Formal Report: Synthesis Project Synthesis of Benzocaine or Phenacetin Chem 228 WS/2007

## NOTE: Attach this blank grading form to the front of your report

## General/Grammar (20 points):

Justification - not left and right justified
Correct font and line spacing
Title - not properly worded
Spelling - general words misspelled (ea)
-chemical names misspelled (ea)
Grammar - failure to comply with the following:
-Used proper tense for section
-Maintained tense throughout section -Avoided run-on sentences
Missing page numbers
Table, figure format/general layout

## Subtotal: (not to exceed - 20 points)

-5

-2
-2 to -5 $\qquad$
$\qquad$-10

Abstract not really an abstract $\quad-8$
Missing chemical names or reactions
Missing mention of how purity was checked (eg. IR, NMR, GC, etc.)
Subtotal: (not to exceed -10 points)
Abstract (10 points):
Missing Abstract entirely

## Introduction (20 points):

Missing background information
reasons for selecting compounds produced
commercial importance, sources, uses, etc.
review of reactions used, adv. \& disadvan.
alternate synthesis routes, if possible


Subtotal: (not to exceed -20 points)

## Procedure (60 points):

Missing mmoles/mg used (need both)
Missing balanced equations
Equations, but not balanced
Missing structures of chemicals
Structures not typeset
Missing table of chemicals used
Some info in table inaccurate or missing
Table split across 2 pages
Procedure not all inclusive or incorrect
Other tests besides IR and NMR (eg. GC)
Subtotal: (not to exceed -60 points)

## -5

-5 to -20
-3 to -10
-3 to -10
-5
-5 to -20
-3 to -10
-5
-2 to -10
-2 to -10
$\qquad$

- $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

IR Analysis ( 60 pts ):
Missing IR from intermediate steps or all steps -10 each
Missing reference IR from..... -10 each
Missing tables for the IR analysis
-10 to -20
Peak analysis incorrect
-2 to -10
Not all "significant" peaks analyzed
-2 to -10
$\square=$
$\square$
$\square$
Subtotal: (not to exceed -60 points)

NMR Analysis ( 60 pts):
Missing NMR from intermediate steps or all steps
-10 each
Missing reference NMR from intermed. ..... -10 each
Missing tables for the NMR analysis
-10 each
Peak analysis incorrect
-2 to -10
Not all "significant" peaks analyzed -2 to -10
NMR tube(s) not cleaned after use
Subtotal: (not to exceed -60 points)

Discussion/Results (60 points):
Missing Tables of Results
-5 to -20
\% Yield, MP
Other tests besides IR, NMR (eg. GC)
Missing or incorrect calculations of \% yield -5 each
Missing discussion of side reactions, yields, etc. -5 to -10
Discussion not logical -5 to -15
Missing discussion of "How to improve Experiment" -5 to -10
Subtotal: (not to exceed -60 points)

## References (10 points):

No references -10
General references - not endnotes
Incorrect formatting of citations
Failure to give citations for various information
Parenthetical notation rather than endnotes
-8
-5
-2 each
Subtotal: (not to exceed -10 points)

Participation/Yellow Sheets (100 points):
Failure to turn in yellow sheets (raw data) -100
Failure to turn in chemical products
Missing prelab information for each step
-10 each
(may all be included in one table)
Pages dated and signed by experimenter and TA
-10
Void blank spaces/Initial
-5 each
Subtotal: (not to exceed -100 points)
Late Penalty
(After 4:30 pm, Friday 5/4/07)
-20pt/da
Total of reduced points (not to exceed -400 points):
Grand Total ( 400 minus Total of Reduced Points):

