

About the Author

Things I Love

My Picture

Science is...

Notebook Scoring Rubrics

FIVE POINT SCORING RUBRIC

<p>5 Points – (a WOW product)</p> <ul style="list-style-type: none"> all of the requirements are evident and EXCEEDED the product is VERY neatly done and EXTREMELY well organized the product shows LOTS of creativity and is colorfully illustrated completed on time
<p>4 Points – (What is EXPECTED)</p> <ul style="list-style-type: none"> all of the requirements are evident the product is neatly done and well organized the product shows creativity and is colorfully illustrated completed on time
<p>3 Points – (Almost What is EXPECTED)</p> <ul style="list-style-type: none"> the requirements are evident (maybe 1 or 2 are missing) the product is neatly done and organized the product shows some creativity and is illustrated completed on time
<p>2 Points – (Sort of What is EXPECTED)</p> <ul style="list-style-type: none"> the requirements are evident (maybe 3 or 4 are missing) the product is done and sort of organized the product shows little creativity and is illustrated completed on time
<p>1 Point – (Two or More parts are missing)</p> <ul style="list-style-type: none"> MANY of the requirements are NOT PRESENT the product is VERY POORLY done and POORLY organized the product shows little TO NO creativity and THE illustrations IS POORLY DONE
<p>0 Points – (Does not meet Standards)</p> <ul style="list-style-type: none"> Not able to score. No effort.

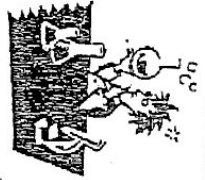
Cornell Note-Taking Revision Checklist

Directions: Review and revise notes taken in the right column. Use the symbols below to revise your notes.

COMPLETED	SYMBOL	REVISION
<input type="checkbox"/>	1, 2, 3... A, B, C...	1. Number the notes for each new concept or main idea.
<input type="checkbox"/>	<u>Key Word</u>	2. Circle vocabulary/key terms in pencil.
<input type="checkbox"/>	<u>Main Idea</u>	3. Highlight or underline main ideas in pencil.
<input type="checkbox"/>	^	4. Fill in gaps of missing information and/or reword/ rephrase in red.
<input type="checkbox"/>	unimportant	5. Delete/cross out unimportant information by drawing a line through it with a red pen.
<input type="checkbox"/>	?	6. Identify points of confusion to clarify by asking a partner or teacher.
<input type="checkbox"/>	*	7. Identify information to be used on a test, essay, for tutorial, etc.
<input type="checkbox"/>	Visual/symbol	8. Create a visual/symbol to represent important information to be remembered.

Keeping Interactive Notebooks in Science: The Left Side

The left page demonstrates your understanding of the information from the right side of the page. You work with the input and interact with the information in creative, unique and individual ways. The left side incorporates and reflects how you learn science as well as what you learn in science. The 12 "Clock" questions below help focus your attention and guide your learning of the science content and concepts.

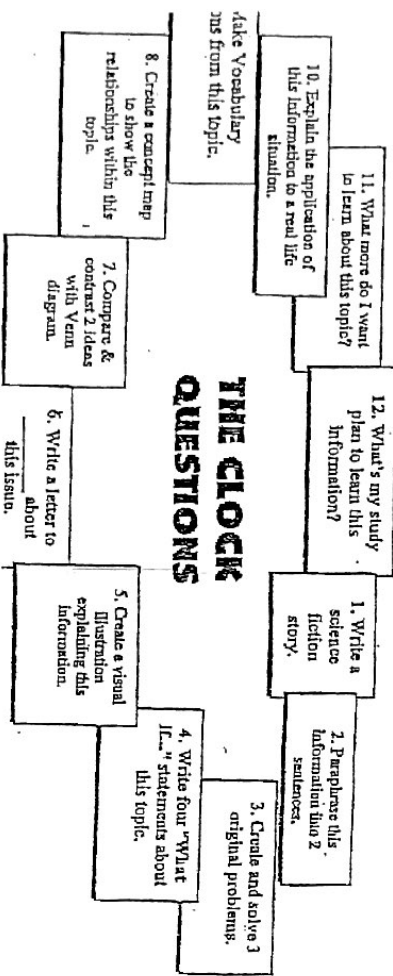


What goes on the Left Side? Output goes on the left side! Left side items include:

