



Get some inspiration from past Science Fair questions!

Plants

- * If I remove any one of these 4 elements from a seed, will it still grow: light, water, soil, air?
- * What do plants grow best with: plant food, soil, sand, moon balls or cotton balls?
- * If I feed the same kind of plants different liquids, how will it affect their growth and health?
- * What liquid keeps cut flowers fresh the longest?
- * Do flowers absorb water with nutrients in it faster than they absorb plain water?
- * Do flowers drink hot or cold water faster?
- * Can you change the color of a plant by changing the color of its water?
- * Which flower absorbs dyewater faster: a white rose or a white carnation?
- * How long does it take different wilted flowers to revive?
- * What is more important to plants: water or light?
- * Why do plants grow toward the light?
- * Do different kinds of seeds germinate at the same rate?
- * How long will it take to grow a plant from a seed?
- * How does acid affect seed germination?
- * What happens when you give a plant too much salt?
- * Does music affect plant growth?

Animals

- * What type of birdseed do the birds in my yard like best?
- * What music makes parakeets sing louder?

- * How do birds talk to each other?
- * Why do big birds and little birds soar differently?
- * How long does it take for a tadpole to form legs they can walk on?
- * Will a rat/guinea pig learn from experience?
- * How do worms help the soil?
- * Why are worms slimy?
- * What is my pet's favorite color?
- * Who eats more, an old guinea pig, or a young one?
- * Who has a faster heartbeat: dog, cat, tortoise or snake?
- * Does one part of a puppy grow faster than another?
- * Are dogs colorblind?
- * Why do some animals go around in a circle before they lie down and fall asleep?
- * What smells do dogs like best?
- * What type of toy entertains a cat the most?
- * Do warm-blooded or cold-blooded animals produce more carbon dioxide?
- * Which butterflies will grow better in the dark or the light?
- * Which foods were easiest for dinosaurs to digest?



Light

- * What effect will the amount of light have on a solar car?
- * Can I have a motor and a light work at the same time using a single battery? If so, how?
- * Is it possible to bend a beam of light?
- * What light source is the hottest and why?
- * Is the brightness of the sun the same as the brightness of a lamp?
- * Does the color of source light affect the color of the rainbow produced?



Air Pressure & Temperature

- * Does temperature affect how a magnet works?
- * Does temperature affect smell?

- * Which color makes water hotter?
- * Does the shape of ice determine how quickly it melts?
- * Will ice cubes float in other liquids besides water?
- * How does temperature affect air pressure?
- * Which affects evaporation more - temperature or wind?
- * Which motor oil withstands heat the best?
- * Does a peep or soap get bigger in the microwave?
- * What happens to balloons when they get hot or cold?
- * Does fire need air to burn?
- * Which liquid freezes fastest: Kool-Aid, apple juice, syrup, or water?
- * Does brown sugar boil, melt and evaporate at a different rate than refined sugar water?
- * How do volcanoes explode?
- * What ingredients make the best volcanic eruption?
- * What kind of materials shrink when washed in hot water? Which ones stay the same size?
- * Which markers last the longest with their caps off?
- * In a tub of water, do soap bubbles group together in a consistent pattern, and does water temperature affect the geometric arrangement of the soap bubbles?
- * What shape bubbles can you make?
- * Does the amount of air in a basketball influence how high it bounces?
- * What effect does water temperature have on yeast bread?



Weather

- * How do rainbows form?
- * What is osmosis?
- * How does a snowflake take shape?
- * Why does some snow make better snowballs than other snow?
- * How can you tell when a storm is coming?
- * What happens to clouds when it rains or snows?
- * How do tornadoes form and where?
- * What makes the sun rise and sun set? What makes the moon visible at night?



Water & Liquids

- * How does water move through leaves?
- * Why do things like leaves stick to my trampoline even when I jump?
- * What kind of effect does hot, cold, regular tap water or saltwater have on an egg?
- * Will bottles filled with different levels of water play music?
- * Is fresh or saltwater more buoyant?
- * Will the water in a closed environment evaporate or will it recycle into the plants?
- * What liquids flow the fastest?
- * Of common liquids which ones are acids and which ones are bases?
- * How do different liquids affect color?
- * How do icicles form?
- * What filters dirty water best: cotton balls, sand, or wood chips?
- * Will water with salt evaporate faster than water without?
- * How is muddy water cleaned so it is pure water?
- * Can water be used as a power source?



