

# Daily Science Trivia

These questions were created for my Daily Science Trivia activity; however, I am not longer updating this area of my site. More resources and thinking games are available on the [Trivia Challenge](#) page at the Kid Zone!

## Trivia Topics:

\* **Scientists & Inventions** \* **Insects** \* **Dinosaurs** \* **Weather** \* **Bats** \* **Health** \* **Chemistry** \* **Physics** \*  
\* **Astronomy** \* **Earth Science** \* **Answer Keys**

## Scientists & Inventions

1. Which of the following scientists studies animals? A. Botanist, B. Zoologist, C. Geologist
2. What does a volcanologist study? A. Constellations, B. Plants, C. Volcanoes
3. Which of the following scientists studies insects? A. Mycologist, B. Ornithologist, C. Entomologist
4. Albert Einstein was a scientist famous for his work on physics. Where was he born? A. Germany, B. United States, C. France
5. Which of the following scientists studies the oceans? A. Oceanographer, B. Astronomer, C. Meteorologist
6. Robert Bakker is a famous paleontologist. What did he study? A. Gorillas, B. Birds, C. Dinosaurs
7. Which of the following animals did Diane Fossey spend her life protecting? A. Bengal Tigers, B. Mountain Gorillas, C. Koalas
8. What does a herpetologist study? A. Insects, B. Birds, C. Reptiles
9. What does a lepidopterist study? A. Beetles, B. Bees and wasps, C. Moths and butterflies
10. Which of the following scientists would study motion, forces, & energy? A. Physicist, B. Chemistry, C. Biologist
11. What do we call the study of solar system and the objects in it? A. Astrology, B. Astronomy, C. Meteorology
12. Which scientist would study rocks and minerals? A. Geologist, B. Botanist, C. Meteorologist
13. Which of the following is NOT a branch of biology? A. Botany, B. Zoology, C. Seismology
14. Which of these machines did Johannes Gutenberg invent? A. Ball point pen, B. Printing press, C. Cotton Gin
15. When was the ENIAC computer turned on for the first time? A. 1936, B. 1946, C. 1956
16. What did Edward Binney and Harold Smith invent in 1903? A. Post-it Notes, B. Scotch Tape, C. Crayola Crayons
17. Which inventor is known for the creation of air conditioning? A. Perry L. Spencer, B. W. H. Carrier, C. Elisha G. Otis
18. Which was invented first? A. Telephone, B. Microwave Oven, C. Light Bulb
19. Who is credited with the discovery of penicillin? A. Dr. Charles Drew, B. Sir Alexander Fleming, C. Dr. Edward Jenner
20. What was invented by Samuel F. B. Morse in 1837? A. Typewriter, B. Telephone, C. Telegraph

## **Insect Trivia**

1. How many different species (kinds) of insects are there? A. 100,000 B. 500,000 C. 1,000,000
2. What is the official state insect for Illinois? A. Ladybug B. Honey Bee C. Firefly D. Monarch butterfly
3. Which is the largest order (type) of insect? A. Coleoptera (beetles) B. Diptera (flies) C. Lepidoptera (butterflies/moths) D. Orthoptera (grasshoppers/crickets)
4. The Goliath beetle is the largest insect living today. How much does it weigh? A. 2 ounces B. 4 ounces C. 8 ounces
5. The fastest insect is the deer bot fly. What is its fastest speed? A. 45 mph B. 90 mph C. 120 mph
6. Fleas would win a gold medal for jumping at the Insect Olympics. How high can they jump? A. 50 times their body length B. 100 times their body length C. 200 times their body length
7. The winner of the “Strong Man” award for insects goes to the Leaf Beetle. How much weight can it pull? A. 10 times its body weight B. 24 times its body weight C. 43 times its body weight
8. Humans have an estimated 762 distinct muscles. How many muscles can be found in some caterpillars? A. 250 B. 800 C. 1600 D. 4000
9. Which insect has been used to treat baldness? A. Honey bees B. Blister beetles C. Lacewings
10. The largest moth is the Owlet moth of tropical America. What is its wingspan? A. 18 inches B. 24 inches C. 30 inches
11. Insects outnumber all other animals by: a. 2 to 1 b. 3 to 1 c. 4 to 1
12. How many different kinds (species) of insects are there? a. Millions b. Thousands c. Hundreds
13. The biggest insect was a fossil dragonfly with a wingspan of over: a. 6 inches. b. 12 inches. c. 24 inches.
14. The fastest running insect is a(n): a. army ant. b. cockroach. c. stag beetle.
15. Grasshopper can jump: a. 10 times their length. b. 40 times their length c. 80 times their length.
16. The most dangerous insect kills a million people a year. What is it? a. mosquito b. housefly c. army ant
17. Tiny midge insects, called “no-see-ums” can beat their wings more than: a. 10 times a second. b. 100 times a second. c. 1,000 times a second.
18. How many lenses are in a dragonfly’s eye? a. 3,000 b. 30,000 c. 300,000
19. Which insect is honored with a statue in Enterprise, Alabama? a. Boll weevil b. Praying mantis c. Grasshopper
20. Monarch butterflies travel at an average of \_\_\_\_\_ miles per day during migration. a. 20 b. 40 c. 60
21. Malaria kills over \_\_\_\_\_ people throughout the world each year. a. 1million b. 100 million c. 1 billion
22. Of the 26 orders of insects, \_\_\_\_\_ have appeared on postage stamps. a. 14 b. 20 c. 24
23. Which of the following is NOT considered a true fly? a. House fly b. Bot fly c. Dragonfly d. Horse fly

