**Middle School STEM Science Lab/Activity Planner**

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| Name of Lab/Activity: Biome Brochure | Grade: 6 |
| California Science Standard(s): * 5.d Students know different of organism may play similar ecological roles in similar biomes.
* 5.e Students know the number and types of organisms an ecosystem can support depends on the resources available and o abiotic factors, such as quantities of light and water, a range of temperatures, and soil composition.
* 7.d Communicate the steps and results from an investigation in written reports and oral presentations.
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| Learning Objective/Goal:* Students will be able to identify characteristics of an ecosystem
* Students will be able to describe how organisms including producers, consumers, and decomposers live together in and environment and use existing resources
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| Language Objective/Goal: (based on California Common Core Standards)6.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content |
| Materials & Resources:* Internet access
* Microsoft Publisher or other
* Student handout
* Student notebook
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| Procedure:* Research the assigned biome and learn as much as you can about:
* The critical characteristics that make that biome unique.
* Names and description of 1-3 animals & plants who live in that biome.
* Adaptations, physical or behavioral that help that animal survive in its habitat.
* Collect images or photos that will help you with teaching about this biome and its habitat.
* Create a book or brochure that will support your learning about the biome.
 | Teaching Notes: (include timing)**3 class periods**  |
| Math Connection:Students will be constructing charts and tables to find temperature and precipitation of different biomes, and convert the temperature in metric system. | Teaching Notes:: |
| Technology Extension of Learning: Web-based activity using individual computers/laptops with internet accessLink: <http://www.mbgnet.net><http://www.blueplanetbiomes.org/><http://www.ucmp.berkeley.edu/exhibits/biomes/index.php> | Teaching Notes:Check ahead of time that the laptops are available and working. |
| Formative Assessment: (please attach a copy)See attachment below. | Teaching Notes Project images. Use white boards or class response system |
| Strategies for EL and Special Needs Students:Provide written instructions, model and think aloud,  | Vocabulary:Biome, habitat, niche |
| Alignment in science unit: (Brief description of lessons taught **prior to & after** this lab/activity)**Unit:** Ecosystem, abiotic and biotic adaptations, limiting factors. Weather and climate |
| Brief description of lessons taught **after** this lab/activity:Students will be extending their knowledge by learning more about ecology in different places. |
| Lab/Activity adapted from: (website, textbook, etc.)*http://www.nationalgeographic.com/xpeditions/lessons/01/g68/dogstails.html http://erg.usgs.gov/isb/pubs/teachers-packets/mapshow/activity4.html http://www.windows.ucar.edu/tour/link=/teacher\_resources/teach\_taterland.htm* | Formative Assessment adapted from: |
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| This lesson was developed by: |
| Teacher’s Name | Currently Teaching at: (School & District) |
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