EARTH DAY CATCH BALL

Objective: Students will learn more about Earth Day.

Illinois State Goals: 11.B., 17. C.

Top Book Hits:

<u>Everything Kids' Environment Book</u> by Sheri Amsel; **ISBN-13**: 978-1598696707 Earth Care by Margaret Read McDonald; **ISBN-13**: 978-0874837841

Earth Book for Kids: Activities to Help Heal the Environment by Linda Schwartz;

ISBN-13: 978-0881601954

The New 50 Simple Things Kids Can Do to Save the Earth by Sophie Javna;

ISBN-13: 978-0740777462

Materials Needed:

Beach ball with numbers 1-40 written on it randomly

List of the following 40 questions (elementary and intermediate set provided)

Procedure:

- 1. Toss the beach ball with numbers around the room, when a student catches the ball have him/her say the number where his/her left thumb lands.
- 2. Ask that question number to the student.
- 3. Then the student tosses the ball to another classmate.
- 4. Repeat steps 1-3 until all 40 questions have been answered.



Earth Day Catch Ball Questions

Elementary:

- When was the first Earth Day celebrated?
 1970
- 2. What is Earth Day?

Earth Day is an opportunity for people to express concerns about the environment and is often used for special activities.

3. What is a habitat?

Food, water, shelter and living space for plants or animals.

- 4. Are dinosaurs extinct or endangered? **Extinct**
- 5. Every food chain begins with the _____. *Sun*
- 6. The EPA is a government agency. What do the letters stand for? *Environmental Protection Agency*
- 7. What was the first national park?

Yellowstone

- 8. What is the difference between renewable and nonrenewable resources?

 A renewable resource is capable of being replaced such as trees, corn and soybeans which can be grown. Nonrenewable resources cannot be replaced such as coal and petroleum/oil.
- 9. What part protects the seed?

Seed coat

10. What does the earth revolve around?

Sun

11. What do humans breathe?

Oxygen

12. What does a plant need in order to grow?

Water, warmth, light, space/soil/something to grow in, time

13. True or false - When making mini-worm bin, be sure to feed the worms lots of meat and dairy products.

False - These type of products will cause your worm bin to have an unpleasant odor.

- 14. True or False Petroleum is a renewable resource.

 False Petroleum is a fossil fuel. Once it is gone, it is gone forever.
- 15. Name one way that you can save energy at home. Answers may vary.

 Shut off the lights when I leave the room; Do not stand with the refrigerator door open while I decide what to eat.; Use rechargeable batteries.; Replace old incandescent light bulbs with the Compact Fluorescent Lights.
- 16. What type of energy uses water to generate electricity? *Hydropower*
- 17. What crop grows in Illinois and is used to produce ethanol? *Corn*
- 18. True or False Wind is a non-renewable energy source.

 False Wind is a renewable energy source.
- 19. What do the "3 R's" stand for?

 Reduce Reuse Recycle
- 20. Why is it important to recycle?

 To save natural resources and save landfill space
- 21. Name something that can be recycled. *Aluminum cans, glass, paper, plastic, cardboard, etc.*
- 22. True or False Glass bottles can be recycled.

 True Glass bottles are recycled and made into new glass bottles. Glass can also be recycled into dishes, jewelry, drinking glasses, and more.
- 23. True or False One way I can "reuse" an item is to use both sides of a sheet of paper.

True – Use the back side for scratch paper

- 24. What can you do with the Sunday comics rather than just throwing them away? The Sunday comics can be put into the recycle bin or they can be re-used as wrapping paper for gifts.
- 25. What is it called when soil is moved from one place to another? *Erosion*
- 26. How long does it take an inch of top soil to form? 500 years

27. Which soil particle is the largest – sand, silt or clay? **Sand**

28. Tell 2 reasons why trees are good for our earth.

They provide oxygen for the air, habitat for animals, hold the soil in place, provide a wind block, provide wood for building materials, etc...

29. What is paper made out of? *Trees*

30. Why are leaves important to the tree? *They make food for the tree.*

31. What is a tree cookie?

A cross section of the tree showing the growth rings.

32. Why is the bark of a tree important? *Protection*

33. Name 3 foods we can get from trees.

Apples, oranges, figs, olives, kiwi, walnuts, almonds, cherries, peaches, pears, cocoa, maple syrup, etc.

34. Name 3 parts of a tree.

Leaves, bark, roots, flowers, fruits, seeds, sap

35. Name something that can be made from trees.

Furniture, paper, houses, etc.

