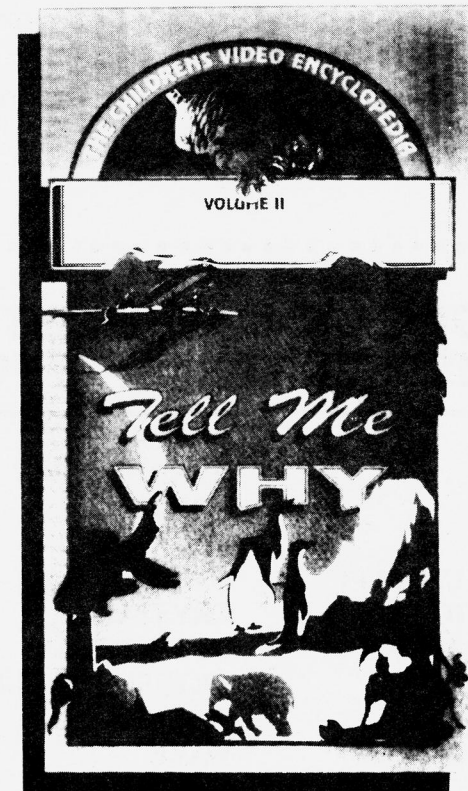


# GLOSSARY

1. ABSOLUTE HUMIDITY-quantity of water vapor in each unit volume of air.
2. ARTESIAN WELL-a well drilled deep until it reaches water, which is then forced up by underground pressure.
3. BASIN-area drained by a river.
4. BROOK-small stream.
5. CLIMATE-average weather.
6. CONDENSATION-the turning from a gas to a liquid.
7. CRYSTAL-geometrically formed fused mineral, sugar, etc.
8. CURRENT-continuous movement of a fluid.
9. CYCLONE-storm with rotating winds.
10. DEW-moisture condensed at ground level.
11. DOLDRUM-equatorial region with little wind.
12. EVAPORATION-the turning into vapor.
13. FOG-water vapor obscuring vision.
14. FUNNEL CLOUD-a cone shaped cloud.
15. GEYSER-natural eruption of water and steam.
16. GLACIER-broad, moving mass of ice.
17. GULF STREAM-a warm ocean current flowing from the Gulf of Mexico through the Florida Straits and northward into the Atlantic toward Europe.
18. HUMIDITY-water vapor in the air.
19. HURRICANE-tropical cyclone.
20. HURRICANE "EYE"-the calm area in the center of the storm.
21. ICE-solid form of water.
22. ICEBERG-a piece of glacier that has broken off.
23. LAKE-inland body of water.
24. LAVA-molten volcanic rock.
25. MAGMA-molten rock deep in the earth, from which igneous rock is formed.
26. MONSOON-season of wind and rain in South Asia.
27. MONSOON WINDS-winds that change their direction with the season.
28. OCEAN-vast body of salt water.
29. PRECIPITATION-rain, snow, sleet, etc.
30. RAIN-water falling in drops from the clouds.
31. RAINBOW-a colored arc of sunlight refracted through raindrops.
32. RAIN GAUGE-and instrument used to measure rainfall.
33. RELATIVE HUMIDITY-amount of moisture in the air as compared with the amount that the air could contain at the same temperature, expressed as a percentage.
34. RIVER-large, natural stream of water.
35. RIVULET-small brook.
36. SEASON-quarter of the year beginning with winter, spring, summer, fall.
37. SEDIMENT-matter falling to the bottom of a body of liquid.
38. SNOW-rain frozen in flakes.
39. SNOWFLAKE-a single feathery crystal of snow.
40. SPRING-stream emerging from the earth.
41. STORM-violent weather.
42. STREAM-body of running water.
43. SUB-TROPICAL-region bordering on the tropical zone.
44. TEMPERATURE-relative heat.
45. THUNDER-the sound following lightning.
46. TIDE-periodic fluctuation of sea level.
47. TORNADO-violent whirlwind.
48. TRADE WIND-a wind that blows toward the equator from the northeast on the north side of the equator and from the southeast on the south side.
49. TROPICAL-very hot; sultry.
50. UNITED STATES WEATHER BUREAU-a division of the department of commerce that gathers data on weather conditions over the United States.
51. VOLCANO-mountain that ejects molten lava, rock, and steam.
52. WATER-colorless, odorless liquid forming rain, rivers, etc.
53. WATERFALL-a stream or river that plunges over a wall of rock.
54. WATERSPOUT-tubelike column of air and water occurring over water.
55. WATER VAPOR-the gaseous state of water.
56. WAVE-ridge along the ocean's surface; undulation.
57. WEATHER-what the air or atmosphere is like at any time; the condition of the sky.
58. WEATHERMAN-a person who professionally forecasts the weather.
59. WHIRLPOOL-spinning body of water.
60. WIND-the motion of air over the earth.

# Tell Me WHY TEACHER'S GUIDE



## VOLUME II WATER & WEATHER

## SUGGESTED TEACHING STRATEGIES

1. Ask students to research "wave" action and prepare a diagram for this action.
2. Point out on a world map the oceans, seas and currents to be discussed: Atlantic, Pacific, Indian, Gulfstream, and Dead Sea.
3. Locate on a map of North America, Niagara Falls and its position 15,000 years ago.
4. Provide a diagram for labeling of artesian wells, springs and geysers.
5. Demonstrate with a relative humidity table how wet and dry bulb thermometer readings are made.
6. Follow weather forecasts in print or on TV. Keep records and evaluate.
7. Obtain an inexpensive diffraction grating or glass prisms and demonstrate the spectrum.
8. Acquaint students with weather map symbols.



## CONCEPTS AND TERMS TO LISTEN AND WATCH FOR

EARTH AXIS	WATERSPOUT
CLIMATE	HURRICANE
WINDWARD	DOLDRUMS
LEEWARD	FOG
RELATIVE HUMIDITY	SNOW
CONDENSATION	CRYSTAL
RAINBOW	GULFSTREAM
SPECTRUM	ARTESIAN WELL
GLACIER	SPRING
ICEBERG	WAVE
LAKES	WHIRLPOOL
CRATER LAKES	WATERFALL
MONSOON	TIDES
CYCLONE	CURRENT
TORNADO	GEYSER

## QUESTIONS FOR THOUGHT, DISCUSSION AND FURTHER STUDY

1. Diagram the positions of the Earth and sun in summer and winter showing the sun's rays.
2. On a circle drawn to represent the Earth, label the various climatic zones.
3. Define relative humidity.
4. Relate the terms condensation and dew point.
5. Describe your position and the conditions enabling you to see a rainbow.
6. How do monsoons vary according to seasons?
7. What may happen to buildings near a tornado? Why?
8. How could the "eye" of a hurricane deceive someone caught in the storm?
9. How do doldrums and trade winds differ?
10. If fog is a cloud at ground level, what is "smog"?
11. What gives water its taste?
12. How do icebergs form?
13. Investigate and determine at least 3 evidences that the seas once covered land.
14. List at least 4 unusual facts about the Dead Sea.
15. Where is the deepest point in the Earth's oceans?
16. What causes tides?
17. Describe how a geyser forms.

## CAREER OPPORTUNITIES

EARTH SCIENCE TEACHER	NAVIGATOR
METEOROLOGIST	ENVIRONMENTALIST
WEATHER RESEARCHER	HURRICANE HUNTER
WEATHERMAN IN ARMED FORCES	NATIONAL WEATHER SERVICE
WEATHER SQUADRON MEMBER	PILOT