24. Which of the following is classified as a Lepidoptera? a. Honey bee b. Grasshopper c. Stag beetle d. Monarch butterfly
- 25.. The largest butterfly, the Queen Alexandra of New Guinea, has a wingspan of \_\_\_\_ inches. a. 6 b. 11 c. 20
26. The caterpillar of the polyphemus moth can eat \_\_\_\_\_ times its weight at birth in a little less than two months. a. 18,000 b. 42,000 c. 86,000
27. It would take approximately \_\_\_\_\_ mosquito bites to drain the blood from an adult. a. 100,000 b. 1,200,000 c. 12,000,000
28. House flies beat their wings at a rate of \_\_\_\_\_ beats per second. a. 330 b. 520 c. 840
29. The smallest beetle in the world is the feather-winged beetle (Nanosella fungi). It measures about \_\_\_\_ of an inch in length. a. one-thousandth b. one-hundredth c. one-tenth
30. Some diving beetles can stay under water for \_\_\_\_ hours. a. 12 b. 24 c. 36
31. Which beetles were regarded highly in Egypt? a. Stag beetle b. Scarab beetle c. Click beetles
32. Which of the following is NOT classified as a Hymenoptera? a. Honey bee b. Paper wasp c. Cornfield ant d. Firefly
33. The honey bee queen may lay more than \_\_\_\_\_ eggs a day in the summer. a. 500 b. 1,000 c. 2,000
34. Ants are believed to make up \_\_\_\_ of the total weight of all the animals in the world. a. 10% b. 15% c. 20%
35. The oldest known ant was found in amber dated \_\_\_\_ million years ago. a. 65 b. 100 c. 200
36. Honey bee workers do much traveling to gather nectar to make honey. In order to make a pound of honey, they have to travel a distance equal to going around the world \_\_\_\_\_. a. once b. twice c. three times
37. Some termites bang their \_\_\_\_ against the walls of the nest to signal danger. a. heads b. legs c. abdomen

### **Dinosaur Trivia**

1. What do we call a scientist who studies fossils from dinosaurs? A. Geologist B. Archeologist C. Paleontologist
2. Vertebrates are animals with backbones. Which of the following were the earliest known vertebrates? A. Frogs B. Fish C. Snakes
3. What is the age of the oldest known fossils on Earth? A. 1 billion years B. 2.2 billion years C. 3.5 billion years
4. Which type of rock is the best for fossil hunting? A. Igneous B. Sedimentary C. Metamorphic
5. What does the term “dinosaur” mean? A. Terrible lizard B. Giant lizard C. Old lizard
6. During which era did dinosaurs rule the land? A. Precambrian B. Paleozoic C. Mesozoic D. Cenozoic
7. Which term is given to lizard-hipped dinosaurs? A. Saurischians B. Ornithischians
8. Which of the following is the Illinois state fossil? A. Tulley Monster B. Trilobite C. Arthropoda
9. T-Rex is believed to eat its own weight in meat each week. How much did it eat? a. 3 tons b. 5 tons c. 7 tons

10. What does the name T-Rex mean? a. terrible king b. lizard giant c. terrible lizard king
11. Dinosaurs became extinct during the last period of the Mesozoic Era. What is the name of the last period? a. Cretaceous b. Triassic c. Jurassic
12. The award for the most teeth goes to the edmontosaurus. How many teeth did it have? a. 100 b. 1000 c. 1500
13. TRUE or FALSE? Dinosaurs used sounds to communicate.
14. How many chambers could be found in a dinosaur's heart? a. 2 b. 3 c. 4
15. "Sue", the most preserved T-Rex fossil ever found, was uncovered in 1990 and is on display at the Field Museum. Where was it found? a. South Dakota b. Montana c. Illinois
16. Out of the following, which was the largest dinosaur? a. tyrannosaurus rex b. giganotosaurus c. brontosaurus
17. How many horns could be found on the head of a triceratops? a. 2 b. 3 c. 4
18. The word fossil comes from the Latin word "fodere". What does it mean? a. buried in dirt b. ancient feature c. to dig up

