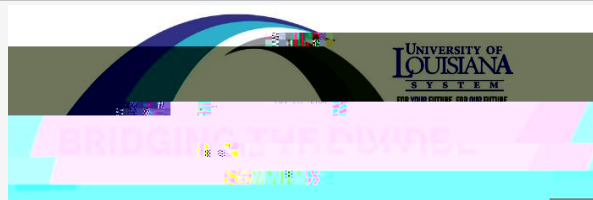


BRIDGING THE DIVIDE

SEVENTH GRADE

Dr. Jean Fotie
Department of Chemistry and Physics
Southeastern Louisiana University



OVERVIEW

Generality of laboratory notebook

Selection of laboratory notebook

Notebook labelling

What should be recorded in the laboratory notebook

Who owns the laboratory notebook

Laboratory notebook ethics

Summary

THE DISCOVERY OF HIV-1

1983: Luc Montagnier published a paper in Science, describing a retrovirus called LAV

[Robert Gallo and the Co-Discovery of HIV \(verywellhealth.com\)](#)

[Crewdson, John \(1989-11-19\). "The Great AIDS Quest: Science under the microscope". \(Special section, 16 pp.\) Chicago Tribune.](#)

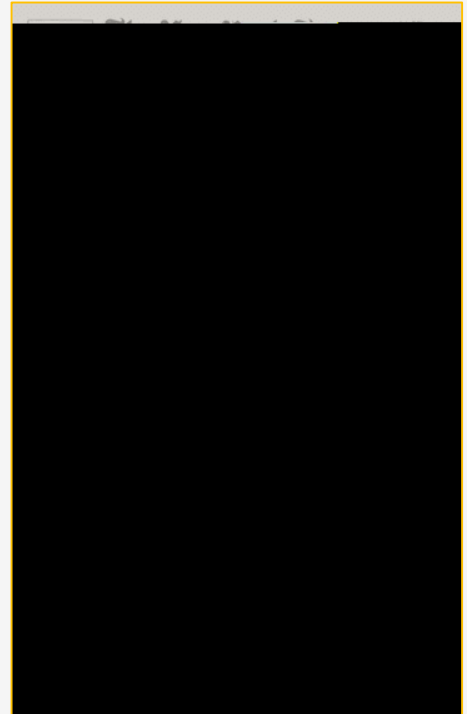
U.S. AND FRANCE END RIFT ON AIDS

Lawrence K. Altman (April 1, 1987)

President Reagan and Prime Minister Jacques Chirac of France ended a festering international scientific dispute today.

2008: The Nobel Prize for Medicine was awarded to French co-

"And the Bank Played On" by Randy Shilts

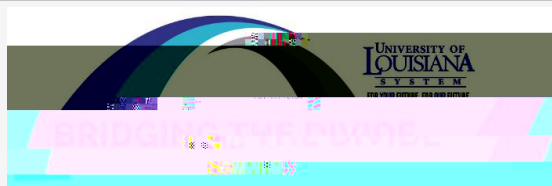


PHYSICAL LABORATORY NOTEBOOK



Leonardo Da Vinci Dmitri Mendeleev Marie Curie Thomas Edison

A large, multi-colored collage representing the work of Leonardo Da Vinci, Dmitri Mendeleev, Marie Curie, and Thomas Edison. The collage is divided into four horizontal sections, each corresponding to a scientist. The top section is yellow and contains images of Leonardo's sketches, including a flying machine and a helicopter. The second section is green and features Dmitri Mendeleev's periodic table of elements. The third section is blue and shows Marie Curie's laboratory equipment and handwritten notes. The bottom section is red and depicts Thomas Edison's light bulb and other inventions. The collage is overlaid with various icons, including flags, lightbulbs, and gears, symbolizing innovation and scientific progress.



