

INSPIRE GK12 Lesson Plan



Lesson Title	Introduction to Biomes
Length of Lesson	One (50 minute) class period
Created By	Rob Thornton, Will McBryde
Subject	General Science
Grade Level	8 th grade
State Standards	8 th : 1b, d (Inquiry); 3a, e (Life Science)
DOK Level	DOK 3
DOK Application	Identify, Name, Classify, Compare
National Standards	5-8: A (Inquiry); C (Life Science)
Graduate Research Element	Having knowledge of meteorology and climatology helps one to understand the various biomes and their environments.

Student Learning Goal:

MS 8th Grade:

1(b) Distinguish between qualitative and quantitative observations make inferences based on observations. (d) Analyze evidence that is used to form explanations and draw conclusions. 3(a) Analyze how adaptations to a particular environment can increase an organism's survival and reproduction and relate organisms and their ecological niches to evolutionary change and extinction. (e) Explain energy flow in a specified ecosystem.

National Science Education Standards of Content 5-8:

A: Inquiry: Abilities necessary to do scientific inquiry, Understandings about scientific inquiry.

C: Life Science: Structure in Functions in Living Systems.

Materials Needed (supplies, hand-outs, resources):

PowerPoint file (see INSPIRE_Thornton_04.01.11_PP) Thornton, note taking sheet (see INSPIRE_Thornton_04.01.11_Biogeography_Notes), laptop and projector

Lesson Performance Task/Assessment:

The PowerPoint will introduce students to the various biomes of the world. The instructor can assess students' knowledge by questioning about specifics of the various biomes. The students can be called on to guess which biomes are being shown on the screen. This can assess any prior knowledge of biomes students may have.

Lesson Relevance to Performance Task and Students:

This lesson will give students a good introduction to biomes. This will help them understand the world's climate and vegetation areas. The instructor can also point out in which biome their school is located.

Anticipatory Set/Capture Interest:



The lesson itself will serve as an anticipatory set due to the images of biomes and the fact that students will be asked to guess which biome is being shown on the screen. This should create interest as the lesson builds.

Guided Practice:

The instructor will lead the class through the PowerPoint lesson and ask them questions along the way.

Independent Practice:

Students will answer questions asked by the instructor and will participate in the biome guessing game.

Remediation and/or Enrichment:

Remediation- Individual IEP; Make PowerPoint available to resource teacher;
Enrichment – Have students select their favorite biome and do a report on it.

Check(s) for Understanding:

Observe students during lecture. Ask students questions regarding the lecture.

Closure:

Question 1: What is a biome?

Question 2: Where are the coldest biomes found?

Possible Alternate Subject Integrations:

Biology, Ecology, Weather, Climate

Teacher Notes:

At the end of the lecture is a link for BrainPOP. www.brainpop.com

If time permits, the instructor can show the video on “Ecosystems.” The videos are found under the “Science” category on the BrainPOP website. See the “BrainPOP” slide on INSPIRE_Thornton_04.01.11_PP for BrainPOP link)

BrainPOP is a resource which provides concise videos and quizzes on a variety of science topics. The quizzes can be taken as a group.

A website for reference:

http://www.teachersdomain.org/asset/ess05_int_biomemap/