### **Weather Trivia**

1. How hot is lightning? A. 1,000 oF B. 40,000 oF C. 70,000 oF
2. When is the lowest temperature of the day usually observed? A. Midnight B. 3 AM C. Sunrise
3. The strongest winds ever recorded were: A. 127 mph B. 183 mph C. 231 mph
4. Over 80% of all tornadoes occur: A. between noon and midnight. B. between midnight and sunrise. C. between sunrise and noon.
5. The largest hailstone on record was 17.5 inches in circumference. How much did it weigh? A. 2 pounds B. 5 pounds C. 8 pounds
6. If the time between the lightning bolt and thunder is 10 seconds, how far away is the storm? A. 2 miles B. 4 miles C. 6 miles
7. The hottest temperature ever recorded in the United States was 134oF. Where was it? A. Phoenix, Arizona B. Tampa, Florida C. Death Valley, California
8. Which location has the highest normal annual rainfall? A. Yakutat, Alaska B. Blue Canyon, California C. Tallahassee, Florida
9. What was the highest amount of precipitation ever recorded for a year in Peoria, IL? A. 40 inches B. 55 inches C. 70 inches
10. How many tornadoes do we average each year in Illinois? A. 27 B. 42 C. 58
11. Vostok, Antarctica holds record for the coldest temperature on Earth. How cold was it? A. - 97 oF B. -127 oF C. -156 oF

12. The snowiest winter on record for Peoria, IL was in 1978 - 1979. How much snow did Peoria receive? A. 52 inches B. 65 inches C. 73 inches
13. Which of the following means "rain" when added to a cloud's name? A. Alto B. Nimbus C. Cirrus
14. How often does Peoria, IL have a white Christmas? A. Every year B. Every two years C. Every three years
15. Which of the following is called "a thunderstorm's worst killer"? A. Lightning B. Tornadoes C. Hailstones
16. If the temperature were 30oF, how many inches of snow will be produced by one inch of precipitation? A. 6 B. 8 C. 10 D. 12
17. Elevation, or altitude, is one of the factors that affect air pressure. Is the air pressure at the top of Mount McKinley, Alaska higher or lower than the air pressure in Havana, IL? Choose: Higher Lower
18. Which instrument is used to measure wind speed? A. Psychrometer B. Anemometer C. Barometer
19. What do the letters NWS represent? A. News, Weather, and Sports B. National Wind System C. National Weather Service
20. If you are increasing in latitude in the Northern Hemisphere, are you traveling: A. East, B. West, C. North, or D. South?
21. Isobars are lines on a weather map. What do they represent? A. Areas of equal temperature B. Areas of equal precipitation C. Areas of equal air pressure
22. If it is winter in Havana, IL, what season is it in Sydney, Australia? A. Spring, B. Summer, C. Fall, or D. Winter
23. What is another term for spring? A. Vernal equinox OR B. Autumnal equinox
24. Which of the following does not belong? A. Red B. Blue C. Black D. Violet
25. Which is hotter? A. 100 degrees Fahrenheit B. 100 degrees Celsius
26. Which of the following is the name for fluffy or lumpy clouds? A. Cirrus B. Stratus C. Cumulus
27. On which continent would you find the windiest spot in the world? A. Antarctica B. North America C. South America
28. Which climate zone do we live in (Illinois)? A. Polar B. Tropical C. Temperate
29. When is a tornado most likely to hit: A. 5:30 am, B. 12:00 noon, or C. 5:30 pm?

**Bat Trivia - An annual Halloween topic!**

1. Little brown bats are the most common bats in the United States and Canada. How many night-flying insects can one bat eat in a night? A. 100 B. 800 C. 1200 D 3000
2. Which of the following is TRUE? A. Bats are blind. B. Bats drink blood and eat insects. C. Bats have lived on Earth for at least 50 million years.
3. How long is the wingspan of the largest bat, the flying foxes of Asia? A. 3 feet B. 6 feet C. 10 feet

4. Mexican free-tailed bats are some of the fastest bats in the world. How fast can they fly? A. 30 mph B. 60 mph C. 90 mph
5. How many “fingers” are found on a bat’s wing? A. 2 B. 3 C. 5 D. None

### **Health Trivia**

1. By the time you are 75 years old, how many years will you have spent sleeping: 17, 23, 37, or 42?
2. Which part of your eye receives no blood at all: the cornea, iris, or retina?
3. How many feet does food travel in the average adult’s digestive tract: 10, 20, or 30 feet?
4. Who has more bones: an adult, a teenager, or a baby?
5. In the month of May, which 10-year-old will grow faster: Tim in the U.S. or Tom in Australia?
6. Every day, 50 gallons of blood are cleaned in your: kidneys, lungs, or liver?
7. If you have a condition called “bromidrosis”, do you have smelly breath, armpits, or feet?
8. About how many sweat glands do you have in your skin: 100,000, 1 million, or 2 million?
9. TRUE or FALSE? No matter how flexible you are, you can’t kiss the tip of your elbow.
10. How many muscles do you use to take a single step forward: 50, 100, 200, or 450?
11. In an average lifetime, does a person have more breaths or heartbeats?
12. TRUE or FALSE? Dead people’s toenails continue to grow.
13. Would you find your philtrum under your nose, tongue, or chin?
14. Does the human bladder hold less or more liquid than a juice box?
15. About how many hours does an adult dream if he sleeps for 7.5 hours: 1.5, 3, or 5 hours?
16. TRUE or FALSE? The left side of your body is controlled by the right side of your brain.
17. Which contains more water: your blood, brain, or skeleton?
18. Which were once eaten as a means of treating tooth aches: worms, spiders, or cockroaches?
19. Which is likely to last longer: a hair on your head or one of your eyelashes?
20. Who is more likely to know if you ate onions before dinner: your aunt or uncle?
21. If you could pile up all the food you’ll eat in a lifetime, how many tons would it weigh: 10, 100, or 1000?
22. When your uvula vibrates are you: snoring, coughing, or burping?
23. If you saved all the skin you shed in a year, would it weigh as much as a tennis ball, baseball, or basketball?