LAB NOTEBOOK IDENTIFICATION

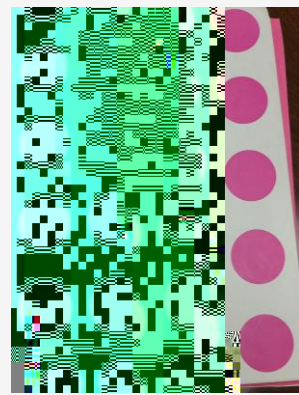
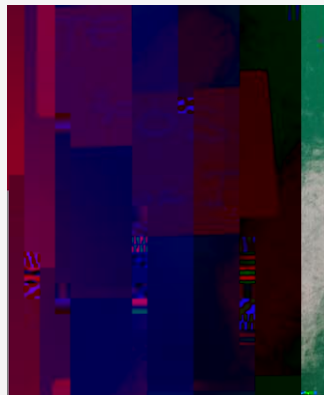
Easy identification to the owner of the notebook

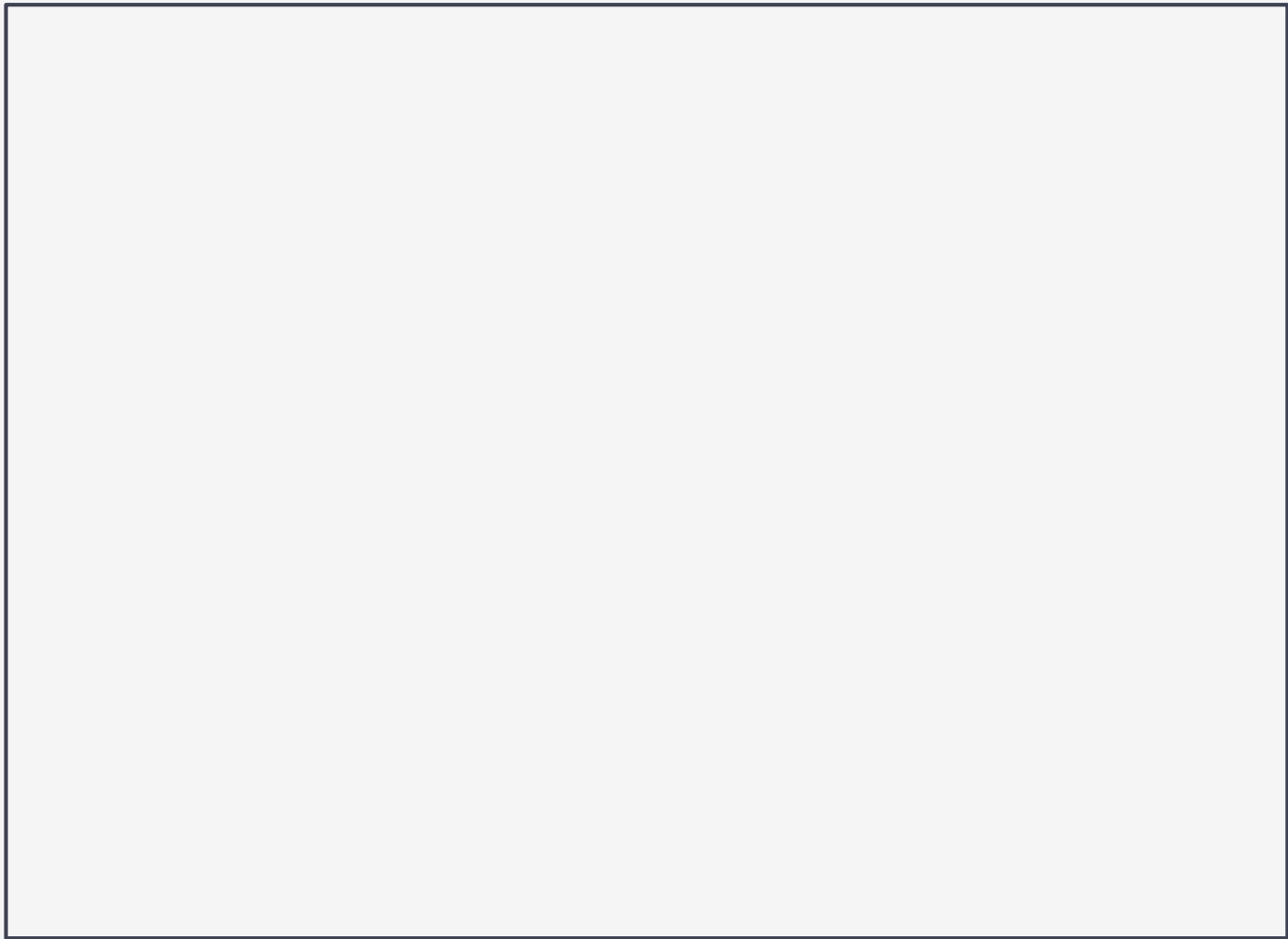
Ability to easily reference collected data to a given entry in the corresponding notebook