Electricity, Magnetics & Sounds

- * Does all metal stick to a magnet?
- * Can you make a magnet with electricity?
- * Can you see magnetism?
- * Do different materials and techniques in making an electromagnet affect its magnetic field?
- * How many potatoes/lemons are needed to be an energy source to run a clock/light bulb?
- * How do radio waves work?
- * What does electricity go through best: wire or pencil?
- * Will a light bulb stay lit longer with a melon or an orange?
- * Which materials conduct electricity and which materials are magnetic and why?
- * How does a light switch work?
- * Does the power from a wind turbine vary with the wind speed?

- * Does the size and power of a telescope determine how big, bright, and clear a star appears?
- * How does electricity flow through different materials?
- * How do electrical circuits work and is electricity only conducted through metal?
- * Can you find the percentages of zinc and copper in a penny by measuring its weight and volume?
- * Which frozen pipe will burst first brass, copper, iron, galvanized, and PVC?
- * What causes a solar eclipse?
- * Which battery brand lasts the longest, and does cold temperature affect the results?
- * Can sound really break glass?



Food & Cooking

- * What substance cools your mouth the fastest after eating spicy food?
- * Does lighter fluid and the amount of lighter fluid on charcoal briquets speed up cooking time?
- * How and why do tomatoes eat through aluminum foil?
- * Do tomato plants need sleep?
- * How long does it take a grape to turn into a raisin?
- * How does popcorn pop?
- * Which brand of popcorn pops the most kernels?
- * How does changing a recipe affect the results? What happens if I leave an ingredient out?
- * What is the perfect amount of baking soda for a batch of chocolate chip cookies?
- * Do chocolate chip cookies rise better with baking soda or baking powder?
- * What makes cookies taste good?
- * Which brand of gum has the flavor that lasts the longest?
- * Which kind of gum blows the biggest bubbles?
- * Can people tell the difference between store brand and national brands?
- * Do people like Minute Maid orange juice, Tropicana orange juice or Kroger's concentrate orange juice the most or least?
- * Does the brand of ice cream affect the taste?
- * How much vitamin C do juices contain?
- * How much sugar is in a can of soda and what does it look like?
- * Which pop will explode and travel the farthest?

- * What solids can cause a chemical in a carbonated drink? Why?
- * What fruit dries the fastest in a dehydrator?
- * What nut contains the most energy?
- * Why does a candy bar give you a quick energy burst then make you want more?
- * Which drink is the best for you before you exercise?
- * What type of potato chips has the most grease and which do people prefer?



Chemical Affects

- * Does mold on different food grow better in cold, dark places or warm, lighted places?
- * Do different molds grow on different types of breads?
- * Does bread mold faster with or without preservatives?
- * Which type of cheese gets moldy first?
- * What kinds of breads grow mold faster?
- * What goes bad faster, milk or cream cheese?
- * Can I grow penicillin mold at home?
- * How does an apple rot when it's whole, cut in half, and cut in little pieces?
- * Will club soda remove stains better than stain remover?
- * Which juice (OJ, apple, cranberry, or grapefruit) will clean a penny the quickest?
- * How much yeast does it take to blow up a balloon in a bottle?
- * Why do things taste sweet or sour?
- * What happens when a bowls of ketchup and ranch dressing are left unrefrigerated for 30 days?
- * What is fermentation and what causes it to happen?
- * Why does cabbage juice change color?
- * Which makes the best sandcastle: milk, orange juice, white grape juice, and Sprite?
- * Why do dog treats and graham crackers stay hard in baby oil, but break-up in water?
- * Can vinegar dissolve an eggshell and why? What is left?
- * What happens when you put different foods in vinegar?
- * Which fruits and vegetables will float in water?



