

Curriculum Guide

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December 5, 2002
SED 720

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Original Lesson Plans

Chemistry

Elisa Montoya • 10th grade • 25 students • 55 minutes

Objective:

1. Problem of the Day
2. Homework Questions
3. Review Valence Electrons
4. Lewis Dot Structures
5. Group Work – Handout

Materials & Resources:

1. Problem of the Day Handout
2. Periodic Table
3. Lewis Dot Structure Handout (30)

Procedure:

Problem of the Day – 10 minutes

1. Students will get out of their Problem of the Day Handout.
2. Students will solve the problem without any help from neighbors.
3. Take attendance while students solve the Problem of the Day.
4. A student will come to the board and explain to the class how to solve the problem. Each day I will ask a different student to come to the board. I will keep track of student participation on a Student Participation Grade Sheet.

Homework Questions – 10 minutes

1. Ask for Homework questions.
2. Put up all the questions on the board.
3. Pick problems to solve
4. Solve, explain and ask questions about each problem.
5. Remind students that they may stay after class or school to have more and other questions answered.
6. Collect Homework.

Review Valence Electrons – 5 minutes

1. Review Valence Electrons
 - a. Definition
 - b. How to count Valence Electrons
 - c. Do examples on board. Answer questions.

Introduce Lewis Dot Structures – 10 minutes

1. What is the Lewis Dot Structure?
2. How to draw Lewis Dot Structure.
3. Do examples on board. Answer questions.

Group Work – Handout – 20 minutes

1. Have students count off 1 through 5. All the 1's, in one group 2's in one group, etc.
2. Go around to each group to answer questions and make sure the students are staying on task.

Homework:

1. Read section on Valence Electrons & Make Flash Cards for bold words, important concepts, and examples.
2. Complete Chapter Review Problems in textbook, 1- 10.

Assessment:

1. Punctuality – 3 free Tardies: - 2 points per tardy on Homework
2. Problem of the Day – Worksheet is collected at the end of the week and one problem is graded.
3. Class Participation – Problem of the Day: Credit or No Credit
4. Group Work – Groups staple all the worksheets together and the top paper is graded. All receive the same grade
5. Flash Cards – Collected on the day of the Chapter Test: Credit or No Credit.
6. Homework – Collected after questions and only a few problems are graded.

Literacy Aspect:

Group work will better their communication skills. Students will read their textbooks and write down important information on flash cards. Through this activity, their scientific literacy as well as their reading level and comprehension will be enhanced.

Chemistry

Elisa Montoya • 10th grade • 25 students • 55 minutes

Objective:

1. Homework Questions
2. Pop Quiz
3. Determining Chemical Formulas

Materials & Resources:

1. Pop Quiz Handout (30)
2. Chemistry Text Book (30)
3. Determining Chemical Formulas Handout (30)

Procedure:

Homework Questions – 15 minutes

1. Ask for Homework questions.
2. Have a student put up all the questions on the board.
3. Take attendance.
4. Solve, explain, and ask as many problems as possible.
5. Remind students that they may stay after class or school to have more and other questions answered.
6. Collect Homework.

Pop Quiz – 20 minutes

1. Have students put everything away.
2. Hand out quiz.
3. Let the students know that they have 10 minutes to complete the quiz.

4. Collect the quizzes.
5. Go over the quiz. Have one student, per problem, on the board, explain how they solved the problem.
6. Have student ask and answer questions when solving the problems.

Determining Chemical Formulas – 20 minutes

1. Have the students read the about Determining Chemical Formulas in their textbooks.
2. Ask students questions about what they read. Have students say something about what they read.
3. Go over main ideas and concepts.
4. Do examples on board. Answer questions

Homework:

1. Re-read section on Determining Chemical Formulas & Make Flash Cards for bold words, important concepts, and examples.
2. Chapter Review Problems

Assessment:

1. Punctuality – 3 free Tardies: - 2 points per tardy on Homework
2. Quiz – All problems are graded.
3. Flash Cards – Collected on the day of the Chapter Test: Credit or No Credit.
4. Homework – Collected after questions and only a few problems are graded.

Literacy Aspect:

Students will read their textbooks. They will then re-read what they read in class and write down important information on flash cards. Through this activity, their scientific literacy as well as their reading level and comprehension will be enhanced. Students will also be required to write an explanation of a problem as well as definitions for key concepts of the Chapter. The only way to better a student's writing ability is by constantly having them write.

Chemistry

Elisa Montoya • 10th grade • 25 students • 55 minutes

Objective:

1. Problem of the Day
2. Homework Questions
3. Types of Chemical Reactions

Materials & Resources:

1. Problem of the Day Handout (25)
2. Demo Reactions Materials
3. Chemistry Text Book (30)

Procedure:

Problem of the Day – 10 minutes

1. Students will get out of their Problem of the Day Handout.

2. Students will solve the problem without any help from neighbors.
3. Take attendance while students solve the Problem of the Day.
4. A student will come to the board and explain to the class how to solve the problem. Each day I will ask a different student to come to the board. I will keep track of student participation on a Student Participation Grade Sheet.

Homework Questions – 10 minutes

1. Ask for Homework questions.
2. Put up all the questions on the board.
3. Pick problems to solve
4. Solve, explain and ask questions about each problem.
5. Remind students that they may stay after class or school to have more and other questions answered.
6. Collect Homework.

Types of Chemical Reactions – 25 minutes

1. Single Replacement - a single uncombined element replaces another in a compound.
2. Double Replacement - parts of two compounds switch places to form two new compounds.
3. Combustion - reaction of oxygen gas (O_2) with anything forming CO_2 and H_2O .
4. Synthesis - two or more simple substances combine to form a more complex substance.
5. Decomposition - a more complex substance breaks down into its more simple parts.
6. Demos if each type of reaction.
7. Examples

Homework Time – 10 minutes

1. Write homework assignment on the board.
2. Students to start their homework.
3. Answer questions from previous nights homework and current material.