24. Who is most likely to sleepwalk: you, your parents, or your grandparents?
25. When you sneeze, how many miles per hour does the spray shoot out of your nose: 50, 100, or 125 mph?
26. Which lasted longer: the world's longest sneezing attack or the world's longest hiccup attack?
27. If all your blood vessels were laid end to end, could they make two circles around the moon, the sun, or the earth?

### **Chemistry Trivia**

1. What is the name for the process of a liquid changing into a gas? A. Melting B. Vaporization C. Sublimation
2. The atomic number for nickel is 28. How many electrons are found in an atom of nickel? A. 7 B. 14 C. 28
3. Which of the following is not found in the nucleus of an atom? A. Protons B. Neutron C. Electron
4. The formula for carbon dioxide is CO<sub>2</sub>. How many atoms of oxygen are in one molecule? A. 1 B. 2 C. 4
5. The correct formula for calculating density is: A. mass X volume. B. mass + volume. C. mass ÷ volume.
6. The amount of matter in an object is called: A. Volume B. Mass C. Density
7. Does a neutron have a: A. positive charge, B. negative charge, or C. neutral?
8. The amount of space an object takes up is called its: A. mass, B. volume, or C. weight?
9. Is gold considered an element or a compound? A. element or B. compound
10. Is "dry ice" the solid state of: A. carbon dioxide or B. carbon monoxide?
11. Are molecules packed most tightly together in a: A. solid, B. liquid, or C. gas?
12. Which is lighter: A. Cold air or B. Hot air?
13. Which of the following elements has the highest number of electrons? A. Hydrogen B. Magnesium C. Oxygen
14. Which state of matter has neither a definite shape nor a definite volume? A. Solid B. Liquid C. Gas
15. Which of the following is the chemical symbol for sodium? A. K B. Na C. S
16. Does a proton have a: A. positive charge, B. negative charge, or C. no charge?
17. Which common household item is made from the elements sodium and chlorine? A. Flour B. Sugar C. Salt
18. Would a strong acid have a pH closer to: A. 1, B. 7, or C. 14?
19. What do we call an atom that has lost one or more electrons? A. positive ion or B. negative ion
20. Which of the following is the chemical symbol for lead? A. Li B. Ld C. Pb
21. Ice melts into water. Is this a physical change or a chemical change? A. Physical or B. Chemical
22. What do we call the amount of matter in an object? A. volume, B. mass, C. weight

23. Is H<sub>2</sub>O the chemical formula for: A. water, B. ice, or C. both water and ice?
24. TRUE or FALSE? Carbon is a nonmetallic element.
25. In the chemical formula for methane, CH<sub>4</sub>, how many carbon atoms are there in one molecule? A. 1 B. 2 C. 4
26. Which does not belong? A. Gold B. Silver C. Pewter D. Lead

### Physics

1. Who proposed the law of motion that for every action there is an equal and opposite reaction? A. Albert Einstein B. Isaac Newton C. Galileo
2. Which branch of science deals with the study of motion, forces, & energy? A. Physics B. Chemistry C. Astronomy
3. If your speed is measured at 10 knots, are you riding in a: A. bus, B. buggy, or C. boat?
4. Does a strawberry look red because: A. it absorbs red light, or B. it reflects red light?
5. Which law of motion states, "An object in motion will remain in motion and an object at rest will remain at rest unless acted upon by an unbalanced force?" A. 1st Law B. 2nd Law C. 3rd Law
6. Which is the correct way to calculate the speed of an object? A. Distance multiplied by time B. Distance divided by time C. Time divided by distance
7. Which of the following is an example of a lever? A. A knife B. A seesaw C. A wheel
8. The distance between two consecutive crests or troughs on a wave is called the: A. wavelength. B. amplitude. C. frequency.
9. What do we call waves that require a medium: A. electromagnetic waves or B. mechanical waves?
10. The rate of change of velocity is known as: A. momentum. B. speed. C. acceleration.
11. The fixed point on which a lever moves is called: A. fulcrum. B. anchor. C. pivot.
12. What unit is used to measure force? A. kilogram B. newton C. joule
13. Sounds with frequencies above 20,000 hertz are called: A. infrasonic. B. ultrasonic.
14. The type of mirror that resembles the inner surface of a spoon is called: A. concave. B. convex.
15. Whispering creates sounds of about: A. 5 decibels. B. 20 decibels. C. 70 decibels.

