Wisconsin

Environmental Survey

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Instructions for taking the survey:

Today you will be taking a survey that asks questions about what you know, think, and do about the environment and environmental problems. Please answer the questions truthfully and to the best of your ability.

You should have received this survey booklet and an answer sheet for recording your answers. First, using a **number 2** pencil, write the first initial of your last name and your entire first name in the spaces provided on the answer sheet and darken the corresponding circles below each letter of your name.

Next, go to the section on the answer sheet marked **special codes**. Write the number that your teacher will give you in the space marked special codes and darken the appropriate circles under each number.

It is very important to fill in the answer sheet carefully using the number 2 pencil. Fill in only **one** bubble on the answer sheet for each question asked. When filling in your answer, make sure that you completely darken the circle for your choice on the answer sheet. If you make any changes in your answers, be sure to completely erase your first answer. Do not make any stray marks outside the circles.

There are four sections in the survey. Each section is different, so please read the directions carefully before starting each section. Complete the entire survey and then stop -- you do not need to stop between sections.

If there are any questions about these directions, please ask them now.
You may begin the survey.

Section One

Instructions for Section One: Fill in the circle on your answer sheet for the letter of the answer that best indicates your response to each of the following questions.

1. What is your gender?
   a) female
   b) male

2. Compared to other subjects you study, how do you feel about studying environmental topics?
   a) less interested
   b) about the same
   c) more interested

3. Compared with other students your age, how well do you think you understand issues related to the environment?
   a) above average
   b) average
   c) below average

4. What **one** thing has contributed **most** to your understanding of the environment and environmental issues? (choose only one answer)
   a) school
   b) books, newspapers, or magazines I have read on my own.
   c) friends or family members (including parents)
   d) field trips, special programs or activities such as clubs, scouting or 4H
   e) television programs

5. What are your educational plans after high school?
   a) no future educational plans at the present time
   b) vocational/technical school
   c) college or university
   d) military
   e) undecided

Section Two

Instructions for Section Two: Please indicate how you feel about each statement below. There are no right or wrong answers. Read each statement carefully. Fill in the circle on your answer sheet for the letter that best indicates the extent to which you agree or disagree with each statement, using the following key:

strongly agree	agree	no opinion	disagree	strongly disagree
(a)	(b)	(c)	(d)	(e)

6. I enjoy watching TV programs about nature.

7. When I am outside, I usually don't notice the natural things around me like flowers, trees, and clouds.

8. I'm not interested in reading about nature or the environment.

9. I like hearing the sound of animals such as birds and insects calling when I'm outside.

10. I think most of the concern about environmental problems has been exaggerated.

11. Knowing about environmental problems and issues is important to me.

12. A community's pollution regulations should not interfere with industrial growth and development.

13. I am concerned about the issue of deforestation.

14. I think that damage to the ozone layer is something that everyone should be concerned about.

15. More controls should be placed on industry and agriculture to protect the quality of the environment, even if it means that things that I purchase will cost more.

16. I am not concerned about the fact that the world's deserts are increasing in size.

17. There are already enough laws to protect the environment.

I believe that plants and animals exist to be used by humans.

I don't think that recycling is worth all the trouble it takes.

I would oppose any environmental regulations that would restrict my way of life.

More land should be set aside for wildlife habitats.

Environmental restrictions should be lifted so that exploration and production of fossil fuels can be increased.

If a person's car exceeds certain standards for air pollution, he or she should not be allowed to drive it.

The government should provide financial support for research and development related to renewable energy, even if it means that taxes will be higher.

I am concerned about how much waste is produced in this country.

Laws should be passed and enforced that protect the quality of life in the future even if it means that individual freedoms are limited.

I am not concerned about the rate of species extinction in the world.

I am concerned about environmental health hazards such as those caused by air or water pollution.

I want to help solve environmental problems.

There is not much that I can do that will help solve environmental problems.

I believe that I can contribute to the solution of environmental issues by my actions.

It's too hard to change my friends' minds about doing things to help the environment (for example, recycling).

An individual, working on his or her own, can contribute to the solution of environmental problems and issues.

Things that I do don't have much effect on the quality of the environment.

I feel that it is my responsibility to help solve environmental problems.

Section Three

Instructions for Section Three: For the following group of statements, please indicate how frequently you do each of the actions mentioned. Be honest, there are no right or wrong answers. Fill in the circle on your answer sheet for the letter that is closest to your answer, using the following key:

almost always	often	sometimes	almost never	never
(a)	(b)	(c)	(d)	(e)

36. I turn off lights and appliances when they're not being used in order to conserve electricity.

37. I avoid purchasing products that are over-packaged.

38. I talk to people that I notice doing something that harms the environment in an effort to persuade that person to stop that activity. (For example, try to talk a friend into recycling pop cans instead of throwing them in the trash.)

