

ECOTRIVIA QUESTIONS

Build your eco-knowledge and share it with others. Use these fun and challenging questions as resources in your environmental activities and initiatives.

1) Earth Day was first celebrated in:

- A) 1960
- B) 1965
- C) 1970
- D) 1975

ENERGY

1) Which household appliance uses the most energy?

- A) Refrigerator
- B) Toaster
- C) Dishwasher
- D) Washing machine

2) What country has the greatest number of coal powered generators?

- A) Canada
- B) Russia
- C) U.S.A.
- D) China

3) “Phantom carriers” is a term used for electronic devices that:

- A) Move from room to room
- B) Continue to consume electricity even when switched off
- C) Are really expensive
- D) Are energy efficient

4) What percentage do heating costs rise by for every degree above 20°C that you set your household thermostat in the winter?

- A) 2%
- B) 4%
- C) 5%
- D) 7%

ANSWERS:

1): C—Earth Day is celebrated every year on April 22nd.

ENERGY

1): A—Refrigerators use about 11% of a household's total energy consumption.

Take Action: Buy Energy Star endorsed refrigerators, which will use less energy and save you money. Also, make sure your refrigerator is set to optimal energy use temperatures (between 2°C and 3°C).

2): D—China requires a great deal of energy to power their rapidly developing economy. Unfortunately burning coal causes pollution.

3): B—“Phantom carriers” are products that draw power 24 hours a day. Appliances that have a clock or programming displays such as coffee makers, DVD players, computers, printers, and stereos are considered phantom load carriers. 75% of the electricity used to power home electronics is consumed while the products are turned off.

Take Action: Unplug electrical appliances and equipment when you leave the room or use a power bar that connects all of these units and then simply switch the bar off.

4): C—Don't overheat your home in the winter. Put on a sweater and dress accordingly in order to save money and to use less energy.

- 5) Your residential water heater uses
of your home's energy and produces approxi-
mately two tones of carbon dioxide annually.
- A) 5%
 - B) 10%
 - C) 15%
 - D) 20%
- 6) Recycling 1,000 kg of aluminum saves
enough energy to heat a/an
for 10 years.
- A) Typical home
 - B) Elementary school
 - C) Corner store
 - D) Restaurant
- 7) What household appliance uses the
second most amount of energy (the first is
the refrigerator)?
- A) Hair dryer
 - B) Clothes Dryer
 - C) Microwave
 - D) Computer
- 8) What is the most energy efficient cycle to wash
and rinse your clothes on?
- A) cold-cold
 - B) warm-warm
 - C) hot-cold
 - D) warm-cold
- 9) The average Canadian home is illuminated by
..... light bulbs:
- A) 31
 - B) 41
 - C) 51
 - D) 61
- 10) Which energy source produces the greatest
amount of atmospheric carbon dioxide?
- A) Natural gas
 - B) Nuclear
 - C) Oil
 - D) Coal
- 11) What type of sector uses the greatest amount
of electricity?
- A) Commercial and industrial
 - B) Restaurant and fast food
 - C) Residential
 - D) Institutional

ANSWERS:

ENERGY

5): C

Take Action: Turn down the thermostat on your water heater to reduce energy consumption. Often the level is set unnecessarily high for regular use. If you go on holiday or away for a long period of time, you can turn off the heater since the water does not need to be constantly heated when no one is home to use it.

6): A—Recycling 1 000 kg of aluminum saves the equivalent of 10 000 L of gasoline.

7): B

Take Action: Whenever possible air-dry your laundry. You can use an outdoor clothes line or purchase a drying rack to use indoors. Air drying can save \$85 in energy costs per year and help reduce your impact on the environment.

8): A

Take Action: Use cold water to wash your clothes. If every household in Canada did this, it would reduce approximately 1.5 billion kilogram of greenhouse gas emissions yearly.

9): B

Take Action: Use compact fluorescent light bulbs (CFLs) which use much less energy than incandescent bulbs; thus, saving you money.