### Astronomy Trivia

1. About how long does it take Pluto to orbit the sun: A. 248 days or B. 248 years?
2. If you wanted to view the stars in the night sky, would you use: A. an electron microscope or B. a refracting telescope?
3. What would an astronomer study? A. Rocks and minerals B. Oceans and ocean life C. Stars and planets
4. How many planets orbit our sun? A. 7 B. 8 C. 11



5. How long does it take the Earth to make one rotation on its axis? A. One day B. One month C. One year
6. Which is the largest planet in our solar system? A. Earth B. Mercury C. Mars D. Jupiter
7. Does a waxing moon look thinner or wider as each night goes by? A. Thinner OR B. Wider
8. Which element gives Mars its reddish-orange color? A. carbon B. copper C. iron
9. Which does NOT belong? A. Taurus B. Pegasus C. Aquarius D. Polaris
10. Which planet is known for its rings? A. Mars B. Jupiter C. Saturn
11. Halley's Comet was seen most recently in 1985-1986. When is it expected to return? A. 2030 B. 2061 C. 2134
12. About how long does it take sunlight to reach the Earth: A. 8 seconds, B. 8 minutes, or C. 8 hours?
13. Of these planets, which is furthest from the sun: A. Earth, B. Mercury, or C. Jupiter?
14. Which of the planets has a year of only 88 days? A. Saturn B. Mercury C. Mars
15. Which term refers to the moon: A. polar, B. solar, C. lunar, or D. stellar?

### **Earth Science**

*Also available ... Thanks to Liz LaRosa for sharing her [Earth Science Trivia powerpoint](#). She uses it as a class starter activity and challenges students to three questions per day. For more class starters, visit my [Science Starters](#) page.*

1. Are Europe and North America drifting closer together or farther apart? A. Closer B. Farther
2. Which is the largest body of water on Earth? A. Pacific Ocean B. Atlantic Ocean
3. Which does not belong? A. Shale B. Basalt C. Sandstone D. Limestone
4. Mammoth Caves in Kentucky is the longest cave system in the world. How long is it? A. 400 km B. 480 km C. 550 km
5. Which imaginary lines circles the earth below the equator (Southern Hemisphere)? A. Tropic of Cancer B. Tropic of Capricorn
6. How many times a day do high tides occur around the world? A. One B. Two C. Four D. Ten
7. There are about 9 million cubic miles of ice on Earth. Is most of it located near: A. the North pole B. the South pole?
8. On a map, are the lines that run parallel to the equator called: A. lines of longitude or B. lines of latitude?
9. If it is 2:00 pm in Havana, Illinois, what time is it in Los Angeles, California? A. 11:00 am B. Noon C. 1:00 pm D. 2:00 pm
10. Is the water in the ocean colder at the surface or 50 feet below the surface? Choose: At the surface or 50 feet below
11. Olympus Mons is a volcano almost three times as tall as Mount Everest. Is it found on A. Earth, B. Mars, or C. Venus?
12. What percent of the world's population live in the United States? A. 6% B. 12% C. 18% D. 24%

13. Is Earth the second, third, or fourth planet from the sun? Choose: 2nd, 3rd, or 4th
14. Which formation in a cave rise from the floor: A. stalagmites B. stalactites?
15. When magma cools and hardens, does it form: A. Igneous rock, B. Sedimentary rock, or C. Metamorphic rock?
16. Which is the deepest ocean? A. Atlantic Ocean B. Indian Ocean C. Arctic Ocean D. Pacific Ocean
17. Which of the following is the longest river on Earth? A. Mississippi B. Nile C. Amazon
18. Which of the following is classified as metamorphic rock? A. Basalt B. Marble C. Shale
19. How long does it take the light from the sun to reach us? A. 2 minutes B. 6 minutes C. 8 minutes D. 10 minutes
20. Which of the following is the oldest mountain range on Earth? A. Rockies (in North America) B. Andes (in South America) C. Highlands (in Scotland)
21. Which is larger ? A. Pacific Ocean B. Atlantic Ocean C. Continent of Asia D. Continent of Antarctica
22. Complete this statement: The moon's diameter is \_\_\_\_\_ the size of Earth's diameter. A. 1/8 B. 1/4 C. 1/2
23. How many degrees does the Earth turn in one day? A. 90o B. 180o C. 360o
24. Two times during the year, the sun is directly over the equator. Are the times called: A. Equinoxes or B. Solstices?
25. Which of the following is the longest mountain range on Earth? A. Andes (in South America) B. Rockies (in North America) C. Great Dividing Range (in Australia)
26. What percent of the people on Earth live north of the Equator? A. 40% B. 60% C. 80%
27. As mountains get older, mountains gradually change shape. How much does a mountain lose every 1000 years? A. 3.5 inches B. 1 foot C. 1 mile
28. In March, Daylight Savings Time begins. Do we: A. set our clocks ahead 1 hour or B. set them back 1 hour?

