

Biomes

5E Lesson

The 5E model is a scientifically proven method to improve student engagement and learning in your classroom



- ✓ Engagement
- ✓ Exploration
- ✓ Explanation
- ✓ Elaborate
- ✓ Evaluate

Complete Teacher Instructions



Biomes 5E Lesson

Grades 6-9	Biomes	Ongoing Lesson
Lesson Objective: Students will learn about the following biomes: - Aquatic - Freshwater - Marine - Grassland - Savanna - Temperate Grasslands - Forest - Tropical Rainforest - Temperate Rainforest - Desert - Hot Desert - Cold Desert - Tundra - Arctic - Alpine • The animals and plants that live there and have adapted to survive		
Possible Student Misconceptions: - Biomes and ecosystems are the same thing - Deserts are always hot		
Materials: 1 device (smartphone, Chromebook, laptop, tablet, or computer) per 3 students - A means of projecting a PowerPoint presentation - Internet access - General classroom objects		
Teacher Notes: - The presentation as well as the student notes are in Google and Office formats and can easily be used in class or online - All videos can be accessed directly from the presentation. To retrieve them while in slideshow mode and it will automatically open for you. If it does not, right-click on the image and click Edit Hyperlink or something similar - I've created a video walkthrough if needed. It can be accessed here - https://youtu.be/oCIKIP9SaDQ - I don't believe in long lessons. If you feel your students are losing their focus, stop the presentation and give them a 5-minute break. If you'd like to show a video, I recommend my video collection here - http://www.teachwithfergy.com/science are tons of brain-break videos to choose from all grouped by category.		

Biomes – 5E Lesson

Engagement Phase Your students will read and answer the questions for Biomes – Digital Reading Article Teacher Notes: - The reading is at a grade 5-7 reading level but can also be applied to students in grade 8 and 9 - The reading is a good way to introduce biomes to your students	Duration: 50 minutes Teacher Role – Facilitate learning and guide student understanding Goals ☐ Connect student's experiences ☐ Create interest ☐ Ask questions ☐ Understand the objectives of the lesson
Exploration Phase Exploration – Lab Station Activity - In groups of 2-3, have your students complete <u>Exploration – Lab Station Activity</u>. Once they're done, they will submit their passport to you. Teacher Notes: - The complete instructions for my Lab Station activity can be found in the <u>START HERE – Instructions</u> file.	Duration: 1 hour Teacher Role – Facilitate learning and guide student understanding Goals ☐ Students receive real experience with the topic ☐ Students use and develop creative thinking skills
Explanation Phase Lesson - This lesson comes in Office and Google versions - There are multiple embedded videos and plenty of opportunities to engage, interact and check for your students' understanding throughout the lesson Teacher Notes: - All videos can be accessed directly from the presentation. To retrieve them, click on the video icon while in slideshow mode and it will automatically open for you. If they don't, right-click on the image and select Edit Hyperlink or something similar - I've created a video walkthrough if needed. It can be accessed here - https://youtu.be/oCIKIP9SaDQ - I have also enclosed a .PDF version of both the teacher and student versions.	Elaborate Phase Elaborate – Scavenger Hunt Your students will complete – <u>Elaborate – Scavenger Hunt</u> . This activity will require your students to move beyond what was covered directly in the lesson and allow them to further develop their understanding. Teacher Notes: - Students will work individually or in small groups - Students will need one device per group
	Duration: 1 hour Teacher Role – Facilitate learning and keep students focused Goal ☐ Students use their newly obtained knowledge to propose solutions and extend their learning to new situations
	Evaluate Phase Quiz Have your students complete – <u>Evaluate – Biomes Quiz</u> Teacher Notes: - It's sometimes best to have the students peer evaluate - Placing students in small groups and having them exchange papers to mark will accomplish two things - Provide immediate feedback on the questions they just completed - Significantly reduce your marking time - Peer evaluation is not needed, only suggested when appropriate
	Duration: 30 min Teacher Role – Distribute and collect evaluation Goal ☐ Students are given the opportunity to demonstrate their understanding and evaluate their own progress

