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# EarthComm: Earth's Natural Resources ERRATA

# Errata Notes on the 2001 Edition

- Chapter 1: Energy Resources and Your Community
- Chapter 2: Mineral Resources and Your Community
- Chapter 3: Water Resources and Your Community

Changes detailed below include both first printing errata and other changes made in subsequent printings to improve figures and the text.

#### Chapter 1: Energy Resources and Your Community

#### 1. Page R8, #4, lines 14-15

The same symbol "W" is used to refer to both work (which is expressed in joules) and watts (which is a unit of power). The symbol for work should be a different font ("W") in both the equation and in the text.

# 2. Page R8, #5, line 4-5

Change "(how far?)" to "(how fast?)" and "(how high?)" to "(how fast?)" to be consistent with rate of doing work.

#### 3. Page R8, #6a, line 5

Change to "one food calorie = 1 kilocalorie or 1000 calories"

## 4. Page R14, Step 5, line 2

Change to "...foot pounds per second."

# 5. Page R46, Geo words

Carbon cycle: the global cycle of movement of carbon, in all of its forms, from one reservoir to another.

#### 6. Page R46, line 2

Reword as: "...power cars), the carbon-containing compounds are changed chemically ..."

## 7. Page R46, line 12

Reword as: Change "salts" to "ions".

# 8. Page R47, Figure 2

Change the horizontal axis label to "year"

## 9. Page R50, line 14

Change to: "... granite and similar rocks."

#### 10. Page R68, line 12

Change "is called the" to "is related to".

## 11. Page R74, Step 5d, 1st sentence

Change to: "Percent energy efficiency is the energy output divided by the energy input, multiplied by 100."

## 12. Page R75, right column, Example calculation, line 3

Delete cubed.

## 13. Page R7, Energy Conversion Table, Energy and work, line 2

Insert "(foot-pounds)" after "ft-lb".

## 14. Page R14, Preparing, right column, line 1

Change to: "...to understand how mechanical energy is converted to heat in the devices they use in their everyday lives."

## 15. Page R20, line 10

Insert "(Watt hours)" after "Wh".

## 16. Page R23, Step 2, line 9

Change to "...would be  $0.50 \times 0.50 = 0.25 = 25\%$ ."

## 17. Page R27, Step 2e

Add the following sentence to the beginning: "Look at the distribution of coal-fired power plants. Why do you..."

#### 18. Page R28, Steps 6a and 6b

Change both steps to begin with "In your state, ..."

#### 19. Page R33, Table 1

Change the "Volatile Matter" columns to the following values:

lignite- up to ~50%

sub-bituminous- up to  $\sim 30\%$ 

bituminous- less than 20%

anthracite- less than 15%

# 20. Page R39, Part B, Step 1f, line 3

After 1st sentence add: "(An acre-foot is the volume of a 1-foot thick layer that covers an area of 1 acre.)"

# 21. Page R52, Inquiring Further, Step 3, last line

Change to: "are taken at the mine?"

# 22. Page R52, Inquiring, 4 steps a, c, d, and e

Reword as follows:

- a) Which fuels are used at the power plant?
- c) What is the power plant's capacity, in megawatts?
- d) How many people are employed at the power plant?
- e) What is done with the ash from the power plant (i.e. ...

#### 23. Page R56, Step 2d, last sentence

Change to ... "Explain your answer."

## 24. Page R60, line 3

Replace sentence "The most striking..." with "Of all the recently developed energy sources, petroleum and natural gas

| 25. Page R79, last three lines   |
|--|
| Change to " the air pollution and the emission of greenhouse gases associated with burning those fuels." |
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| Chapter 2: Mineral Resources and Your Community  |
| No changes.  |
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| Chapter 3: Water Resources and Your Community  |

have had the greatest impact."

No changes. Back to Top