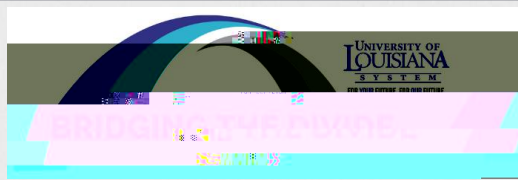
Use of name/initials of researcher, name of the project or a unique code

LAB NOTEBOOK	
Your Name	

Professor's Name	_____
Semester/Year	_____







CONTENTS OF LABORATORY NOTEBOOK

Inside cover or cover page

Period the lab notebook was used

Project name(s)

The address of the laboratory or office of researcher

Table of contents

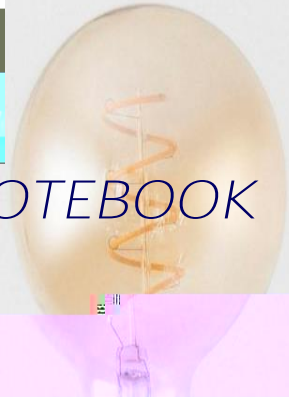
Each page numbered and dated



Page #	Dates	Title of the experiment
--------	-------	-------------------------

1	06/01/	
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CONTENTS OF LABORATORY NOTEBOOK

Date and titles each experiments

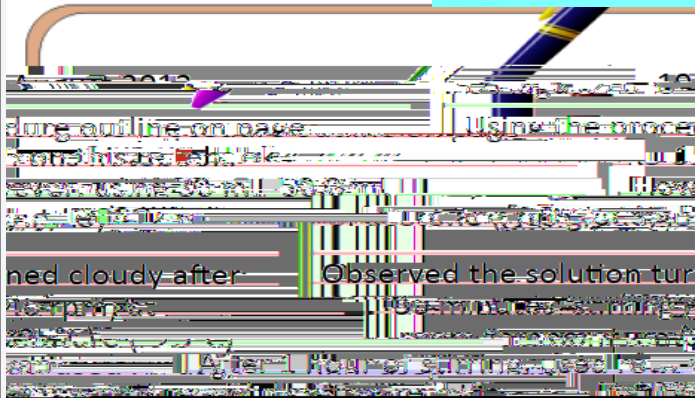
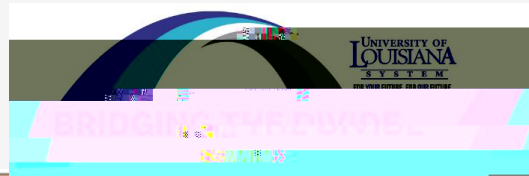
Provide all the experimental details

