



Type your name below and select Start Game to begin.

Critical Thinker

Clear

START GAME



# SCIENCE DETECTIVE®

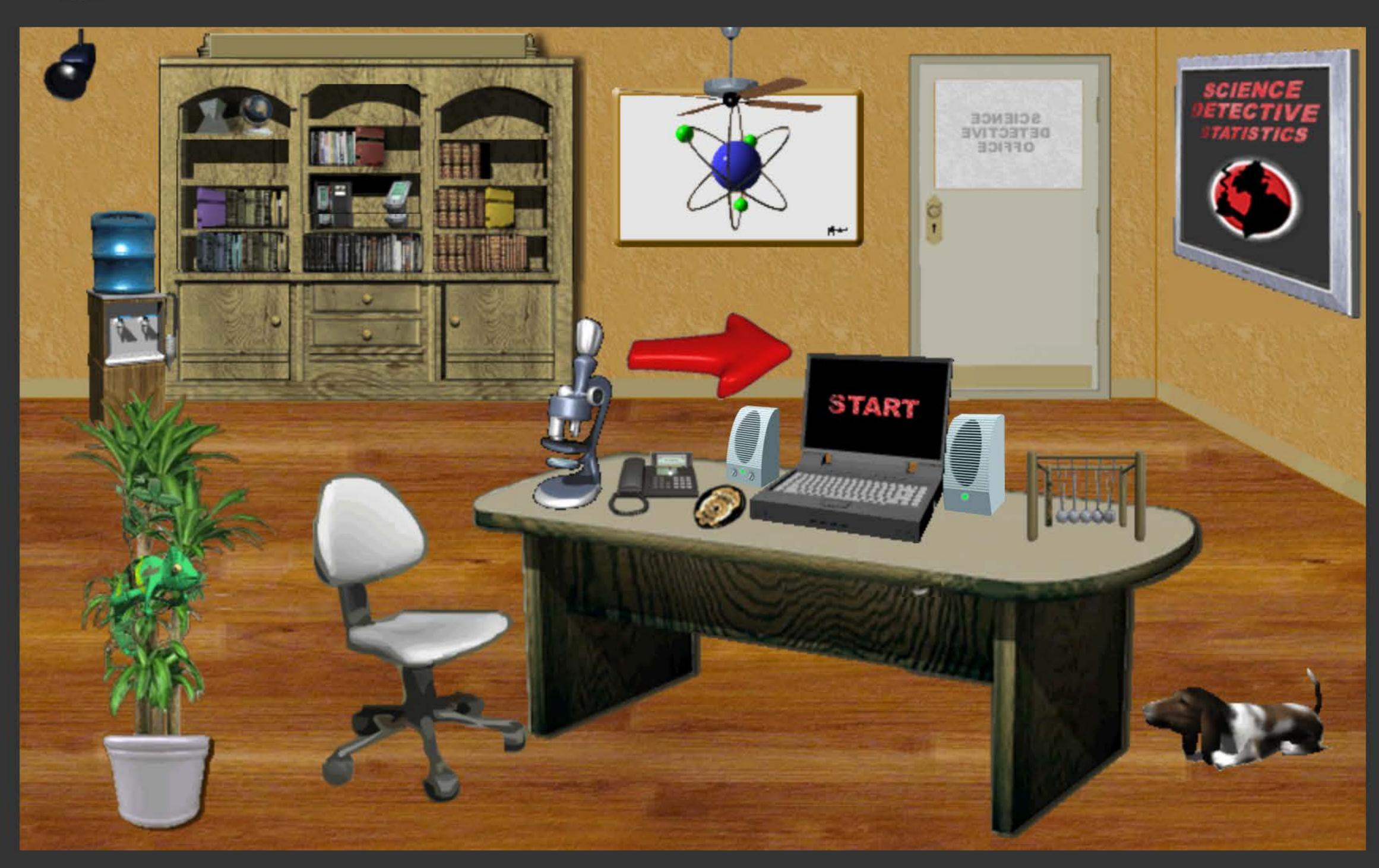
INTRO

CASES

STATS

HELP

**NEW USER** 



## Welcome, Detective Critical Thinker!

### QUICK INSTRUCTIONS:

Select a Case File button from the list below to investigate a case. Select the Status button to restart a case. Try to earn all 51,900 points!



#	CASE FILE	STATUS	TOPIC	TRIES	BADGE PTS	SCORE (%)
1.	Observable Physical Properties of Objects & Materials	Complete	Physical Science	1	1120	93
2.	Measuring Physical Properties	Complete	Physical Science	1	1100	92
3.	Classification of Matter	Incomplete	Physical Science	1		
4.	States of Matter		Physical Science			
5.	Change of Phase		Physical Science			
6.	Position, Distance, and Motion		Physical			

# Level 3 Progress Meter Total Points

# Rank:

2220

Official 2-Star Junior Detective



ELP NEW USER

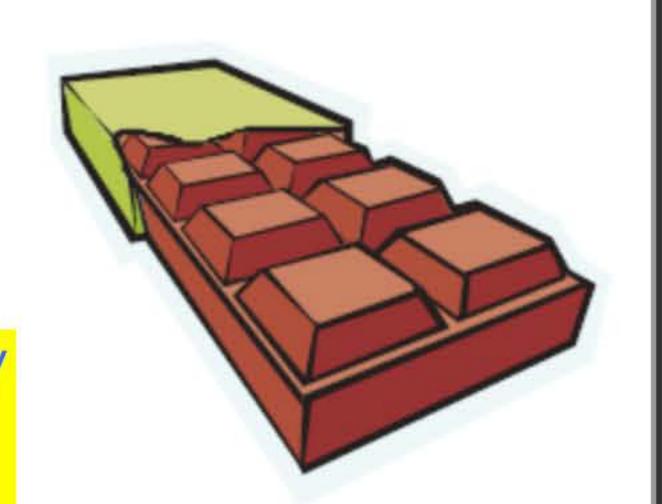
### PLAYER POINTS

200 / 1200 pts.

