. Content Guide Expectations:
	1. Identify elevations
	2. Identify contour interval
21. Calculating relief:
22. <http://www.youtube.com/watch?v=k5MXFK17mSg>
23. Drawing a relief diagram from a topographic map.
24. Content Guide Expectations:
	1. Calculate relief
25. <http://answers.yahoo.com/question/index?qid=20071215211208AAUvgkN>
26. Explains how to calculate the relief of the variation of a map.
27. Content Guide Expectations:
28. Calculate relief
29. Calculating Gradient:
30. <http://www.youtube.com/watch?v=3QFJ_uv2mGw>, http://imnh.isu.edu/digitalatlas/geog/basics/topo.htm
31. How to calculate gradient using contour lines on a topo map and the edge of a piece of paper.
32. Content Guide Expectations:
	1. Calculate gradient (land)
33. <http://wiki.answers.com/Q/How_do_you_calculate_the_gradient_of_groundwater#slide4>
34. How to calculate the water table gradient. Uses step-by-step slides to explain.
35. Content Guide Expectations:
36. Calculate gradient (water table)
37. <http://en.wikipedia.org/wiki/Stream_gradient>
38. How to calculate the gradient of a river/stream
39. Content Guide Expectations:
40. Calculate gradient (river/stream)
41. Locate/Describe Location:
42. <http://www.youtube.com/watch?v=EPL_e7iQ_Vo>
43. Explains the concept of latitude and longitude.
44. Locate and describe location using latitude and longitude.
45. Content Guide Expectations:
46. Latitude and Longitude
47. [http://en.wikipedia.org/wiki/Section\_(United\_States\_land\_surveying](http://en.wikipedia.org/wiki/Section_%28United_States_land_surveying))
48. Explains the shorthand for PLS- what numbers and letters stand for.
49. Content Guide Expectations:
	1. Public Land Survey (PLS), up to the nearest ¼ section
50. Drawing Contour Lines
51. <http://www.youtube.com/watch?v=5HaJkhjMtjM>
52. Explains how to draw contour lines from given elevations on a topographic map.
53. Content Guide Expectations:
54. Draw contour lines from given elevations
55. Construct and Interpret a Topographic Profile
56. <http://www.youtube.com/watch?v=XslsiE2buIo>
57. Explains how to create a topographic profile using a topographic map.
58. Content Guide Expectations:
59. Construct a Topographic Profile
60. <http://www.youtube.com/watch?v=L1AWNR-Y0pQ>
61. Explains how to interpret topographic maps and profiles using 3D models.
62. Content Guide Expectations:
63. Interpret a Topographic Profile
64. Recognizing Features
65. Coasts
66. <http://geology.campus.ad.csulb.edu/people/bperry/geology303/geol303tchapter3.html>
67. barrier island information and pictures
68. [http://oceanica.cofc.edu/an%20educator'sl%20guide%20to%20folly%20beach/guide/process2.htm](http://oceanica.cofc.edu/an%20educator%27sl%20guide%20to%20folly%20beach/guide/process2.htm)
69. longshore drift direction
70. <http://en.wikipedia.org/wiki/Emergent_coastline>
71. Emergent Coastline
72. <http://en.wikipedia.org/wiki/Submergent_coastline>
73. Submergent Coastline
74. Rivers/Streams
75. <http://www.youtube.com/watch?v=STgbHFvUMlE>
76. meandering
77. <http://www.youtube.com/watch?v=co7Q7hl9ibk>
78. braided rivers
79. <http://www.youtube.com/watch?v=_XOb07MDjAs>
80. river deltas
81. <http://www.youtube.com/watch?v=8v6yuQeAbEM>
82. drainage patterns
83. <http://www.youtube.com/watch?v=STgbHFvUMlE>
84. oxbow lake
85. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/Floodplain.htm>
86. flood plain
87. Need to find Resources on
88. Past coastline/shorelines
89. Man-made structures
90. Glaciers
91. Arête
92. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/Arete.htm>
93. Definition: in geology, a sharp-crested serrate ridge separating the heads of opposing valleys (cirques) that formerly were occupied by Alpine glaciers. It has steep sides formed by the collapse of unsupported rock, undercut by continual freezing and thawing
94. Cirque
95. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/Cirque.htm>
96. Definition: A bowl-shaped depression with very steep sides that forms at the head of a mountain glacier. Forms from cold-climate weathering processes including frost wedging and plucking.
