

“Expose our Roots to Investigate the Problem”

Day 2: Make sense of problems and persevere in solving them.

Objective: You will explain the meaning of a problem and look for entry points to its solution, analyzing the givens, constraints, relationships, and goals.

Rationale: You will need to investigate the history behind the identified problem in order to better understand why it exists in its current state. This will help you to create an efficient and effective solution.

Goal: Analyze a specific community “problem” and understand the history behind it.

Key Terms: blight

Materials & Resources:

Social Studies: [Solving blight: Local leaders working together, but numbers are growing](#) (WJAC-TV)

ELA: [Stage 1 of the Writing Process; Example Graphic Organizer](#)

Math: [List of States By Population Density](#)

Science: [How Nature Can Make You Kinder, Happier, and More...](#) (Greater Good Science Center)

ACTIVITIES:

Social Studies

- **Read** the article: *Solving Blight: Local Leaders Working Together, but Numbers are Growing*
- **Define** the word **blight***.
- **Explain** possible reasons why blight may exist in a community.
- **Identify** which of the counties listed in the article has the most abandoned properties. How many?
- **Analyze** a problem that exists in your own community. Investigate and summarize the history behind the problem. (If you can’t conduct research, create a hypothesis.)
- **Explain** a possible solution to the problem.

ELA

- **Brainstorm** perceived problems in your community and ways to potentially make it better.
- Consider using a graphic organizer such as a word web or a flow chart (See Example Graphic Organizer).

Math

- **Describe**, in your own words, what you think the term “population density” means.
- **Respond** What do you think the population of the United States is today?
 - What do you think are the top 5 *most-populated* states?
 - What do you think are the 3 *least-populated* states?

number of people ÷ the area they occupy = population density

- **Identify** the formula for, and **calculate**, the population density of your community using population and area at different times in the past.

- If you cannot access the square mileage of your own community, use the following numbers to solve the equation:
- Johnstown, PA - Area = 6 square miles
Population = 19,195
So what is the population density?

- **Practice** calculating population density of surrounding communities or states. (Search to find the appropriate variables and then solve the equation.) Do your findings match your assumptions?

Science

- **Explain** how being in nature makes you feel *physically*. **Explain** how it makes you feel *mentally*.
- **Make predictions** Why do you think nature tends to have a calming effect on our minds and bodies?
- **Read** the article: [How Nature Can Make You Kinder, Happier, and More...](#)
- **Summarize** each of the 5 main sections of the article in 1-3 sentences (for each section).
 - 1) *Being in nature decreases stress*
 - 2) *Nature makes you happier and less brooding*
 - 3) *Nature relieves attention fatigue and increases creativity*
 - 4) *Nature may help you to be kind and generous*
 - 5) *Nature makes you "feel more alive"*