

**North Pole Bureau Of Investigations**  
**Case #1225: Case of the Christmas Cookie Mystery**

Name \_\_\_\_\_

Mrs. Claus needs your help! Each Christmas, Mrs. Claus makes a batch of her special sugar cookies to give Santa all the energy he needs to deliver presents to all the good little boys and girls around the world. A bad little elf has snuck into the kitchen and messed up all the special baking powders. He has left a note with three mystery bags of white powder.



The North Pole Bureau of Investigations has provided samples of six white powders found at Santa's house and the three mixtures left by the elf. Without your help, Mrs. Claus will not be able to make her cookies and there will be no Christmas!

**Safety Rules - Complete each statement as they are discussed in class.**

- ✓ Do not \_\_\_\_\_ substance or \_\_\_\_\_ anything without permission. Also be careful not to cross \_\_\_\_\_ the samples by mixing a little bit of one with another on accident!
- ✓ Do not \_\_\_\_\_ any of the substances – even if you know what it is. This would also include \_\_\_\_\_ your hands to prevent getting anything in your mouth, eyes, or nose.
- ✓ \_\_\_\_\_ if you need to smell something – don't \_\_\_\_\_ right from the container.
- ✓ Wear \_\_\_\_\_ and an \_\_\_\_\_ while doing the tests.
- ✓ Pull back long \_\_\_\_\_, push up your \_\_\_\_\_, and keep \_\_\_\_\_ away from the flame when testing at the heat station.
- ✓ Keep the \_\_\_\_\_ on the containers when you are not using them. Also be sure to clean up \_\_\_\_\_ immediately.
- ✓ Tell your teacher if you have an \_\_\_\_\_ or need \_\_\_\_\_.
- ✓ Follow your teacher's \_\_\_\_\_.

**Are there other rules we need to follow?**

**What do we need to do to obtain accurate and reliable results?**

**Case #1225: EVIDENCE CHART**

Name \_\_\_\_\_

Sample	Description	Water	Vinegar	Iodine	Heat	What is it?
1						
2						
3						
4						
5						
6						
7						
8						

**MYSTERY MIXTURES CHART**

Sample	Description	Water	Vinegar	Iodine	Heat
A					
B					
C					

**DONE? FOLLOW YOUR TEACHER'S DIRECTIONS TO PREPARE THE FINAL REPORT FOR THE North Pole Bureau of Investigations!**