## ***Daily Science Trivia Answer Keys***

### **Scientists & Inventions**

1. B. Zoologist
2. C. Volcanoes
3. C. Entomologist
4. A. Germany
5. A. Oceanographer
6. C. Dinosaurs
7. B. Mountain Gorillas
8. C. Reptiles
9. C. Moths and butterflies
10. A. Physicist
11. B. Astronomy
12. A. Geologist
13. C. Seismology
14. B. Printing press
15. B. 1946 It was called ENIAC and weighed 30 tons.
16. C. Crayola Crayons
17. B. W. H. Carrier
18. A. Telephone
19. B. Sir Alexander Fleming
20. C. Telegraph

### **Insects**

1. C. 1,000,000 - Over 90,000 species have been found in North America.
2. D. Monarch butterfly
3. A. Coleoptera (beetles) This order has about 330,000 species!
4. B. 4 oz - Four ounces is equal to one stick of butter. The Goliath beetle is larger than your hand!
5. B. 90 mph
6. C. 200 times their body length - If humans could jump like a flea, we could jump about 1000 feet in the air!
7. C. 43 times its body weight - If humans had this strength, the average adult could pull about 6500 pounds!
8. D. 4000
9. B. Blister beetles
10. A. 18 inches - This is a little wider than 2 pieces of paper.
11. C. 4 to 1
12. A. Millions
13. C. 24 inches.
14. B. cockroach.
15. C. 80 times their length.
16. A. mosquito
17. C. 1,000 times a second.
18. B. 30,000
19. A. Boll weevil
20. A. 20
21. A. 1 million
22. A. 14
23. C. Dragonfly
24. D. Monarch butterfly
25. B 11
26. C. 86,000
27. B. 1,200,000
28. A. 330
29. B. one-hundredth
30. C. 36

31. B. Scarab beetle
32. D. Firefly
33. C. 2,000
34. A. 10%
35. B. 100
36. B. twice
37. A. heads

### **Dinosaurs**

1. A scientist who studies fossils is called a paleontologist (answer C).
2. The earliest vertebrates were fish (answer B).
3. The oldest fossils on Earth are 3.5 billion years old (answer C).
4. The best rock for finding fossils is sedimentary rock (answer B).
5. The term "dinosaurs" means "terrible lizards" (answer A). Dinosaurs ruled the land for about 150 million years during the Mesozoic Era.
6. Dinosaurs ruled the land during the Mesozoic Era (answer B).
7. Lizard-hipped dinosaurs belong to a category called saurischians (answer A).
8. The Tulley Monster (answer A) is the state fossil for Illinois.
9. The T-Rex ate about 7 tons (answer C) of meat each week. This would equal 12 cows!
10. The name for T-Rex means terrible lizard king (answer c).
11. Dinosaurs became extinct towards the end of the Cretaceous period (answer a).
12. This dinosaur won the record for having 1,000 teeth (answer b).
13. True- Dinosaurs used different sounds to communicate with other dinosaurs.
14. Dinosaurs are believed to have hearts with 4 chambers (answer c).
15. Sue was discovered in 1990 in South Dakota (answer a).
16. The largest dinosaur was the gigantosaurus (answer b). It was 40 feet long and weighed 9 tons. It's skull was 6 feet long!
17. The triceratops had 3 horns (answer b).
18. The Latin word "fodere" means "to dig up"(answer c).

### **Weather**

1. A return streak of lightning can reach temperatures of (answer C) 70,000 oF.
2. The lowest temperature is usually observed at sunrise - answer C.
3. Wind speed reached 231 mph (answer C) atop Mount Washington, NH on April 12, 1934.
4. Most tornadoes occur between (answer A) noon and midnight.
5. It weighed (answer A) 2 pounds. It was found in Coffeyville, KS on September 3, 1970.
6. The storm is approximately (answer A) 2 miles away. (Divide the number of seconds by 5!)
7. The hottest temperature was recorded at (answer C) Death Valley, California on July 10, 1913.
8. Yakutat, Alaska (answer A) wins this one with an average of 135 inches per year!
9. The most precipitation ever recorded for a year was (answer B) 55 inches. This record was set in 1990!
10. We average (answer A) 27 tornadoes per year in Illinois!
11. The coldest temperature on record was of (answer B) -127oF - which occurred on August 24, 1960!
12. During the snowiest winter, Peoria received (answer A) 52 inches of snow!
13. Nimbus (answer B) means rain when added to a cloud's name.
14. Peoria averages a white Christmas every three years (answer C.)
15. Lightning (answer A) is called "a thunderstorm's worst killer".
16. One inch of precipitation equals (answer C) 10 inches of snow at a temperature of 30oF.