10): D—Gases emitted from coal burning plants contribute to acid rain and global warming.

11): A—The commercial sector uses almost 70% of all electricity produced.

Take Action: When at home or at work, make sure to turn off lights, computers and other energy consuming equipment when not in use.

WATER

- 1) A typical 5-minute shower uses litres of water:
 - A) 50
 - B) 100
 - C) 150
 - D) 200
- 2) Over a period of one day, a slow dripping drop could fill a:
 - A) Swimming pool
 - B) Bathtub
 - C) Drinking glass
 - D) Sink
- 3) The average Canadian uses 36,000 L of water each year for:
 - A) Showers
 - B) Dish Washing
 - C) Laundry
 - D) Toilet Flushing
- 4) How much water is used to produce 1kg of paper?
 - A) 100 litres
 - B) 200 litres
 - C) 300 litres
 - D) 400 litres
- 5) What country has the greatest supply of fresh water?
 - A) Canada
 - B) Brazil
 - C) Russia
 - D) China
- 6) How many litres of water can be saved on average if you turn off the tap when you brush your teeth or wash your face?
 - A) 5 litres
 - B) 7 litres
 - C) 9 litres
 - D) 11 litres
- 7) The average automatic dishwasher uses litres of water for each cycle.
 - A) 10
 - B) 20
 - C) 30
 - D) 40

ANSWERS:

WATER

1): B

Take Action: Use a low flow showerhead and you can reduce the amount of water used during a five minute shower to 35 litres. You will save water and money on your water bill.

2): B—Slow dripping taps can actually be more wasteful than high volume toilets.

Take Action: Fix your faucets to prevent wasting water.

3): D—the average toilet uses about 19 litres per flush.

Take Action: Replace your toilet with a low flush toilet or purchase a water displacement dam for your current toilet. Water dams can save up to five litres per flush.

4): C

Take Action: Use both sides of a sheet of paper before recycling it. Buy products that are labeled: contains “post-consumer” recycled material. This means it is made from things that you put into your blue box.

5): A

Take Action: Use water conservatively in your life. Although Canada has access to the greatest supply of fresh water, much of it is wasted. There is a severe fresh water shortage in many areas around the globe today so we must be careful to preserve our water and avoid contaminating it.

6): D

Take Action: Turn off the tap when not needed, or partially fill up the sink with water to use and plug it, then turn the tap off so that it doesn't run.

7): D

Take Action: Turn on the dishwasher only when there is a full load because it uses the same amount of water whether it's full of dishes or not.

FOOD & GARDEN

- 1) **Composting can reduce your household waste by:**
 - A) 10%
 - B) 25%
 - C) 50%
 - D) 75%

- 2) **What plant has been used to monitor air pollution?**
 - A) Lichen
 - B) Juniper
 - C) Clover
 - D) Strawberry

- 3) **On average, households waste of their food purchases.**
 - A) 5%
 - B) 10%
 - C) 14%
 - D) 19%

- 4) **One tree can remove pounds of carbon dioxide from the atmosphere annually.**
 - A) 13
 - B) 20
 - C) 26
 - D) 32

- 5) **The existence of many plant flowers depends on:**
 - A) Birds
 - B) Bugs
 - C) Worms
 - D) Bees

- 6) **As much as of the chemicals that are administered on our lawns, gardens, and crops to ward off insects and pests end up in our drinking water supply!**
 - A) 70%
 - B) 60%
 - C) 50%
 - D) 80%

ANSWERS:

FOOD & GARDEN

1): C

Take Action: Separate your food waste from your regular garbage and recycling. Designate a small household container or bucket for your food scraps and then dump the contents into your backyard composter or green bin daily.

2): A—Lichen, usually found on trees and rocks, are very sensitive to air pollution. Their presence indicates good air quality.

3): C—An average family of four people throws out about \$590 per year in meat, fruit, vegetables and grain products.

Take Action: Buy only what you know you can consume and freeze items for use later.