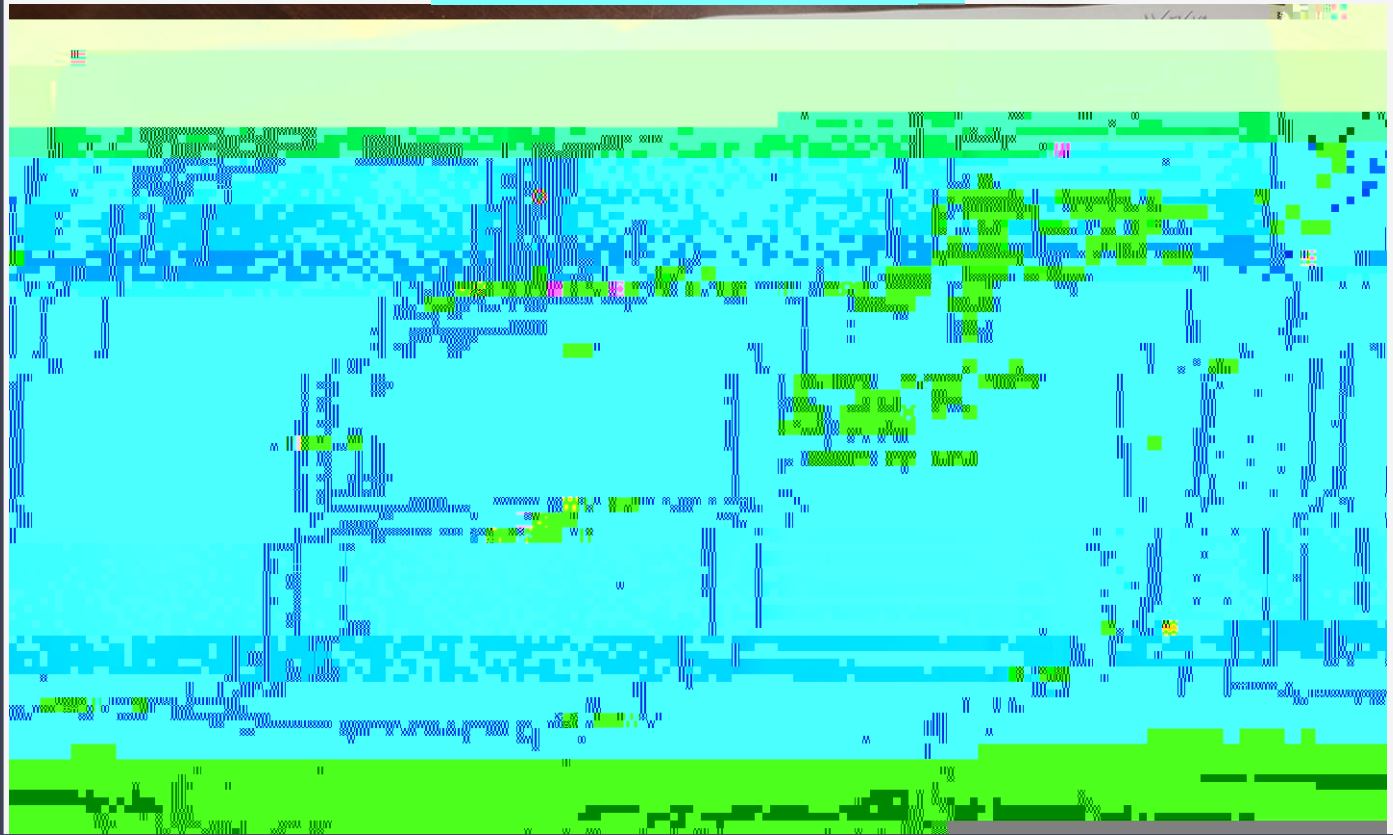
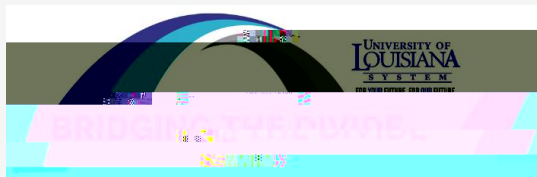
Protocols, calculations, reagents, equipment used during experiments

Observations: anything planned or unplanned, raw data, permanently attached with reference to data