- ◇ Brainstorming.
- ◇ Discoverly headlines,
- ◇ Biography posters,
- ◇ Concept maps,
- ◇ Riddles,
- ◇ Your questions,
- ◇ Pictographs,
- ◇ Cartoons,
- ◇ Poetry and songs,
- ◇ Metaphors and analogies,
- ◇ Venn diagrams,
- ◇ Data and graphs you generate,
- ◇ Analysis writing,
- ◇ Reflection writing,
- ◇ Quick write,
- ◇ Four square analogies,
- ◇ Mnemonics,
- ◇ Significant statements,
- ◇ Flowcharts,
- ◇ Graphic organizers,
- ◇ Drawings,
- ◇ Writing prompts,
- ◇ Other creative avenues for processing information

Things to know about left sides

- ✓ Every left side gets used.
- ✓ Always use color... It helps the brain learn and organize information.
- ✓ Quizzes and tests are left side items.
- ✓ Homework problems are left sides (but they don't take the place of processing your notes!)



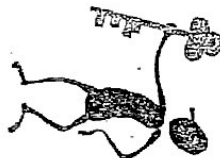
Keeping Interactive Notebooks in Science: The Right Side

Interactive notebooks will be used in this class daily to help you learn and remember important chemistry concepts. *Why do they work?* This notebook categorize, remember and creatively interact with the new knowledge you are gaining. The more you process information the more you begin to understand it. This leads to longer retention.

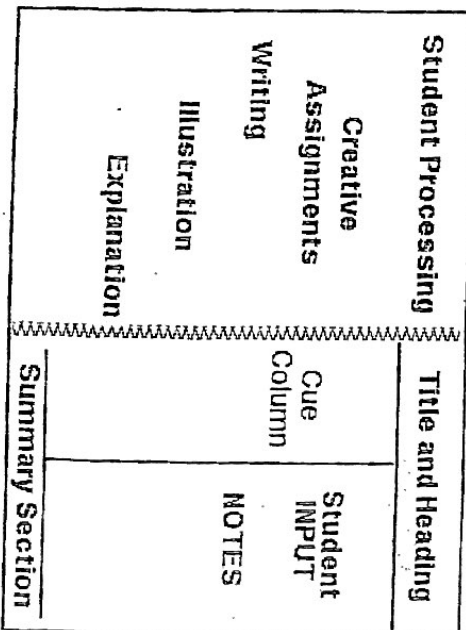
What goes on the right side? **INPUT GOES ON THE RIGHT SIDE!** Input is all the information that you are supposed to learn. Some examples of input are: lecture, guest speaker, text or other source; vocabulary words; video and film notes; readings; questions and answers; sample problems; and lab information and procedures.

The Keys to Fantastic Right Sides

- ✦ Always start the page with the date and title at the top of the page.
- ✦ Right sides have odd numbered pages.
- ✦ The right page is for writing down information you are given in class.
- ✦ Use Cornell style notes for lecture, discussion, text, etc. Write up your study questions ASAP.
- ✦ Write legibly. Use highlighting and color to make important information stand out.
- ✦ Write summaries at the bottom of each page of notes to reduce the amount you have to study.



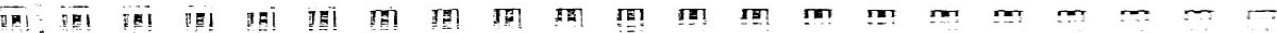
Sample Cornell Style Notes





Costas Levels of Thinking and Questioning: Science

LEVEL 1	LEVEL 2	LEVEL 3
<ul style="list-style-type: none"> • What information is given? • What are you being asked to find? • What formula would you use in this problem? • What does _____ mean? • What is the formula for...? • List the... • Name the... • Where did...? • What is...? • When did...? • Describe in your own words what _____ means. • What science concepts does this problem connect to? • Draw a diagram of... • Illustrate how _____ works. 	<ul style="list-style-type: none"> • What additional information is needed to solve this problem? • Can you see other relationships that will help you find this information? • How can you put your data in graphic form? • How would you change your procedures to get better results? • What method would you use to...? • Compare and contrast _____ to _____. • Which errors most affected your results? • What were some sources of variability? • How do your conclusions support your hypothesis? • What prior research/formulas support your conclusions? • How else could you account for...? • Explain the concept of... • Give me an example of... 	<ul style="list-style-type: none"> • Design a lab to show... • Predict what will happen to _____ as _____ is changed. • Using a science principle, how can we find...? • Describe the events that might occur if...? • Design a scenario for...? • Pretend you are...? • What would the world be like if...? (variable) were increased/decreased? • How would repeated trials affect your data? • What significance is this experiment to the subject you're learning? • What type of evidence is most compelling to you? • Do you feel _____ experiment is ethical? • Are your results biased?