4): C—This is equal to the amount of car emissions produced if a car was driven 17,600 kilometers.

5): D—If there were no bees, 100,000 plant species would cease to exist.

6): C—Pesticides and other chemicals leach into the ground water and contaminate our drinking supply. They can also negatively affect the health of people and animals nearby.

Take Action: Don't use pesticides on your lawn. Be sure to look into environmentally sensitive alternatives that aren't harmful to animals and people.

- 7) Which of the following should not go into your personal back yard composter?
- A) Egg shells
 - B) Meat trimmings
 - C) Apple cores
 - D) Banana Peels
- 8) What type of food production is the most wasteful in terms of resources used?
- A) Raising livestock for meat production
 - B) Growing grain
 - C) Growing fruit
 - D) Growing vegetables
- 9) A plant or animal that is native to an area is called:
- A) Nocturnal
 - B) Exotic
 - C) Indigenous
 - D) Perennial

TRANSPORTATION

- 1) One busload of passengers takes the equivalent of cars off the road during a typical rush hour.
- A) 15
 - B) 40
 - C) 72
 - D) 88
- 2) Canadian drivers their cars for an average of 5 to 10 minutes a day.
- A) Wash
 - B) Idle
 - C) Drive
 - D) Park
- 3) One poorly maintained vehicle can emit pollutants equivalent to those from properly tuned cars.
- A) 20
 - B) 30
 - C) 40
 - D) 50

ANSWERS:

FOOD & GARDEN

7): B—In a backyard composter, meat scraps should not be composted because they tend to have a high probability of causing odours in the compost pile that would be offensive to humans and attract pests. However, meat and many other products can be composted in your municipal green bin since the waste is sent to large-scale composting facilities.

8): A—Large amounts of grain, requiring high amounts of water to grow, are required to feed livestock while vast areas of land are deforested for pasture areas.

Take Action: Try to eat meat less often, perhaps one day less a week. There are plenty of meat alternatives available.

9): C

Take Action: Plant indigenous species in your yard because they will require fewer resources to maintain since they tend to thrive in the natural climatic conditions.

TRANSPORTATION

1): B—In a year, it also conserves 70,000 litres of fuel, and generates only about 1/3 of the greenhouse gas emissions that 40 cars produce.

Take Action: Take public transit whenever possible.

2): B

Take Action: Turn off your ignition if idling for more than 10 seconds (after this time restarting the car uses less fuel than idling), avoid using drive-thrus when possible, and don't start the ignition until you and any passengers are ready to go.

3): A—A poorly maintained vehicle can increase fuel consumption by up to 50% and greenhouse gas emissions by even more.

Take Action: Make sure your vehicle is regularly tuned and maintained and falls within emission regulations.

- 4) "Fuel cell" powered vehicles run on oxygen and:
A) Helium
B) Ethanol
C) Hydrogen
D) Methanol
- 5) You can improve your gas mileage by about 3.3% by:
A) Having your windows open
B) Keeping your tires inflated to the proper pressure
C) Driving with the music on
D) Keeping your car clean
- 6) The major cause of urban air pollution is:
A) Vehicle exhaust
B) Smoke stacks
C) Home chimneys
D) Cigarette smoke
- 7) Automobile exhaust contributes to:
A) Ozone depletion
B) Acid rain
C) Global warming
D) Smog
E) All of the above
- 8) 50% of urban areas in Canada are used for:
A) Homes
B) Industry
C) Transportation
D) Parks

ANSWERS:

TRANSPORTATION

4): C—The only by-product of a "Fuel cell" vehicle is water.

5): B

Take Action: Make sure to keep your tires inflated to the proper pressure. If just one tire is under-flated by 20% you will use an additional 74 litre of fuel annually.

6): A

Take Action: Take public transit when possible, carpool, and reduce your car idling time.

7): E

8): C—Transportation includes roads, driveways and parking lots. North American societies have become so reliant upon the automobile that there is elaborate infrastructure to support its use.