Thanks to a visitor for the following information she received from the National Weather Service Forecast Office: "The amount of snow that falls is highly dependent upon temperature. For example, at 10 degrees F, one inch of precipitation will produce 30 inches of snow. At 20 degrees F, one inch of precipitation will produce 20 inches of snow. At 30 degrees F, one inch of precipitation produces 10 inches of snow. At freezing, one inch precipitation will produce approximately 6 inches of snow. "

17. The air pressure decreases as altitude increases; therefore, the air pressure at the top of Mount McKinley would be LOWER than it is in Havana, IL.
18. An anemometer (answer B) is used to measure wind speed.

19. NWS stands for National Weather Service (answer C).
20. You would be traveling North (answer C) to be increasing latitude.
21. Isobars are a collection of points of equal air pressure (answer C). "Iso" means equal, while "bars" refers to barometric pressure (or air pressure).
22. It would be (answer B) summer in Australia since it is located in the Southern Hemisphere.
23. Another term for spring is (answer A) vernal equinox, which occurs on March 20 or 21.
24. Black does not belong (answer C). All the others are colors in a rainbow. (The colors in a rainbow are red, orange, yellow, green, blue, indigo, and violet.)
25. 100 degrees Celsius (answer B) would be hotter than 100 o Fahrenheit.
26. Fluffy or lumpy clouds are called (answer C) cumulus clouds.
27. The windiest spot on Earth would be Antarctica (answer A). Winds reach up to 200 miles per hour at Commonwealth Bay.
28. We live in the Temperate zone (answer C).
29. C. 5:30 pm - Most tornadoes occur between 5 and 6 pm; the fewest occur between 5 and 6 am.

### **Bats**

1. A little brown bat can eat up to 1200 insects in one night (answer C).
2. The only one that is true is answer C. Fossil records have shown evidence of bats as far back as 50 million years.
3. The flying foxes of Asia have a wingspan of six feet (answer B) - about the length of a surfboard.
4. Free-tailed bats can fly 10,000 feet above the ground and reach speeds of 60 miles per hour (answer B).
5. A bat's wing has 5 fingers (answer C).

### **Health**

1. About 23 years - or one-third!
2. Cornea - transparent covering of the eye through which light is admitted.
3. 30 feet - or 5 to 6 times the person's height.
4. A baby - as children grow, some of their bones fuse together.
5. Tim in the U.S. - kids grow faster in spring than in fall. May is a spring month in the U.S. and a fall month in Australia.
6. Kidneys - these organs clean the blood and make urine to carry waste products out of your body.
7. Smelly feet - it is the scientific name for foot odor.
8. 2 million - sweat glands are all over your body.
9. True! (It's tough to kiss the very tip! I've only had one girl who came close!)
10. 200
11. Heartbeats - about 3 billion vs. about 600 million breaths in 74 years.
12. False - it just looks that way because the drying skin pulls away from the nails.
13. Under your nose - it is the vertical crease between your nose and upper lip.
14. More - it holds 16 fl. oz vs. 8.45 ounces in an average juice box.
15. 1.5 hours
16. True - the nerves in the brain stem cross over as they enter your brain.
17. Your brain - it's about 80% water vs. 78% for blood and 50% for bones.
18. Spiders - they were mashed up and placed on an aching tooth.
19. A hair on your head - eyelashes don't last past 150 days.
20. Your aunt - women have a keener sense of smell than men.
21. 100 tons
22. Snoring - the uvula is a flap of tissue at the back of your mouth.
23. A basketball - you shed up to 1.5 pounds, or 24 ounces of skin each year; a basketball weighs 20 to 22 ounces.
24. You are - children do more sleepwalking than anyone else.
- 25, 100 mph - a hurricane force.
26. World's longest hiccup attack - it lasted 69.5 years, while the sneezing attack last 978 days.
27. The earth - the human body contains 60,000 miles of blood vessels. The earth's circumference is less than 25,000 miles.

### **Chemistry**

1. The process of a liquid changing into a gas is called vaporization (answer B), which includes evaporation and boiling.
2. Nickel would have 28 electrons in each atom (answer C).

