**LEWISBURG AREA SCHOOL DISTRICT**

**LESSON PLAN**

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

**Topic: \_\_\_Chapter 19 Particulates Date of Lesson: \_\_Class #41**

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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: What gases make up Earth’s atmosphere?  Answer: 78% N, 21% O, 1% other |
| **KEY VOCABULARY**: | Atmosphere, troposphere, stratosphere, ozone, radiation, |
| **RESOURCES:** | Teacher slide show, demonstration, and lecture. |
| **TEACHING STRATEGIES**: | APES  Air Quality Chapter 19  Share bio bottle updates / collected reports  Assign chapter 19 questions.  Slide show / notes (slides 1-20)  Donora Smog  http://www.donorasmog.com/archivesdonorasmogdisaster.htm  Collect 1000ml snow and allow to thaw until next class. Next class we will pour the water through coffee filters and look at particulates deposited since snow fall.  If time, watch Killer Fog on youtube.  http://www.youtube.com/watch?v=eUQ9tPc8YbM |
| **EXTENDED THINKING ACTIVITY / ASSIGNMENT:** | Complete Chapter 9 questions |
| **SUMMARIZATION/ CLOSURE:** | Wrap- up / class discussion |