Conclusions

If multiple researchers using same notebook, name the author of each entry



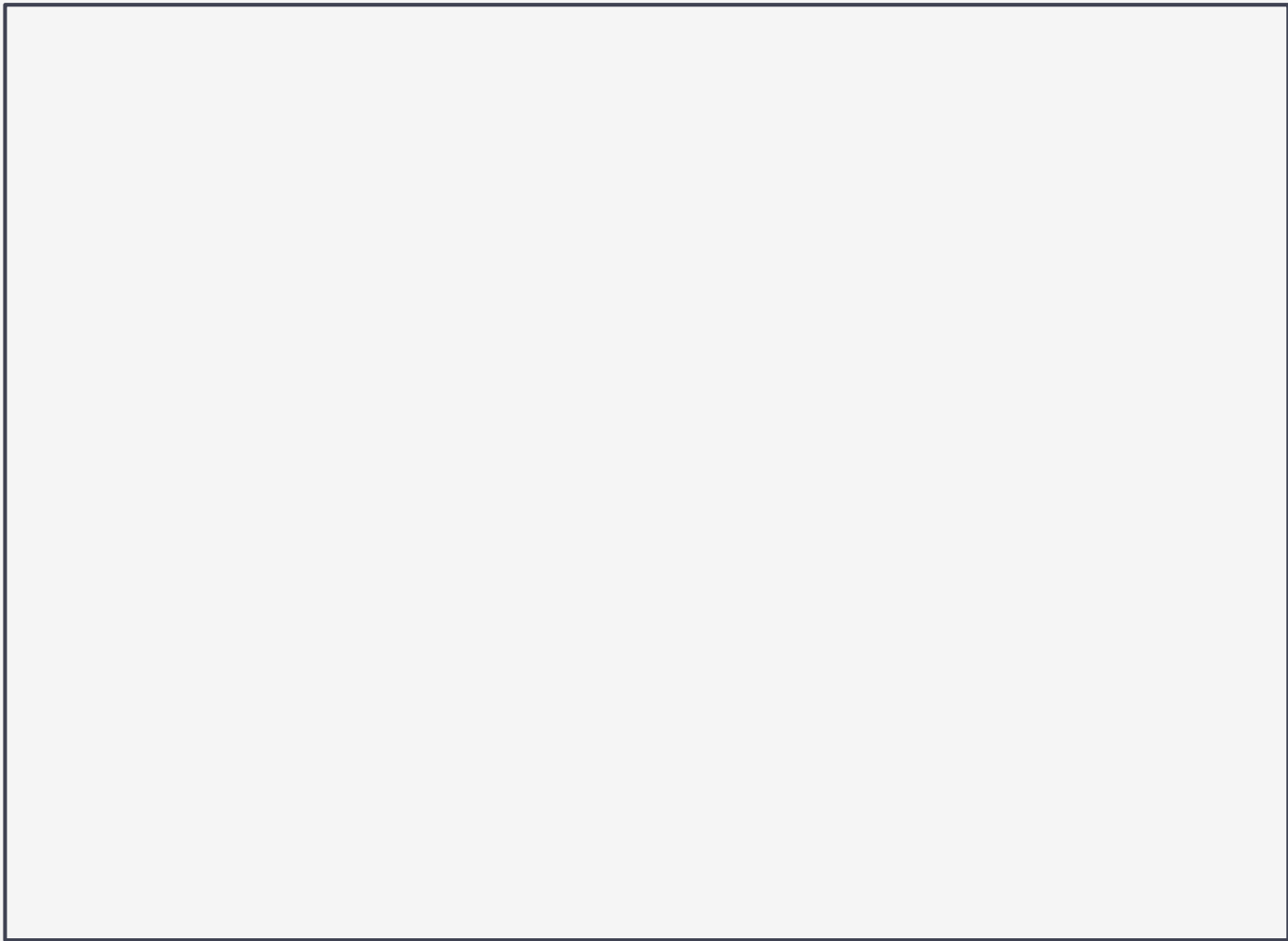


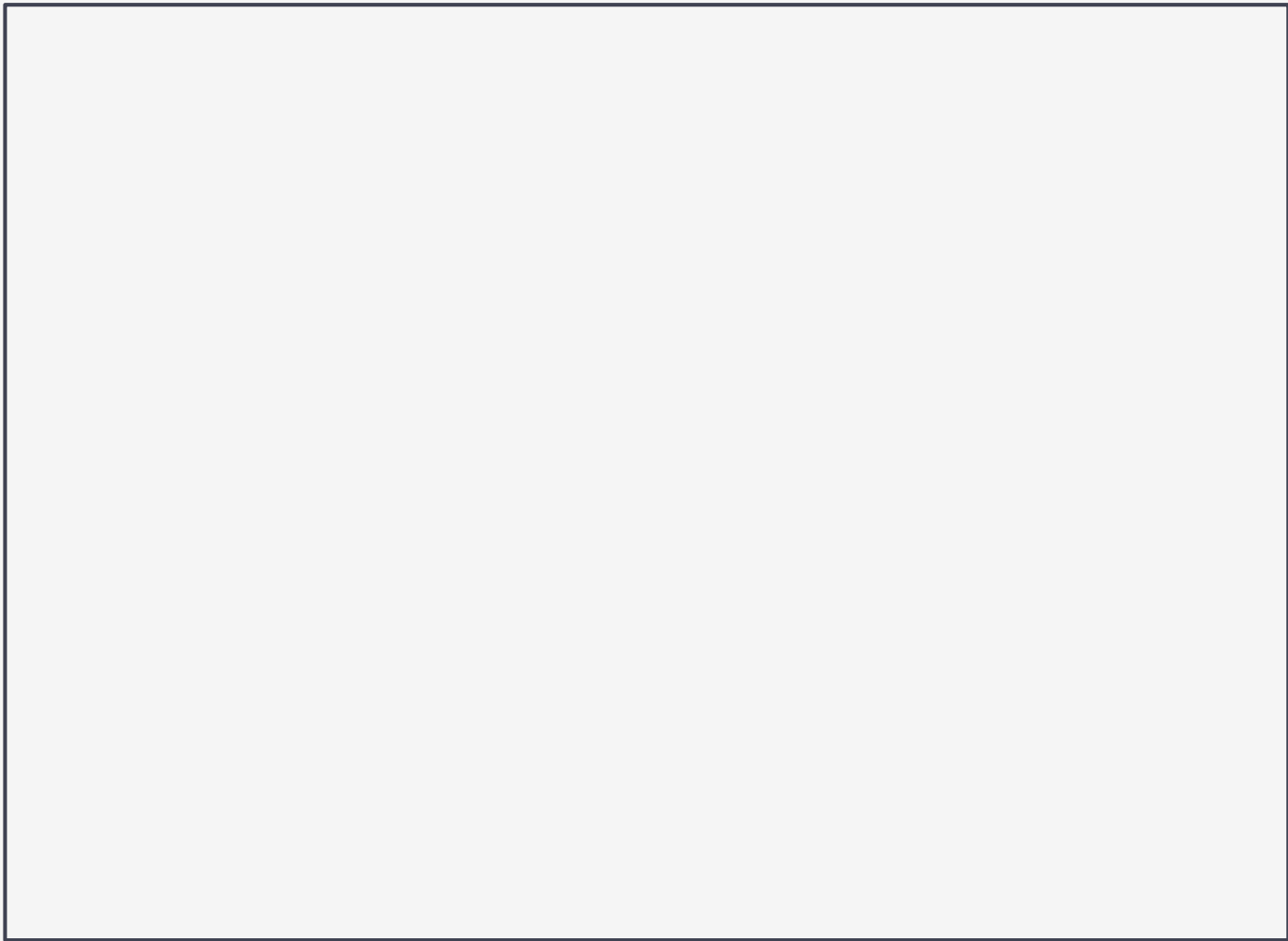
TIPS FOR NOTEBOOK HOUSEKEEPING

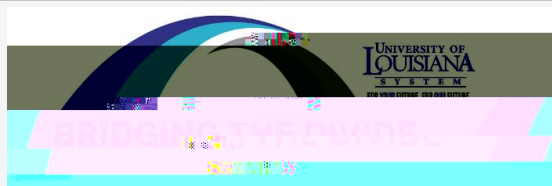
Use an ink pen (not Pencil) to write in notebook

Write as you go: do not write important results on scratch paper

In







SELECTING A LABORATORY NOTEBOOK

Electronic lab notebook (ELN)

Strong and easy to use note-taking capabilities

"Secured" and Easily navigable

Allows for imbedded data and images

Easy link between pages

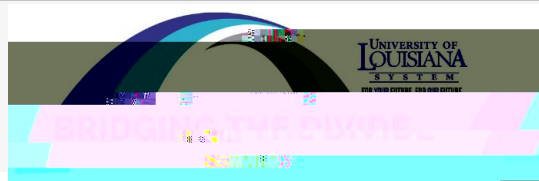
Lock notebook pages

Secure login

Audit trail – timestamp for changes and by whom

Allows for witness signatures

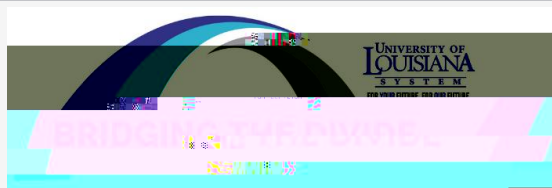
Ability to easily export information in different file types