WASTE

- 1) **The amount of waste in landfills that could be recycled is about:**
 - A) 20%
 - B) 50%
 - C) 40%
 - D) 70%

- 2) **What represents the greatest amount of household hazardous waste?**
 - A) Batteries
 - B) Solvents
 - C) Paints
 - D) Cleaners

- 3) **On average, how many kilograms of textile waste (clothes, bedding, curtains, etc.) per person end up in landfills throughout Canada each year?**
 - A) 1
 - B) 3
 - C) 5
 - D) 7

- 4) **On average, each child that takes a to school generates 30kg of garbage per school year.**
 - A) Backpack
 - B) Disposable lunch
 - C) Scotter
 - D) Textbook

- 5) **What was the first country to introduce a garbage collection system?**
 - A) England
 - B) Spain
 - C) France
 - D) U.S.A.

- 6) **Which of these will not naturally decompose in nature?**
 - A) Leather shoe
 - B) Steel door
 - C) Wood table
 - D) Plastic bottle

ANSWERS:

WASTE

1): D

Take Action: Make sure you compost and recycle all appropriate items. Also, attempt to reduce amount of packaged goods you purchase, which will help to divert 70% of household waste from landfill.

2): C—Paint accounts for more than 40% of household hazardous waste.

Take Action: Don't buy large quantities of paint; give extra paint to other people who may need it; dispose of paint properly in your local hazardous waste depot.

3): D

Take Action: Reduce the amount you throw out by giving old textiles to a charitable organization or friends and family, or reuse them as rags, painting sheets, and so on.

4): B

Take Action: Pack your child's lunch in reusable containers and avoid purchasing individually wrapped items when you can easily put these items into your own sealed reusable containers. You will save about 45% in expenses and produce 89% less waste when you AVOID single use, disposable containers and bags. You can even wash sandwich bags and use them again before disposing.

5): A—London, England introduced the first garbage carts in the 15th century.

6): D—Plastic does not decompose naturally.

Take Action: Make sure you are recycling all plastics properly as some of the materials may be reusable.

7) How many kilograms of unsolicited mail does the average Canadian household receive per year?

- A) 26kg
- B) 76kg
- C) 56kg
- D) 86kg

8) Which of these gases contribute to global warming?

- A) Carbon dioxide
- B) Methane
- C) CFC's
- D) Nitrous oxides
- E) All of the above

9) How long does it take for an aluminum can to decompose?

- A) 80 years
- B) 100 years
- C) 75 years
- D) 50 years

10) How many plastic bags are used per year by the average family of four people?

- A) 200
- B) 500
- C) 1000
- D) 1500

11) Which of these contributes to global warming?

- A) Car and truck exhaust emissions
- B) Industrial emissions
- C) Deforestation
- D) Incinerators
- E) All of these

12) Cleaning up litter is about how many times more expensive than collecting it from trash receptacles?

- A) 2 times
- B) 5 times
- C) 9 times
- D) 10 times

ANSWERS:

WASTE

7): B

Take Action: *Unsubscribe from mailing lists, cancel catalogue and magazine subscriptions you are no longer interested in, and make sure to recycle junk mail if you do receive it.*

8): E—All contribute but carbon dioxide is the most significant due to the large quantities produced.

9): B—Also, decomposition is even slower in landfills because there is little air and moisture to help this process.

10): C

Take Action: *Bring your own reusable bags or baskets whenever you can (such as to the grocery store). Say "no thanks" when cashiers offer to bag small items that you don't really need a bag for. If you have to get plastic bags, reuse them.*

11): E

12): C—Each year, the City of Toronto spends \$20 million in tax dollars towards cleaning up public places. 90% of that money is allocated to collecting litter on the ground, compared to 10% used for collecting it from the waste/recycle bins.

Take Action: *Don't litter and be sure to throw out your garbage into the proper receptacles. It helps your community look beautiful and saves the city money so that your tax dollars can be used for other services.*