39. I walk, take public transportation, or ride a bike instead of using a car in order to help protect the environment.

40. I make an effort to reduce the amount of goods I consume.

41. I set a positive environmental example for my friends to follow.

42. I support candidates for school offices who are concerned about environmental problems and issues in our school.

43. If I see an aluminum can on the ground when I'm out walking, I pick it up and take it with me.

44. I recycle paper, glass, and/or metal waste products at home or at school.

45. I avoid purchasing products that have a negative impact on the environment.

46. I talk to my family and friends about what they can do to help solve environmental problems.

47. I write or call politicians to express my views about environmental issues.

48. I make a point of reading newspaper and magazine articles about the environment.

49. I purchase one product over another product because it is packaged in reusable, returnable, or recyclable containers or packages.

50. I send letters to the newspaper about environmental problems or issues.

51. I have reported environmental problems or violations that I have noticed to the proper authorities.

Section Four

Instructions for Section Four: For each of the following questions, choose the **best** answer. Fill in the circle for the letter of the answer on your answer sheet.

52. A food web consists of

a) the animals that eat other animals in a community.
b) all the herbivores and carnivores in an ecosystem.
c) many interconnected food chains.
d) all the consumers in an ecosystem.

53. When two or more species attempt to use the same limited resource in an ecosystem, their interaction is called

a) mutualism.
b) competition.
c) predation.
d) commensalism.

54. Having sharp thorns can help a plant by keeping animals from eating it. This is an example of

a) mutualism.
b) adaptation.
c) competition.
d) commensalism.

55. All of the individual organisms that live on the ground in a particular forest share the same

a) niche.
b) habitat.
c) life-style.
d) food source.

56. The reason dead leaves and twigs don't build up in a forest from year to year is because

a) non-living elements such as wind and rain remove them.
b) decomposers break them down into soil.
c) animals eat them or use them to build nests.
d) none of the above.

57. Wolves often eat deer. Does this interaction have any beneficial effects on the deer population as a whole?

a) Yes, the wolves help keep the deer population size controlled.
b) No. The deer population is usually only harmed.
c) Yes, the wolves help keep the deer population strong since the fastest, most alert deer survive.
d) both (a) and (c)

58. The energy currently present

a) is all the energy we will ever have.
b) can change form but is never destroyed.
c) can only be used once.
d) is mostly in the form of fossil fuel energy.

59. Based upon major ecological principles, we should conclude that

a) humans are a climax species that will last indefinitely.
b) the human species will soon become extinct; nothing we can do will prevent this.
c) the human species will last as long as there is a balanced ecosystem that will support human life.
d) there is no way of predicting what will happen to the human species; ecological principles do not apply to humans.

60. The process of photosynthesis in green plants

a) uses sunlight to burn energy in plants.
b) changes light energy into chemical energy.
c) changes chlorophyll into sugar.
d) is a process used to burn sugar stored in plants so the plants can grow.

61. Which of the following terms is used to describe all of the natural living and nonliving interacting features of a given area?

a) habitat
b) community
c) biodiversity
d) ecosystem

62. Humans grow crops for food. Many species of these plants need certain species of insects (such as bees) to pollinate them. The pollinating insects often rely on the nectar they obtain from the plants for food. This is a good example of

a) how organisms, including humans, are interdependent.
b) commensalism between humans and other species.
c) how humans manipulate their environment.
d) a food web that includes humans.

63. A particular aquatic ecosystem is contaminated by a chemical which tends to remain stored in body fat. The highest concentration of this chemical would most likely be found in which group of organisms in the ecosystem?

a) plant life
b) minnows
c) fish that eat insects and plants
d) fish-eating birds

64. Which of the following phrases refers to the potential ability of a system to support population growth without harming the environment?

a) carrying capacity
b) species loading
c) non-sustainable growth
d) all of the above

65. In a small lake, a food chain was as follows:

sun → green algae → small crustaceans → fish

After many months of heavy snow covering the ice, most of the small crustaceans died. What is the best explanation for this?

a) The algae population was cut off from its source of energy.
b) It was too cold for the crustaceans to survive.
c) The fish ate most of the crustaceans.
d) A disease killed most of the algae.

66. If carbon dioxide (CO_2) disappeared from the atmosphere, which of the following would be affected first?

a) plants
b) animals that eat plants
c) animals that eat other animals
d) decomposers

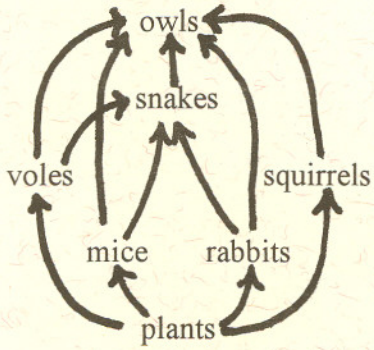
67. Each of the following food chains starts with the same amount of green plants. Assuming that the green plants are digestible by humans, which of the food chains would supply the most energy to humans?

a) green plants to humans
b) green plants to cattle to humans
c) green plants to insects to fish to humans
d) green plants to insects to small fish to larger fish to humans

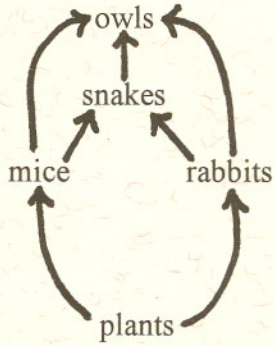
68. Some insecticides that were once effective in killing insects no longer work very well. This is because

a) new insect species develop every day.
b) the wrong kind of insecticides were used.
c) insects with natural resistance survived and multiplied.
d) the insects produced many more offspring than the insecticide could kill.