Search notes

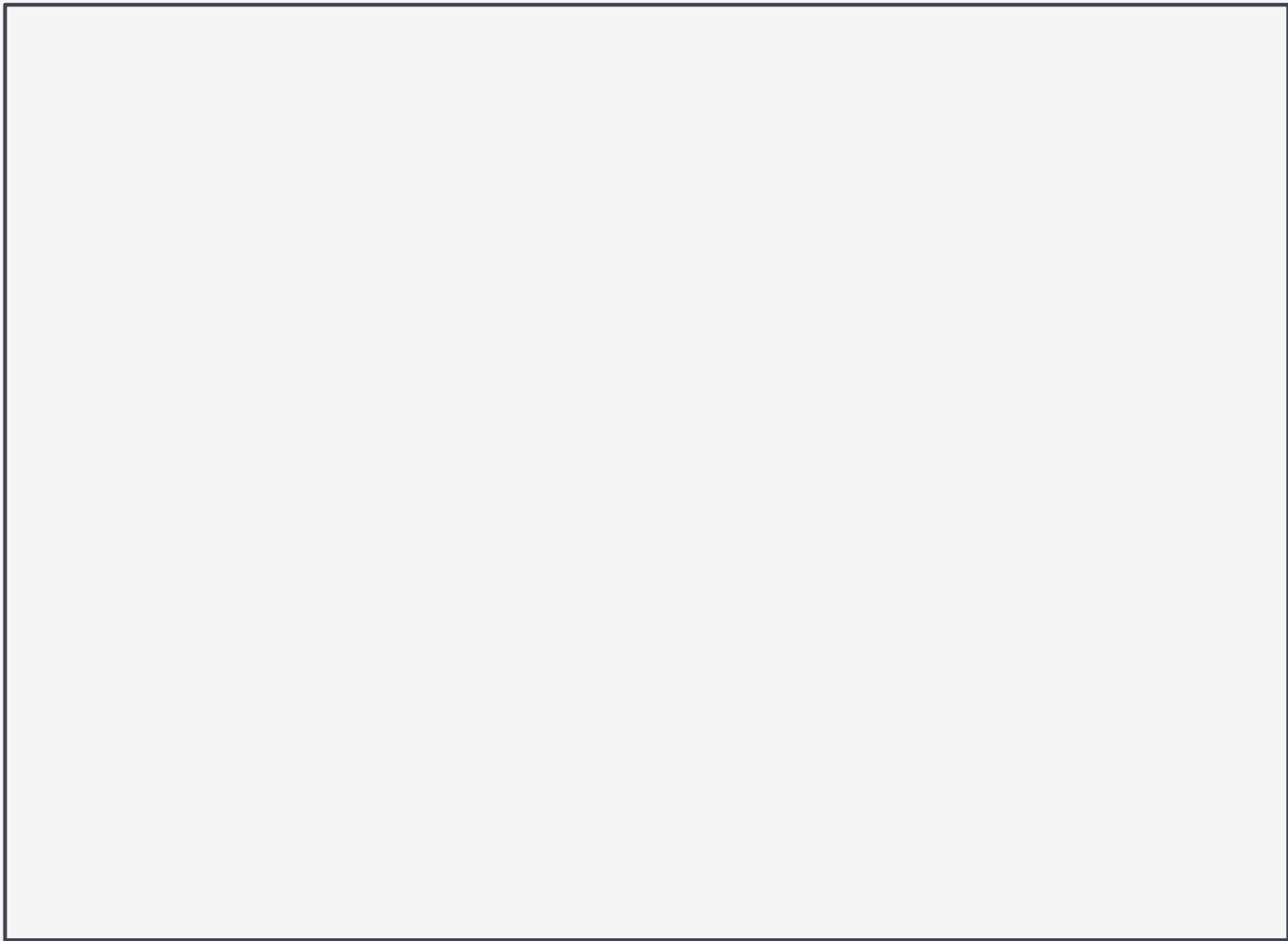
Table of Contents

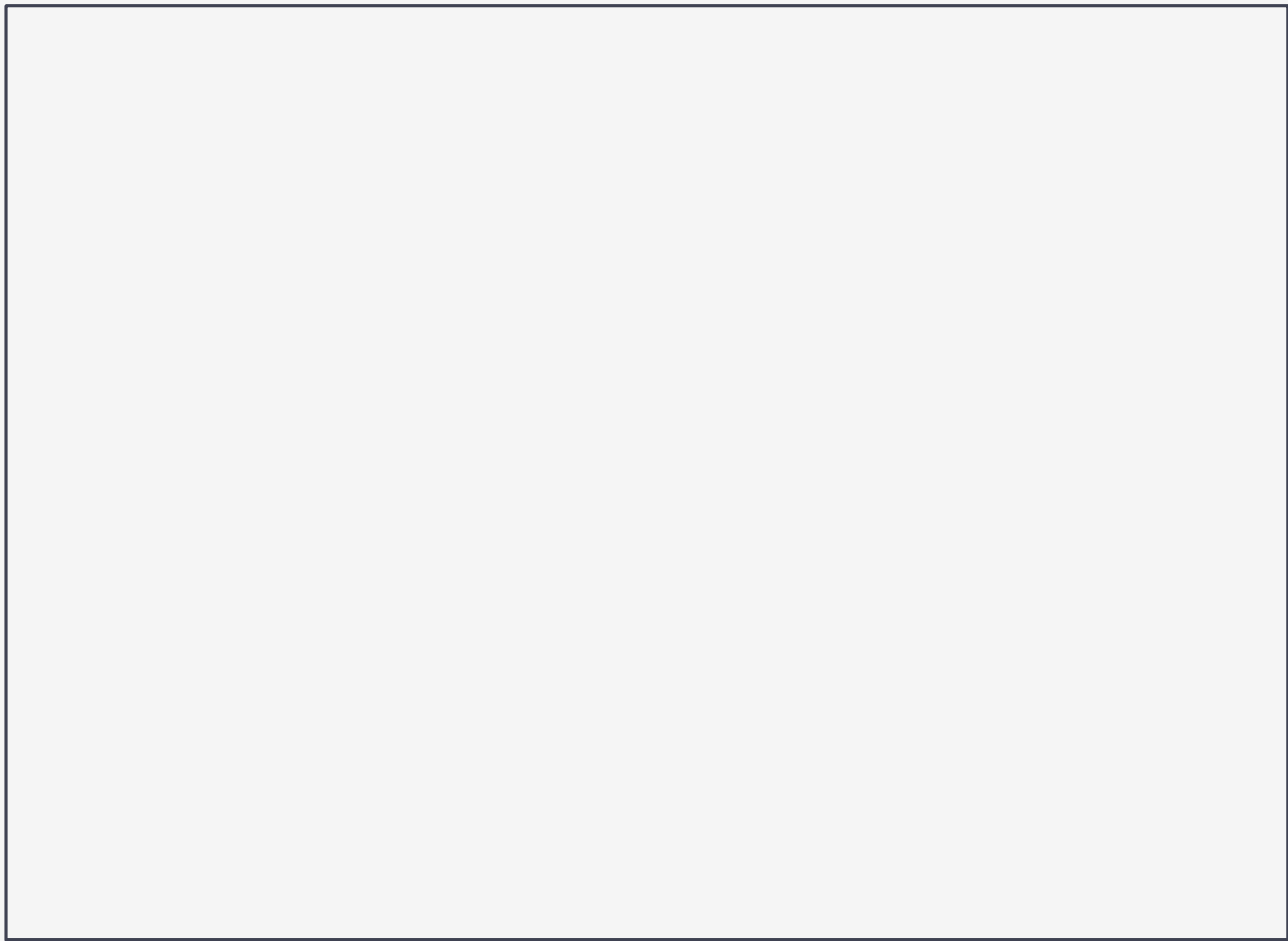
2- Commercial particles



NOTEBOOKS – ADVANTAGES & DISADVANTAGES

Type of Notebook	Advantages	Disadvantages
Bound/Stitched	No lost pages, legally stronger	Difficult to copy, not logically organized, requires references to data stored elsewhere
Loose Leaf / Binder	Organized by experiment, data stored together	Sheets fall out, difficult to authenticate as pages can be added as needed.
Computer / Electronic	Easy to search, easy to read, Easy to store, available from different locations	Requires electronic security, files could be easily corrupted, Software compatibility issue, potential cyberattack





LABORATORY NOTEBOOK ETHICS

All data needs to go into notebook, even the result from unsuccessful experiments

Pages should not be removed from the lab notebook. Simply draw a line through error and provide the corrected version.

Record facts, not opinions (ex: no reaction occurred under these experimental conditions vs. this reaction will never work!)

REFERENCES