97. Crevasses
98. <http://en.wikipedia.org/wiki/Crevasse>
99. Definition: fissure or crack in a [glacier](http://www.britannica.com/EBchecked/topic/234619/glacier) resulting from stress produced by movement.
100. Esker
101. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/Esker.htm>
102. Definition: A long winding ridge of sorted sands and gravel. Thought to be formed from sediment deposited by a stream flowing within or beneath a glacier.
103. Hanging valley
104. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/Hanging%20Valley.htm>
105. Definition: a tributary valley entering a main valley at a much higher level because of overdeepening of the main valley, esp by glacial erosion
106. Horn
107. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/Horn.htm>
108. <http://www.csus.edu/indiv/s/slaymaker/archives/geol10l/horns2.jpg>
109. Definition: sharp peak formed where the ridges separating three or more cirques intersect
110. Lakes
111. Kettle
112. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/Kettle.htm>
113. Definition: A depression formed in glacial deposits when a buried block of ice, left behind by a retreating glacier, melts.
114. Paternoster
115. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/lake_Pater_Noster.htm>
116. <http://www4.uwsp.edu/geo/faculty/lemke/alpine_glacial_glossary/landforms/paternosterlakes.html>
117. Scoured lake
118. <http://www.eoearth.org/view/article/155066/>
119. Great Lakes are an example
120. Tarn
121. <http://www4.uwsp.edu/geo/faculty/lemke/alpine_glacial_glossary/landforms/tarn.html>
122. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/lake_Tarn.htm>
123. Moraine
124. Medial
125. <http://www4.uwsp.edu/geo/faculty/lemke/alpine_glacial_glossary/landforms/medial.html>
126. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/Medial%20Moraine.htm>
127. Lateral
128. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/Lateral%20Moraine.htm>
129. <http://www4.uwsp.edu/geo/faculty/lemke/alpine_glacial_glossary/landforms/lateralmoraine.html>
130. Terminal
131. <http://www4.uwsp.edu/geo/faculty/lemke/alpine_glacial_glossary/landforms/endmoraine.html>
132. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/Terminal%20Moraine.htm>
133. Terminus
134. End of a glacier at any given point in time
135. U-shaped and V-shaped valleys
136. U-shaped valleys
137. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/Terminal%20Moraine.htm>
138. <http://www4.uwsp.edu/geo/faculty/lemke/alpine_glacial_glossary/landforms/u_valley.html>
139. V-shaped valleys
140. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/V%20Shaped%20Valley.htm>
141. Recognize/interpret maps showing Michigan w/glacial till and outwash
142. Definition: Glacial till is the sediment deposited directly from the glacier- unsorted. Glacial outwash is deposited from melted water from the glacier.
143. <http://www.ncrs.fs.fed.us/gla/reports/physical.htm>
144. Groundwater
145. Water table
146. <http://ga.water.usgs.gov/edu/earthgw.html>
147. <http://pubs.usgs.gov/gip/gw_ruralhomeowner/>
148. Aquifers
149. <http://ga.water.usgs.gov/edu/earthgwaquifer.html>
150. Sinkholes
151. <http://home.moravian.edu/users/phys/mejjg01/geology/geology%20pages/geo_map_folder/geo_map_pages/lake_Sinkhole.htm>
152. Volcanoes
153. Shield
154. <http://jonjosvolcanoes.weebly.com/shield-volcanoes.html>
155. Large with a gentle slope
156. Usually located in hotspot areas
157. Startovolcano/composite
158. <http://www.crystalinks.com/stratovolcano.html>
159. mountain-sized
160. alternating layers of felsic or andesitic lava and tephra
161. Cinder cone
162. <http://science-at-home.org/more-about-volcanoes/>
163. small, steep sided
164. explosive
165. Lava dome
166. <http://en.wikipedia.org/wiki/Lava_dome>