



## ANSWER KEYS



*West Virginia Firewise in the Classroom*



## Answer Keys

### From Lesson 2: West Virginia and United States 2000 Wildfire Data Questions Key

1. Skim through the data categories and data in general. What questions come to your mind about the data categories, the data and the process of collecting the data? **Answers will vary.**
2. Wildfire causes can be divided into two very broad categories. What are those two categories? **Natural and Human**
3. Which of the wildfire causes listed are preventable? Which are not? In the margin of the data sheet, label each cause “P” for preventable or “NP” for not preventable. Be prepared to justify your labels in class discussion. **Answers will vary.**
4. One wildfire cause category is termed as “miscellaneous”. Why does this category exist? **Miscellaneous is used when the specific cause of a wildfire is not known, or when the cause does not fit established categories.**
5. Excluding the miscellaneous category:
  - What was the leading cause of wildfire in WV in 2007? **Debris (will vary)**
  - What was the leading cause of wildfire in the U.S.? **Arson or incendiary (21.9%) (will vary)**
  - How do you account for the difference? *It is common in Minnesota for people to burn debris on their property. The incidence of debris fires has decreased in recent years as spring burning restrictions have been imposed.* **Arson or incendiary comes in a close second. (will vary)**
  - What was the second leading cause of wildfires burned in WV? **Arson or incendiary**
  - What was the leading cause of acres burned in the U.S.? **Lightning (57.3%)**
  - How do you account for the difference? **Lightning activity is greater in other regions of the U.S. due to climate and ground conductors.**
6. Which wildfire cause appears to be the most destructive in terms of acres burned? The least destructive? **Most destructive - Nationally - Lightning, MN - Arson; Least destructive - Nationally - Children, MN - Campfire.**
7. Find something in the data that interests, surprises or puzzles you. Write it here and be prepared to share it during the class discussion. **Answers will vary.**

**From Lesson 4: Introduction to Firewise Minnesota PowerPoint Presentation Outline Key**

- I. Wildland/Urban Interface - Not a geographical location, a: **set of conditions that exist in every community**
- II. Fire Prone Property in West Virginia: **Thousands** of potentially fire prone homes in West Virginia.
- III. Home Ignition Zone - What is it? **area within 30 feet of the home**
- IV. Keys to Reducing Home Ignitions
  - A. **Wildland** fuel reduction
  - B. Fuel reduction near the **home**
  - C. **Structure** modification
- V. Home Fire Risk Factors
  - A. Site
    - 1. **Pine and other evergreens** within 30 feet of house
    - 2. Fire ladder fuels: Examples: **branches reaching from the ground to the crowns of trees, dense brush and shrubs under trees**
    - 3. Flammables near the house: Examples: **wood piles, tall, unmowed grass**
  - B. Site Access
    - 1. Long, narrow **driveways**
    - 2. Small **turnarounds**
    - 3. Steep **hills**
  - C. Structure
    - 1. Fire prone **building materials and design**  
Examples: **cedar roof, open soffits, wood siding, unenclosed decks**
  - D. Fire Use Practices
    - 1. Open **burning**
    - 2. Recreational fire use
    - 3. Indoor fireplaces without **spark arrestors**
- VI. Assessment
  - A. Level 1 Assessment uses: **aerial photos and Geographic Information Systems (GIS)**
    - 1. What do you look for on the aerial photo? **trees (fuels) close to the home**
    - 2. What do you add to the aerial photo? **a 1-5 home risk rating**
    - 3. What can be created from these? **maps showing home risk ratings and high risk areas**
  - B. Level 2 Assessment uses: **ground assessment (home surveys) to determine site, structure and fire use practice concerns of each home**

**From Lesson 4: Introduction to Firewise West Virginia PowerPoint Presentation Outline Key (Continued)**

- VII. What People Can Do To Reduce Their Home Fire Risk
  - A. Site
    - 1. Thin and prune **pine**
    - 2. Site access widen **driveway**
    - 3. Trim **overhanging branches**
    - 4. Mark **address clearly**
  - B. Structure
    - 1. Remove or replace **flammable materials**
    - 2. Repair **fire prone design**
  - C. Fire Use Practices
    - 1. Use alternatives such as **composting**
    - 2. Create **fire breaks**
- VIII. Firewise Community Plan
  - A. Community activities  
Examples: **access improvements, dry hydrants, fire breaks**
  - B. Homeowner activities: Examples: **access improvements, conifer thinning, seasonal cleanup**
  - C. Future development: Examples: **development guidelines, building codes**
  - D. Education efforts: Examples: **open houses, mailings, personal contacts**
  - E. Disaster Readiness: Examples: **evacuation plan, fire suppression plan**
- IX. Implementation!

**From Lesson 5: Using Census data to Explore West Virginia Population Growth and Change Key**

- I. *Why is it important to know if a county's population is increasing or declining:* Answer: **Building new schools takes several years to build. Predicting population growth allows time to plan and build new schools and city services.**
- II. Based on U.S. Census 2006 population estimates how many counties in West Virginia have declining population from 2000 to 2006: Answer **26**
- III. *Which county has the largest percentage increase in estimated population for 2000 to 2006:* Answer: **Berkeley 28.49%**
- IV. *Which county has the largest percentage decline in estimated population for 2000 to 2006:* Answer: **McDowell -12.61%**

*What is the formula to calculate percentage of population change:* Answer: **Population 2006 – population 2000 divided by population 2000**  
**To show the number as a percent multiply by 100**

**From Lesson 8: Level 2 Firewise Community Assessment Field Guide Teacher Edition**

- 3 Major Factors You Will Be Assessing
  1. **Site Factors**
  2. **Structural Factors**
  3. **Hazard Reduction Factors**
- Write on the Residential Hazard Assessment form.
- Fill In the Home and Evaluator Information
  1. Address, City, Assessment Date, Agency (school name), GPS Unit #, Evaluator (your name).
  2. Take 2 GPS Readings and record the waypoint number and UTM coordinates. Take the other GPS reading at: **the home**