# 1. Observable Physical Properties of Objects & Materials

Have you ever seen the color of a snowflake? Have you felt the softness of a pillow or the roughness of sandpaper? These qualities that describe objects or materials are their **properties**.

Physical properties are properties that we can easily observe with our **senses**—by seeing, hearing, touching, or smelling. Color, hardness, texture, size, shape, and smell are physical properties.



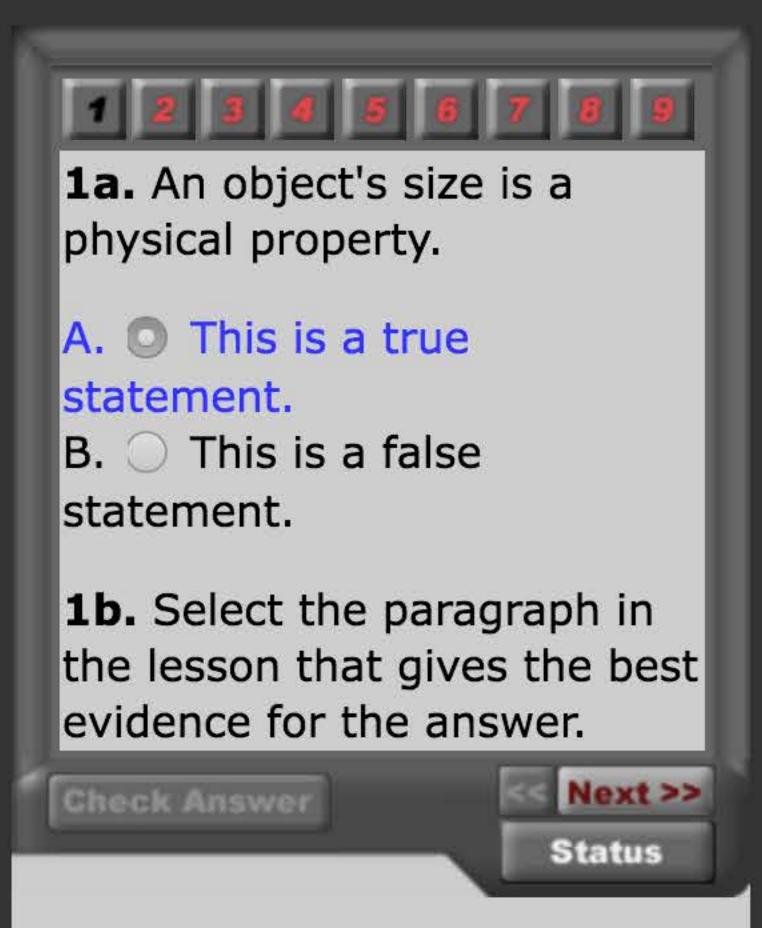
**Text Size** 

Image △ ▽

Physical properties are helpful when we need to identify substances. Sometimes two different substances can appear the same until we observe them more closely. For example, both salt and sugar are white, are made up of small crystals, and look grainy. You might not be able to tell them apart by just looking, though. A piece of brown plastic might look just like a piece of chocolate. However, they melt at different temperatures. If you hold them in your hand awhile, you'll see which is the real chocolate by the mess it makes!

The temperature at which a substance starts changing from solid to liquid is its **melting point**. When a substance boils, it is at its **boiling point**. The melting point and the boiling point are physical properties of a substance. Some melting and boiling points are listed below.

Melting points, boiling points, and other kinds of information can be displayed by



### **Correct Answer**

Great Job, Detective!



Physical properties (like size, color, or hardness) are things that we can easily observe with our senses (seeing, hearing, touching, smelling, or tasting).

# **Scoring Statistics**

All Activity-based scoring data comes from your last attempt.

### **Critical Thinker**

Overall Scoring Summary									
AVERAGE SCORE	HIGH SCORE	LOW SCORE	ACTIVITIES COMPLETED	UNFINISHED ACTIVITIES	UNATTEMPTED ACTIVITIES				
93%	93%	92%	2	1	38				

Overall Scoring Details (click Activity name for more specific details) PARTIALLY INCORRECT HINTS **TOTAL** CORRECT TOPIC ACTIVITY POINTS SCORE STATUS ATTEMPTS QUESTIONS CORRECT Observable Physical Physical 0 of 5 1120/1200 93% Complete Properties of Science Objects & <u>Materials</u> Physical Measuring 0 of 5 1100/1200 Complete 10 0 <u>Physical</u> Science <u>Properties</u> Physical Classification Incomplete 0 of 2 9 Science of Matter