69. Which of the food webs below would be affected the most if all of the mice were removed? (Note: the arrows point to the consumer of the organism in the food web.)



Food Web (A)



Food Web (B)

a) food web (A)
b) food web (B)
c) Neither would be affected.
d) They would both be affected to the same degree.

70. Which of the following contributes to air pollution at the surface of the earth, and acts as a shield against ultraviolet rays in the upper atmosphere?

a) nitrous oxide
b) methane
c) ozone
d) sulfur dioxide

71. The main source(s) of emissions that have been identified as contributing to acid deposition (acid rain) in the United States are

a) volcanoes and forest fires.
b) petroleum refineries.
c) automobiles and coal burning power plants.
d) aerosol sprays and refrigerant leakage.

72. Which of the following is **not** true of the world's human population?

a) It is expected to double within your lifetime.
b) It is declining in developed areas such as the United States and Canada.
c) Its increase has led to the extinction of many plant and animal species.
d) The greatest rate of population growth is occurring in developing areas such as South America and Africa.

73. The future of food production as it is currently practiced in this country is in question because

a) soil is being depleted by erosion.
b) the use of synthetic chemical additives has become an issue.
c) agricultural land is being lost to development.
d) all of the above.

74. Which of the following would be **most** likely to cause groundwater pollution?

a) organic farming practices
b) municipal composting of yard wastes
c) adding too much fertilizer to fields
d) wastewater treatment plants

75. The rate of species' extinction is higher now than at any time since the period of the dinosaurs' extinction. The **main** cause of this rapid decline in biodiversity is

a) habitat alteration by humans.
b) the illegal poaching or collecting of animals and plants.
c) changes in the Earth's atmosphere due to human activities.
d) hunting by humans for food or sport.

76. Which of the following do scientists feel is the **least** important contributor to the greenhouse effect?

a) destruction of the earth's rainforests
b) burning of fossil fuels, such as gasoline and oil
c) increased use of hydroelectric power
d) production of methane gas by cattle and rice paddies

77. Most municipal solid waste in the United States is presently disposed of by what method?

a) burning it in closed incinerators
b) recycling
c) shipping it out to sea and dumping it
d) burying it in landfills

78. Which of the following is **NOT** a major water pollutant?

a) bacteria
b) pesticides
c) heat
d) All of the above are major water pollutants.

79. One suggested advantage of using nuclear power plants for energy production is that

a) nuclear power plants are not expensive to build.
b) the waste products are fairly easy to store.
c) there is less air pollution.
d) they are totally safe.

80. Which of the following results in the most serious waste or loss of our usable water?

a) contamination by bacteria
b) uncontrolled drainage
c) careless usage
d) improper storage

81. Which of the following would be most likely to result in soil erosion?

a) an increase in nutrients added to the soil
b) the removal of vegetation
c) contour plowing of hillsides
d) aeration of the soil by bacteria

82. Which of the following is considered to be a non-renewable energy source?

a) oil
b) wood
c) biomass
d) none of the above

83. Which of the following is a naturally occurring, invisible gas which can seep out of the ground into people's homes and cause serious health problems?

a) ethane
b) krypton
c) radon
d) chlorofluorocarbon

84. A major nuclear accident occurred in 1986 at the_____ nuclear power plant.

a) Belgrade
b) Nagasaki
c) Chernobyl
d) Three Mile Island

85. Which of the following offers the most potential for reducing our immediate energy problems?

a) geothermal power
b) energy conservation
c) biomass conversion
d) tidal power

86. Having your household water tested is important if

a) you live in an old house.
b) your water comes from a well.
c) you live in an agricultural area.
d) all of the above.

87. Which of the following is <u>most</u> likely to help endangered species?

a) Outlaw the sale or possession of endangered species or products made from them (skins, furs, ivory, etc.).
b) Create breeding programs in zoos for endangered animals.
c) Use farming methods which do not damage habitat.
d) Maintain large protected natural areas where they live.

88. In the long term, which of the following would be the **best** way to lessen the problem of solid waste?

a) Incinerate waste materials.
b) Reduce the amount of materials being consumed.
c) Reuse materials for other purposes rather than throwing them out.
d) Recycle materials that can be used again.

89. Which of the following would be the most effective method to influence a large number of people to take action about an environmental problem?

a) Advertise on the radio.
b) Write letters to the newspaper.
c) Go door to door and talk to people.
d) Use a combination of the above.

90. If your student environmental club was concerned about an environmental issue, which of the following would be the best thing to do **first**?

a) Write and circulate a petition about the issue.
b) Talk to other people about what they could do to help resolve the issue.
c) Write to elected officials about your concern.
d) Research the issue.

This is the end of the survey. Thank you for your participation!