

# CHRISTMAS SCAVENGER HUNT

2017 COMPOUND CHEMISTRY ADVE

CHRISTMAS "CRACKERS" ARE PAPER AND CARDBOARD TUBES CONTAINING  
 \_\_\_\_\_  
 WHICH DENOTES WHEN FRICTION IS CREATED AS YOU TUG ON THE ENDS.

**PARTICULAR ORDER BELOW!** **HAPPY HOLIDAY HUNTING!**

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WHEN GINGEROL IS HEATED, THE COMPOUND \_\_\_\_\_  
IS PRODUCED, GIVING GINGERBREAD ITS SWEET AROMA.

## The Smell of Chocolate

WHAT TYPE OF COMPOUND CONTRIBUTES TO THE NUTTY, COCOA-Y AROMA OF CHOCOLATE?



## The Orange Peel Flamethrower

SQUEEZING AN ORANGE INTO A FLAME (CAREFULLY) CAN IGNITE THE OILS CONTAINING \_\_\_\_\_ WHICH GIVES CITRUS FRUITS THEIR SCENT.



## Gingerbread Chemistry

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## Christmas Tree Aroma

ALPHA- AND BETA- \_\_\_\_\_ ARE RESPONSIBLE FOR "CHRISTMAS TREE SMELL".



## Making Fake Snow

SODIUM POLYACRYLATE IS A POLYMER USED TO MAKE FAKE SNOW, WHICH ABSORBS \_\_\_\_\_ ITS WEIGHT IN WATER.



## The Chemistry of a Christmas Cracker

CHRISTMAS "CRACKERS" ARE PAPER AND CARDBOARD TUBES CONTAINING \_\_\_\_\_ WHICH DETONATES WHEN FRICTION IS CREATED AS YOU TUG ON THE ENDS.



## Snow Globe Chemistry

BENZOIC ACID IS USED TO MAKE "SNOW" IN SNOW GLOBES BY \_\_\_\_\_ THE WATER TO DISSOLVE IT. AS THE WATER \_\_\_\_\_ A PRECIPITATE IS FORMED.



## The Relighting Candle Trick

YOU CAN RELIGHT A CANDLE WITHOUT TOUCHING A FLAME TO THE WICK BY LIGHTING THE SMOKE OR \_\_\_\_\_ JUST AFTER YOU BLOW IT OUT.



## Candy Cane Chemistry

WHAT IS THE COMPOUND THAT MAKES YOUR MOUTH FEEL COLD AFTER EATING PEPPERMINT?



## Christmas Light Chemistry

THIS SEMICONDUCTOR IS ONE OF THE MAIN ELEMENTS INVOLVED IN THE CREATION OF COLORED LED LIGHTS.



## Bell Metal Compositions

BELLS ARE USUALLY MADE OF BRONZE, WHICH IS AN ALLOY OF COPPER AND TIN ALONG WITH OTHER METALS. WHAT IS THE PERCENT MASS OF COPPER IN BRONZE?



## The Holly and The Ivy

HOLLY AND IVY CONTAIN ALKALOIDS WHICH ARE MILDLY TOXIC. SURPRISINGLY ONE OF THESE ALKALOIDS, \_\_\_\_\_ IS ALSO FOUND IN SMALL AMOUNTS OF CHOCOLATE.



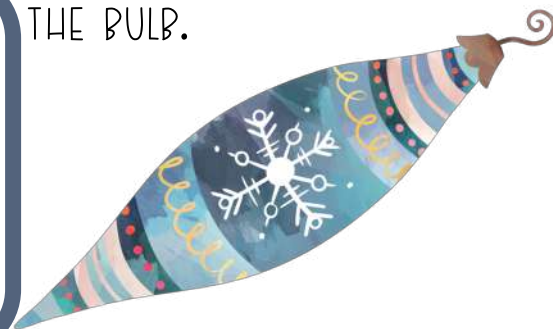
## Poinsettia Plant Indicator

POINSETTIAS CONTAIN A CLASS OF COMPOUNDS CALLED \_\_\_\_\_ THAT CAN BE USED AS pH INDICATORS.



## Silver Bulbs

TO MAKE SILVER ORNAMENTS, SILVER NITRATE, FOLLOWED BY AMMONIA, AND FINALLY \_\_\_\_\_ ARE USED TO PRODUCE THE SHINY SILVER COATING INSIDE THE BULB.



## Wrapping Paper and Tape

BOTH WRAPPING PAPER AND TAPE ARE BASED ON THE PLANT CARBOHYDRATE \_\_\_\_\_ (THE FIBER IN PLANT CELL WALLS).



## Mulled Wine Chemistry

EUGENOL AND \_\_\_\_\_ HELP GIVE MULLED WINE, A SEASONAL DRINK, ITS FLAVOR.





## Poisonous Mistletoe

MISTLETOE CAN BE TOXIC IF INGESTED DUE TO THE PRESENCE OF THESE TWO TOXIC PEPTIDES.



## The Smell of Winter Fires

THIS TYPE OF COMPOUND PRODUCES A SPICY WOOD AROMA.



## Cranberry Chemistry

CRANBERRIES HAVE \_\_\_\_\_ EFFECTS, BUT EVIDENCE FOR THESE EFFECTS IN HUMANS IS CURRENTLY LIMITED, AND MORE RESEARCH IS REQUIRED.



## The Aroma of Frankincense

HOW MANY CARBON ATOMS ARE IN OLIBANIC ACID?



## Flaming Christmas Puddings

THE BLUE FLAME IS DUE TO COMPLETE REACTION OF THE \_\_\_\_\_ VAPORS WITH OXYGEN IN THE AIR.



## Brussels Sprouts Chemistry

SINIGRIN AND PROGOITRIN CONTRIBUTE TO THE \_\_\_\_\_ OF SPROUTS.



## Christmas Turkey

WHAT COMPOUND GIVES TURKEY ITS SWEET, CARAMEL-LIKE FLAVOR?



## The Chemical History of Tinsel

TINSEL WAS ORIGINALLY MADE FROM STRANDS OF \_\_\_\_\_ WHEN IT WAS FIRST INVENTED AROUND 1610 IN GERMANY.

