



Critical Thinking Skills



Reducing Your Own Carbon Footprint

Skills for Critical Thinking		Reading						Hands-on Activities	
		Climate Change Has Your Footprint On It	Your Footprint At Home	A Footprint On Your Dinner Plate	Your Travel Footprint	Footprints At The Mall And In The Trash	Your Slice Of The Shared Footprint		How To Make Your Footprint Smaller Any Why You Should
LEVEL 1 Remembering	<ul style="list-style-type: none"> List Details/Facts Recall Information Match Vocabulary to Definition Define Vocabulary Sequence 	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 2 Understanding	<ul style="list-style-type: none"> Demonstrate Understanding Describe Classify 	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 3 Applying	<ul style="list-style-type: none"> Application to Own Life Organize and Classify Facts Infer Outcomes Utilize Alternative Research Tools 	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 4 Analysing	<ul style="list-style-type: none"> Distinguish Meanings Make Inferences Draw Conclusions Identify Cause and Effect Identify Supporting Evidence 	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 5 Evaluating	<ul style="list-style-type: none"> State and Defend an Opinion Make Recommendations Influence Community 						✓	✓	
LEVEL 6 Creating	<ul style="list-style-type: none"> Compile Research Information Design and Application Create and Construct Imagine Alternatives 		✓	✓	✓	✓	✓	✓	✓

Based on Bloom's Taxonomy



Climate Change Has Your Footprint On It

1. Circle the word **TRUE** if the statement is TRUE or Circle the word **FALSE** if it is FALSE.

a) The average temperature of Earth is rising.

TRUE **FALSE**

b) Earth would have a perfect climate if there were no greenhouse effect.

TRUE **FALSE**

c) Combustion is another word for burning.

TRUE **FALSE**

d) Coal is a fossil fuel.

TRUE **FALSE**

e) More carbon dioxide must be added to the atmosphere to reverse global climate change.

TRUE **FALSE**

2. Put a check mark (✓) next to the answer that is most correct.

a) The greenhouse effect traps

- A carbon
 B gas
 C heat
 D light

b) Carbon dioxide molecules are made up of one carbon atom and two oxygen atoms. What is the chemical formula of carbon dioxide?

- A CO
 B CO₂
 C C₂O
 D C₂O₂

c) All of these are produced when gasoline burns, *except*

- A heat
 B water
 C oxygen
 D carbon dioxide



A Footprint On Your Dinner Plate

United States agriculture produces about 10% of the national carbon footprint. This means that even the food on your plate has a carbon footprint because growing, fertilizing, harvesting, packaging, and shipping food all release CO₂, either directly or indirectly.

Farmers drive their tractors many miles back and forth over their fields as they plow the field, sow the seeds, spread **fertilizer, pesticide** and **herbicide**, and harvest the crop. Since the tractors are powered by fossil fuel, this adds to your footprint when you buy the food they grow. There are also many indirect parts of the food footprint. Manufacturing the tractors, machinery, and fertilizer all release CO₂.

Another indirect part of the food footprint is shipping. On average, food travels 1,500 miles from the farm to your plate. Almost all the trucks, trains, planes, and boats that ship that food add more carbon dioxide to the atmosphere. One way to reduce the shipping part of your food footprint is to buy locally grown produce and locally produced meat and dairy products.

A good place to find local produce is at a farmers' market. There are now over 4,000 farmers' markets in the United States, so the chances are good that you live near one. Some farmers also have roadside stands where they sell what they grow. Remember though, that if you have to drive a long way to buy local produce, you may actually be increasing your footprint. If you can only shop at a supermarket, be



Agriculture generates 10% of the national carbon footprint.

SAMPLE



Footprints At The Mall And In The Trash

1. Most things you own contribute to your carbon footprint. Number the parts of the footprint of a cotton T-shirt from 1 to 13 in the order they occur. The first and last have been done for you.

- _____ a) weaving cloth
- _____ b) manufacturing a tractor
- _____ c) washing and drying
- _____ d) sowing cotton seed
- _____ e) shipping to clothing store
- 13 f) trucking to landfill
- _____ g) sewing
- 1 h) mining iron ore
- _____ i) shipping to factory
- _____ j) picking cotton
- _____ k) driving to and from clothing store
- _____ l) spinning thread
- _____ m) plowing a field



SAMPLE

2. Circle the word **TRUE** if the statement is TRUE or Circle the word **FALSE** if it is FALSE.

- a) Wooden furniture does not have a carbon footprint.
TRUE **FALSE**
- b) Almost all manufacturing has a carbon footprint because it uses energy.
TRUE **FALSE**
- c) Banana peels, coffee grounds, and lawn trimmings can be put in a compost pile.
TRUE **FALSE**
- d) Broken glass cannot be recycled.
TRUE **FALSE**
- e) Motor oil can be recycled.
TRUE **FALSE**