- **36.** Name one way that you can save water. **Answers may vary. Turning off water when brushing teeth**
- 37. Is there more land or water on earth? *Water*
- 38. What is the geographic area water drains to called? *Watershed*
- 39. What are the 3 states of matter? **Solid, liquid & gas**
- 40. Name a form of precipitation.

Snow, rain, sleet

Intermediate:

- 1. Why is habitat important to an animal?

 All the animal's needs are met in their habitat.
- 2. Give 2 examples of non-renewable resources. *Petroleum and minerals*
- 3. What is a landfill?

 A site for the disposal of waste materials by burial.
- 4. Who coordinated the first Earth Day celebration?
 Denis Hayes
- 5. Name an activity appropriate for Earth Day.

 (answers will vary) Earth Day is an opportunity people often use to share environmental information in the media and schools, plant trees, clean up the environment, recycle, encourage others to be good environmental stewards.
- 6. In 1974 what act was passed requiring the Environmental Protection Agency to regulate the quality of public drinking water?

 Safe Drinking Water Act
- 7. When was the first national park named and what was it? **1872 Yellowstone**
- 8. Name two examples of renewable resources. *Trees, corn and soybeans (answers will vary)*
- 9. Where does a seed store its food? Cotyledons
- 10. What is photosynthesis?

The process which plants that contain chlorophyll make food with energy from the sun

- 11. How much of the earth is covered by water? **75**%
- 12. Give an example of a food chain with at least 4 steps.

 Answes may vary. Example: Sun, grass, mouse, snake, owl
- 13. The earth rotation on its _____ causes night and day. *Axis*
- 14. What do plants take in and animals exhale?

Carbon dioxide

15. What can be done with certain food wastes, wood chips, grass clippings, shredded newspaper, leaves and other organic materials rather than sending them to a landfill?

These items can be composted.

16. What causes the seasons?

Farth's	rotation	around	the su	n
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17	are a row(s) of trees, planted on the prevailing wind side of a home
	to help reduce the force of the wind. This can also help reduce the amount of
	energy needed to heat a home.

Windbreaks

- 18. The term for the careful use of our natural resources is ______.

 **Conservation*
- 19. What is the term for food, water, shelter and space in the proper arrangement? *Habitat*
- 20. What does CFL stand for? **Compact Fluorescent Lights**
- 21. Name 3 types of energy we use on earth. *Wind, solar, and thermal.*
- 22. Name two of the five different types of renewable energy sources. *Biomass, Geothermal, Hydropower, Solar, and Wind*
- 23. Name two of the five different types of non-renewable energy sources. *Coal, Natural Gas, Petroleum, Propane, and Uranium*
- 24. What does closed loop recycling mean?

 The original product is reused to make the same product again, such as an aluminum can being recycled to make another aluminum can.
- 25. How can you reduce the number of plastic bags your family uses?

 Use re-useable cloth shopping bags every time that you go shopping. Did you know that Americans use more than 277 million plastic bags a day? Only about 2% of these bags are recycled. Most go to the landfill.
- 26. What does the symbol of three chasing arrows in a triangular format mean?

 This is the recycling symbol. It is used to designate items that can be recycled and/or items that are made from recycled materials.

- 27. What is soil made up of?

 Minerals, air, water, organic matter, organisms, and decaying remains.
- 28. What items help form soil?

 Water, nutrients, earthworms, sunshine, bacteria, decaying plants and animals, time
- 29. What are the 3 soil layers?

 Topsoil, subsoil, parent material (bedrock).
- 30. Name a way to prevent soil erosion.

 Windbreaks, conservation tillage, no-till, plant trees, planting grass, filter strips, cover crops, terraces, etc.
- 31. Name a way that soil can be eroded. *Wind, water, humans, machines, etc.*
- 32. Tell the life cycle of a tree.

 Seed, sprout, sapling, mature tree, dead tree, rotting log
- 33. What is the very middle part of the tree called? *Heartwood*
- 34. How many trees are saved by recycling one ton of paper?

 About 17 trees are saved for every ton of paper that is recycled.
- 35. Explain the water cycle.

 Evaporation, cloud, precipitation, condensation

 (Infiltration, ground water, transpiration, and river could also be used)
- 36. What can you do to conserve water? Answers may vary.

 Take 5 minute shower, turn off water when brushing teeth, etc.
- 37. What is a watershed?

A geographic area in which water, sediments and dissolved minerals all drain into a common body of water like a stream, creek, reservoir, or bay

38. Name the watershed you live in.

The following website provides the answers to anywhere in the U.S. http://cfpub.epa.gov/surf/locate/index.cfm

- 39. Where can we get fresh water for human use? *Groundwater, freshwater lakes, rivers & streams*
- 40. When water passes from a liquid to a vapor state, it is called _____. *Evaporation*