Each phase is clearly described

Complete Biome Lesson



Forests

- Forests contain many trees and cover about one-third of the Earth
- _____



Forests

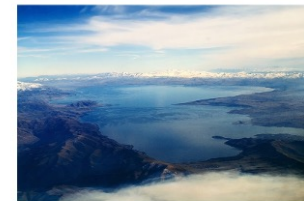
- Forests contain many trees and cover about one-third of the Earth
- Most of the land biodiversity on Earth (birds, mammals, and insects) is found within its Forests



Student and Teacher versions of the presentations

Aquatic Biomes

- Aquatic biomes include both freshwater and marine biomes
- Freshwater biomes have very little salt and include lakes, rivers, and ponds



Videos embedded directly into the slides. One-click access

Interactive and Engaging Activities



Device-Based Scavenger Hunt Biomes



Includes

- 5 Unique Locations
- Online form
- Answer Key

Works on all smartphones, tablets, Chromebooks

- 100% Digital
- Simulations
- Quizzes
- Videos
- Games
- Word Scramble
- and more



Biomes Lab Station Activities



Station 2

Research – Using your search research a biome located in the you live in. What is the name of the biome? What is one animal and species that is specially adapted to that area? What are the climate conditions?

Applicability following answer found in Reading

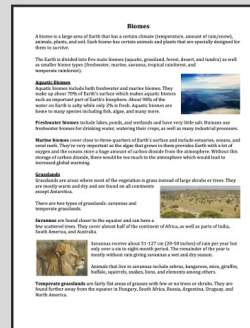


7 Lab Station Activities to get your kids out of their seats and engaged in their learning.

Biomes



Science Reading Comprehension Article Grade 5 - 7



Improve your students' Scientific Literacy and Analysis Skills, use an an Emergency Substitute Plan or create Applicability in your classroom.

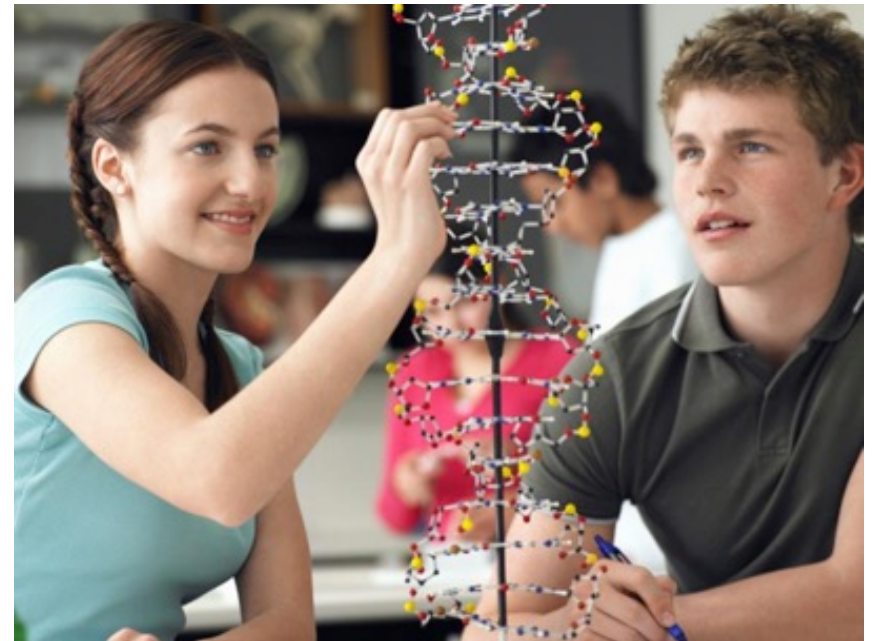
Get away from tired practices and unengaged students



TWF

Provide a Scientifically-Proven means of instruction

TWF



Incorporate Technology and Increase Collaboration



TWF