Chemistry

- * What batteries last longer – alkaline or rechargeable?
- * Can ordinary batteries be recharged?
- * Can a nail be made rustproof?
- * How does metal rust?
- * Which paper towel is the most absorbent?
- * What tape sticks to paper the best: Office Max or 3M? Why?
- * What is the effectiveness of different sunscreen products for blocking UV rays?
- * Which place has the most germs: home or school?
- * Does slime stretch more with hot, warm, or cold air?
- * Does deodorant soap really kill bacteria?
- * Which anti-perspirant works the best?"
- * Which kitchen ingredient dissolves fastest in water?
- * Which brand of dishwashing detergent makes the biggest bubbles?
- * Which clothes soap works the best?
- * Are some molecules bigger than others?
- * Which color of sunglasses blocks the most sunlight?
- * Which type of invisible ink shows up on what type of paper the best?
- * Why can hydrogen peroxide be used as a disinfectant and for rocketry?
- * How does Airborne react in different liquids?



Crystals & Rocks

- * Why do stones split or crack?
- * Does more sugar make the crystals go faster?
- * How are crystals different?
- * Do crystals grow better in sunlight or in shade?
- * Will crystals grow without a solid mass such as a rock to attach to?
- * What differences will occur when different salts vs sugar are used as a crystal's main base?

- * What different materials can you use to make stalactites?
- * Why do some kinds of rocks bubble when put acid or vinegar on them?
- * Which rocks of the same size are the heaviest?

Aerodynamics & Physics

- * If I put three different size marbles up on an incline plane, would they have energy? Which one will have the most?
- * Which of my hot wheels cars goes the fastest?
- * Which car is faster – lighter or heavier?
- * Which ramp coating will offer the least resistance to a rolling toy car?
- * Will my submarine sink deeper and faster in salty water or soda?
- * What keeps a metal ship from sinking?
- * Why do airplanes fly?
- * Which paper airplane design keeps the airplane in the air the longest/goes fastest?
- * Will a hot air balloon rise faster in cold or hot weather?
- * Can I make a balloon float with just a hairdryer?
- * Will a balloon blow up inside a bottle?
- * Will a foam spaceship fly better than a paper spaceship?
- * What structure will hold better triangle or square?
- * How high and how much liquid comes out of a soda bottle with mentos?
- * What ball can you throw further?
- * How much weight can Jello hold?
- * What type of bridge holds the most weight?
- * Does the size or shape of a seashell affect whether you can hear the ocean inside it?
- * How do whirlpools occur?
- * Why am I right side up on one side of the spoon and upside down on the other?
- * Why do some objects float and others sink? Does the size or shape matter?

Human Body, Senses & Behavior

- * Do children remember numbers better by hearing or seeing?
- * What is the effect of light on the pupil?
- * Do our eyes help our balance?
- * How do you hear sounds?
- * How far away can you hear and can you use a machine to hear for you?
- * How important is smell in being able to taste food?
- * Can we really taste the difference between waters?
- * Does age or gender impact memory?
- * Do people have a better visual or auditory memory?
- * Does drinking caffeine affect memory?
- * Which drink makes swallowing a pill easier and does the same drink dissolve it faster?
- * Does drinking hot chocolate affect the minute-math test?
- * Do my family members have common shapes in their fingerprints?
- * Which family member has the grossest mouth?
- * What is the percentage of people that observe the crosswalk signal?
- * What changes your body temperature?
- * How is a boy's average body temperature different from a girl's temperature?
- * Does my height change from the time I go to bed and wake up?
- * In what conditions do bacteria grow the best on your hand?
- * Does double dipping cause more bacteria than regular dipping?
- * What makes you burp?
- * Does hair or fur grow faster?
- * Who blinks more in a minute? My dog and me, or my dad and me?
- * If you tell a lie, will your body give you away?
- * How effective are subliminal messages?
- * Do different types of music affect your math test grade?
- * Does being in a hot tub raise or lower your blood pressure?
- * Do adults get dizzy faster than kids?
- * Is it easier to say a tongue-twister if you read it and hear it, or if you just hear it?
- * How does sweat make people cool?