**LEWISBURG AREA SCHOOL DISTRICT**

**LESSON PLAN**

**Teacher Name: \_\_\_\_\_Van Wagner\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_AP Enviro**

**Topic: \_\_\_Land Use changes Date of Lesson: \_\_Class #37**

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| **LESSON ESSENTIAL QUESTION**: | How do we balance human needs and wants with limited natural resources available? |
| **STANDARD / LEARNING TARGET:** | Objective: Students will investigate land cover changes in the Bull Run Creek Watershed and apply that to the concept of the heat island effect.. |
| **ACTIVATING STRATEGIES**:  (Anticipatory Set) | Bell Ringer: Historically, before the 1700’s, what covered most of the land around what we now call Lewisburg?  Answer: Forest / trees.  Some Native American farmland but the majority of our area was forested. |
| **KEY VOCABULARY**: | Sprawl, urban, rural |
| **RESOURCES:** | Teacher slide show, demonstration, and lecture. |
| **TEACHING STRATEGIES**: | Notes:  **Critical Zone:** the thin veneer at Earth’s surface where the atmosphere, lithosphere, hydrosphere and biosphere interact.  **heat island effect:** when a metropolitan area is significantly warmer than its surrounding rural areas.  In this lab you will investigate land cover changes in the Bull Run Creek Watershed.  Lab: Students complete Land Cover Lab.  \*\*\*Use digital infrared thermometers to get surface temp readings outside. |
| **EXTENDED THINKING ACTIVITY / ASSIGNMENT:** | Complete Chapter 9 questions |
| **SUMMARIZATION/ CLOSURE:** | Wrap- up / class discussion especially focus on Questions 6, 7, and 8 in the lab.  Exit Bell ringer: What land surface had the highest heat island effect from today’s lab? |