Key Words:

Compare Inspect
Apply Develop
Solve Infer
Classify Analyze
Reason Explain
Distinguish
Examine
Contrast

Key Words:

Label
Identify
Match
Name
Which
Spell
Select
Restate
Observe

Key Words:

How is _____ similar to _____?
What might you infer from _____?
How would you categorize _____?
What is the function of _____?
How would you classify _____?
What conclusions can you draw?
Why do you think _____?
How is _____ related to _____?
How would you summarize _____?

<p> EVALUATE GENERALIZE IMAGINE JUDGE PREDICT SPECULATE IF/THEN APPLY A PRINCIPLE HYPOTHESIZE FORECAST IDEALIZE </p>	<p> COMPARE CONTRAST CLASSIFY SORT DISTINGUISH EXPLAIN (WHY) INFER SEQUENCE ANALYZE SYNTHESIZE MAKE ANALOGIES REASON </p>	<p> OUTPUT </p>
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Level 1
Level 2
Level 3

INPUT

PROCESS

OUTPUT

Academic Language Scripts

Requesting Assistance

- Could you please help me?
- I'm having trouble with this. Would you mind helping me?
- Could you please show me how to do this...; write this...; draw this...; pronounce this...; solve this...?

Interrupting

- Excuse me, but... (I don't understand)
- Sorry for interrupting, but... (I missed what you said)
- May I interrupt for a moment?
- May I add something here?

Asking for Clarification

- Could you repeat that?
- Could you give me an example of that?
- I have a question about that: ...?
- Could you please explain what _____ means?
- Would you mind repeating that?
- I'm not sure I understood that. Could you please give us another example?
- Would you mind going over the instructions for us again?
- So, do you mean...?
- What did you mean when you said...?
- Are you sure that...?

Probing for Higher Level Thinking

- What examples do you have of...?
- Where in the text can we find...?
- I understand... but I wonder about...
- How does this idea connect to...?
- If _____ is true, then...?
- What would happen if...?
- Do you agree or disagree with his/her statement? Why?
- What is another way to look at it?
- How are _____ and _____ similar?
- Why is _____ important?
- How do you know that? Can you give an example?
- Is there another way to look at this?

Expressing an Opinion

- I think/believe/predict/imagine that...
- In my opinion...
- It seems to me that...
- Not everyone will agree with me, but...



Responding

- I agree with what _____ said because...
- You're right about that, and I also think...
- That's an interesting idea. I wonder...? I think... Do you think...?
- I thought about that also, and I'm wondering why...?
- I hadn't thought of that before. You make me wonder if...? Do you think...?

Disagreeing

- I don't really agree with you because...
- I see it another way. I think...
- My idea is slightly different from yours. I believe that... I think that...
- I have a different answer than you...

Soliciting a Response

- Do you agree?
- _____ (name), what do you think?
- Can someone else ask a question or offer an opinion?
- _____ (name), what did you understand from that answer?

Building on What Others Say

- I agree with what _____ said because...
- You bring up an interesting point, and I also think...
- That's an interesting idea. I wonder...? I think... Do you think...?
- I thought about that also, and I'm wondering why...?
- I hadn't thought of that before. You make me wonder if...? Do you think...?
- _____ said that... I agree and also think...
- Based on the ideas from _____ and _____, it seems like we all think that..."
- That's an excellent point, and I would add...

Offering a Suggestion

- Maybe you/we could...
- Here's something we/you might try.
- What if you/we...?

Classroom Reporting

- _____ explained to me that...
- _____ pointed out that...
- _____ mentioned that...
- _____ emphasized that...
- _____ shared with me that...
- _____ brought to my attention that...
- _____ pointed out something (interesting, intriguing, surprising)
- I found out from _____ that...
- I learned from _____ that...
- I heard from _____ that...
- I discovered from _____ that...

