

The Secret Life of Paper: The Quiz!

1) The average American consumes how much more paper than the average Briton?

- A) 10%
- B) 30%
- C) 50%
- D) 70%

2) The average American consumes how much more paper than the average Mexican?

- A) 20%
- B) 40%
- C) 60%
- D) 80%

3) What percent of ancient forest (primary-growth forest) have been destroyed as of 2008?

- A) 100%
- B) 80%
- C) 60%
- D) 10%



4) What size acre of forest do we lose every second?

- A) A tennis court
- B) A basketball court
- C) A soccer pitch
- D) An average golf course



5) What percent of paper is recycled in the US?

- A) 25%
- B) 50%
- C) 75%
- D) 100%

6) The US uses enough paper towels to fill how many average landfills every day?

- A) 15
- B) 100
- C) 500
- D) 3,000

7) What greenhouse gas is emitted by paper in landfills?

- A) Pulp
- B) Carbon dioxide
- C) Methane
- D) Water vapor



8) Fiber for paper can be made from which of the following substitutes, except...?

- A) Cotton
- B) Flax
- C) Kenaf
- D) Tall grass

9) How many different elements of used in the bleaching and processing of paper and pulp?

- A) 14
- B) 4
- C) 24
- D) 44

10) By printing double-sided you can save how much paper as if you don't?

- A) No more, no less
- B) Twice as much
- C) Four times as much
- D) It actually uses more paper printing double-sided



The Secret Life of Paper: The Answers

- 1) **B:** Though our GDP per capita is very similar and our cultures overlap significantly, the statistics don't lie. For some reason the US uses significantly more paper products than Britain does. Recycling and consumer choices, government regulations on creating paper waste, as well as Britain's dependence on imports may influence these numbers, but the fact remains that the US needs to cut back to bring its paper consumption in line with the rest of the developed world.
- 2) **D:** When compared to a country that is not as developed as the US, we dwarf them in paper use. This discrepancy is partially not the consumers fault; junk mail and advertising flyers are not as big of a cultural phenomenon in Mexico and so Americans consume more paper without purchasing any. However there is also our lack of recycling and disregard for wasting materials to contend with, which inflates the US number even more.
- 3) **B:** There is still some primary growth forest left, but not much. These ancient forests have never been cleared by man and are in their pure, unaltered form. Some of the trees are hundreds of years old. Yet we are losing them at a significant rate; almost none exist in the Northeast US anymore due to development activities. The paper industry is another huge culprit in the destruction of these trees. Primary growth forests have been found to combat global warming much more effectively than secondary-growth forests. So even if we chop down the trees and then replant them, we're still doing irrevocable harm to the global environment.
- 4) **C:** Because of the demand for paper towels, toilet paper, and office supplies, we lose 2 acres of forest every second. If the paper industry were to change into a more sustainable model, or recycling efforts increased, this number could be significantly decreased...
- 5) **B:** It's a good start that the US recycles half of its paper, but think of all the waste from that other half. Some towns don't even provide for paper recycling, meaning part of this is related to government policy. However consumers have the power to buy recycled paper products, and to ensure that there paper is recycled properly.
- 6) **D:** The answer is a shocking 3,000 landfills. Most bathrooms have paper towels to dry hands, and households clean spills using paper towels. But think if electric hand dryers were used in bathrooms. Sure those take energy, but it also takes energy to process paper from wood, and even more energy to transport the raw materials across vast amounts of land. The environmental impact is staggering.
- 7) **C:** Paper in landfills emits methane, a greenhouse gas that is twenty times more potent in the atmosphere than carbon dioxide. And we dump a lot of paper in landfills, judging by our paper use and the amount we recycle.
- 8) **D:** Tall grass, traditionally found in certain prairies on the Great Plains of the US, can't be made into paper. However the fibers in cotton, flax, and kenaf (a type of hibiscus that has uses in making rope) can be made into paper, which could help the US cut down on the destruction of trees by the paper industry.
- 9) **A:** The basic chemical structure consists of five simple elements; carbon, phosphorus, nitrogen, hydrogen and oxygen. Other elements are found in smaller amounts, but these are the staples. The bleaching and dyeing of paper however uses fourteen different elements; sodium, magnesium, aluminum, silicon, sulfur, chlorine, calcium, titanium, zirconium, barium and the five listed above. Some of those are actually metals. The chemical names of what is used in bleaching are downright confusing. What exactly is ammonium zirconium carbonate? What does diethylene triamine pentaacetate do?
- 10) **B:** That wasn't a trick question. Twice the information on one sheet of paper, it can go a long way. So print this quiz double-sided, and then begin to make a difference by recycling and making informed consumer choices!