3. Electrons (answer C) is not found in the nucleus of an atom. It is found in energy levels that surround the nucleus.
4. There would be 2 atoms of oxygen (answer B) and one atom of carbon in each molecule of carbon dioxide.
5. Density is calculated by the formula mass divided by volume (answer C).
6. The amount of matter in an object is called mass (answer B).
7. A neutron is neutral (answer C).
8. Volume (answer B) is the amount of space an object takes up.
9. Gold is an element (answer A) that is found on the Periodic Table of the Elements.
10. Dry ice the solid state of carbon dioxide (answer A).
11. The atoms are most tightly packed in a solid (answer A).
12. Hot air (answer B) is lighter than cold air.
13. Magnesium (answer B) has the most electrons of the three - one atom has 12 electrons.
14. A gas (answer C) has neither a definite shape nor definite volume.
15. The chemical symbol for sodium is Na (answer B).
16. A proton has a positive charge (answer A).
17. Salt (answer C) is made from the elements sodium and chlorine.
18. A strong acid would have a pH closer to one (answer A). A pH more than 7 indicates a base; a pH of 7 indicates a neutral substance.
19. It would be called a positive ion (answer A). An atom that gains electrons would be a negative ion.
20. The chemical symbol for lead is Pb (answer C).
21. Ice melting into water is considered a physical change (answer A) since no new substance is formed.
22. The amount of matter in an object is called its mass (answer B). Volume is the amount of space it takes up!
23. It is the formula for both water and ice (answer C). Ice is the solid state of water.
24. True! In nature, diamond and graphite are pure forms of carbon.
25. There would be one atom of carbon (answer A) and four atoms of hydrogen in a methane molecule.
26. Pewter (answer C) does not belong. It is an alloy not a metallic element.

### Physics

1. Isaac Newton (answer B) is known for the Laws of Motion.
2. The study of motion, forces, and energy is called physics (answer A).
3. You would be riding in a boat (answer C). One knot equals one nautical mile per hour.
4. A strawberry appears red because it reflects red light (answer B) - it absorbs all the other colors in white light.
5. Newton's 1st Law of motion (answer A) was correct.
6. The correct way to calculate speed is distance divided by time (answer B).
7. The seesaw (answer B) is a lever.
8. The distance between two consecutive crests or troughs is called the wavelength (answer A.)
9. Waves that require a medium are called mechanical waves (answer B.)
10. The rate of change of velocity is known as acceleration (answer C.)
11. The fixed point is called a fulcrum (answer A.)
12. Newtons (answer B) are used to measure force.
13. The term ultrasonic (answer B) is used to describe sounds with frequencies above 20,000 hertz.
14. A concave mirror (answer A) resembles the inner surface of a spoon.
15. Whispering would create sounds of about 20 decibels (answer B.)

### Astronomy

1. It takes Pluto about 248 years (answer B) to orbit the sun.
2. To view the stars you would use a refracting telescope (answer B).
3. An astronomer would study stars and planets (answer C).
4. Eight planets (answer B) orbit our sun.
5. It takes the Earth one day (answer A) or 24 hours to make one rotation on its axis.
6. Jupiter (answer D) is the largest planet with a diameter of 143,000 kilometers.
7. A waxing moon appears to be getting wider (answer B). A waning moon appears to grow thinner.
8. Iron (answer C) gives Mars its reddish-orange color.
9. Polaris (answer D) does not belong. It is a star, while the others are constellations.
10. Saturn (answer C) is known for its rings.
11. Halley's Comet is expected to return in 2061 (answer B). It returns about every 76 years.

12. It takes about 8 minutes (answer B) - actually 8 minutes and 20 seconds.
13. Of the three, Jupiter (answer C) is the furthest from the sun.
14. Mercury (answer B) has a year of only 88 days.
15. The term lunar (answer C) refers to the moon.

### **Earth Science**

1. B. Farther - The Atlantic Ocean is expanding by a few centimeters each year due to sea floor spreading.
2. A. Pacific Ocean - It is twice the size of the Atlantic Ocean.
3. B. Basalt - It is an igneous rock; all the others are sedimentary rocks.
4. B. 480 km
5. B. Tropic of Capricorn - The Tropic of Cancer is in the Northern Hemisphere.
6. B. Two - The tides rise and fall twice between each moonrise.
7. B. The South pole
8. B. Lines of latitude - They run parallel to the equator and measure distance north or south of the equator.
9. B. Noon
10. 50 Feet below the surface - The temperature continues to get colder the deeper you dive in the ocean!
11. B. Mars - The base of Olympus Mons would cover the state of Nebraska!
12. A. 6%
13. 3rd - Only Mercury and Venus are closer. Don't forget the song, Welcome to Earth third rock from the sun!
14. A. Stalagmites - An easy way to remember: Stalagmites "might" reach the top, while stalactites hold "tight" on the ceiling.
15. A. Igneous rock
16. D. Pacific Ocean - It averages 4,000 meters deep.
17. B. Nile - It is 6,670 kilometers in length.
18. B. Marble - It is formed from limestone that has been subjected to great heat and pressure.
19. C. 8 minutes
20. C. The Highlands in Scotland - They are believed to be 400 million years old.
21. A. Pacific Ocean - It is three times bigger than Asia, the largest continent.
22. B. 1/4
23. C. 360o
24. A. Equinox - The vernal equinox is the start of spring and the autumnal equinox is the start of fall in the Northern Hemisphere.
25. A. Andes Mountains in South America - The mountain range spans a total of 7,240 km.
26. C. 80%
27. A. 3.5 inches
28. A. Set our clocks ahead 1 hour - Remember this phrase, "Spring forward, fall behind."