Homework:

1. Read section on Types of Reactions & Make Flash Cards for bold words, important concepts, and examples.
2. Chapter Review Problems.

Assessment:

1. Punctuality – 3 free Tardies: - 2 points per tardy on Homework
2. Problem of the Day – Worksheet is collected at the end of the week and one problem is graded.
3. Class Participation – Problem of the Day: Credit or No Credit
4. Flash Cards – Collected on the day of the Chapter Test: Credit or No Credit.
5. Homework – Collected after questions and only a few problems are graded.

Literacy Aspect:

Students will read their textbooks and write down important information on flash cards. Through this activity, their scientific literacy as well as their reading level and comprehension will be enhanced.

Chemistry

Elisa Montoya • 10th grade • 25 students • 55 minutes

Objective:

1. Problem of the Day
2. Homework Questions
3. Limiting Reactants
4. Group Work – Handout

Materials & Resources:

1. Problem of the Day & Limiting Reactants Handout
2. Chemistry Text Book
3. Gram Crackers, Marshmallows, Hershey Chocolate Bars
4. Crayons (Red, Orange, Yellow, Green, Blue & Purple)
5. Zip Lock Bags
6. Bunsen Burners (13)

Procedure:

Problem of the Day – 10 minutes

1. Students will get out of their Problem of the Day Handout.
2. Students will solve the problem without any help from neighbors.
3. Take attendance while students solve the Problem of the Day.
4. A student will come to the board and explain to the class how to solve the problem. Each day I will ask a different student to come to the board. I will keep track of student participation on a Student Participation Grade Sheet.

Homework Questions – 10 minutes

1. Ask for Homework questions.
2. Put up all the questions on the board.
3. Pick problems to solve
4. Solve, explain and ask questions about each problem.
5. Remind students that they may stay after class or school to have more and other questions answered.
6. Collect Homework.

Limiting Reactants – 15 minutes

1. Limiting reactants are those that are used up before the entire reaction can take place. Once one of the reactants is used up, the reaction has no choice but to stop.
2. To determine which reactant is the limiting reactant: Calculate how many moles of product each reactant can form. The one with the least number of moles produced will be the limiting reactant.

3. Examples.

Group Work – Handout – 20 minutes

1. Students are to pair themselves up with another student.
2. One student from each group will come up and take 2 handouts, 1 bag of crayons & 1 bag of Gram Crackers, Marshmallows, Hershey Chocolate Bar pieces.
3. Students will use the material to complete the handout.
4. Students will then return the materials, turn in the handout, and take 2 Gram Crackers, 2 Marshmallows, 2 Hershey Chocolate Bar pieces. Students may use the Bunsen burners at the lab stations to make smores. After they are done making smores, the students must turn off the Bunsen burners and clean up their lab stations.

Homework:

1. Read section on Limiting Reactants & Make Flash Cards for bold words, important concepts, and examples.
2. Complete Chapter Review Problems in textbook, 10-20.

Assessment:

1. Punctuality – 3 free Tardies: - 2 points per tardy on Homework
2. Problem of the Day – Worksheet is collected at the end of the week and one problem is graded.
3. Class Participation – Problem of the Day: Credit or No Credit
4. Group Work – Collected at the end of the period and individually graded.
5. Flash Cards – Collected on the day of the Chapter Test: Credit or No Credit.
6. Homework – Collected after questions and only a few problems are graded.

Literacy Aspect:

Students will read and write as every other night and will hopefully absorb some of the information in their textbook. They will also have to read, follow and interpret directions in class during the smores activity. They will have to apply what they have learned to what they are doing. They will have to comprehend what they learned and use it to complete the activity. The act of hearing and then doing is important.

Chemistry

Elisa Montoya • 10th grade • 25 students • 55 minutes

Objective:

1. To group the students in 5's
2. To explain the activity
3. To begin the project

Materials & Resources:

1. Hat with 5 pieces of paper
2. 5 Songs from the 60's, 70's 80's, 90's and 00's.
3. 5 Topics
4. Tape and CD player

Procedure:

Hip-Hop Activity – 55 minutes

1. Explain the Hip-Hop Activity to the students. *5 minutes*
 - a. Pre-assigned Groups: 5 students.
 - b. Each group will randomly pick a song from the 60's, 70's 80's, 90's and 00's.
 - c. Each group will randomly pick a topic.
 - d. Student groups must come up with lyrics about their topic.
 - e. Presentation must be a minimum of 30 seconds.
 - f. All students must be in the presentation.
 - g. Students have all period to prepare.
 - h. This is a fun project and to obtain full credit all must participate and must put effort into the presentation.
 - i. Presentations will be on Monday.
2. Questions and Answers. *5 minutes*
3. Get students into their groups. *5 minutes*
4. Have one person come up to pick a song and topic. *5 minutes*
5. Students work with groups. *35minutes*

Homework:

1. Students are to prepare for their presentations. They must ready to present on Monday.

Assessment:

1. Punctuality – 3 free Tardies: - 2 points per tardy on Homework
2. Presentations – Students will receive full credit for participation. If the students do not come to class, they must make up the activity by finding 2 articles in the newspaper that pertain to chemistry. They must summarize the articles and tell how it pertains to chemistry. They will be due at the beginning of class on Wednesday. Students will not be given this information until after they don't show up.

Literacy Aspect:

Students have the opportunity to write lyrics. They might also have an opportunity to write poetry if they chose to have their lyrics rhyme. As they complete these projects, the information should stay with them. The youth of today have difficulty remembering what they learn in classes and no difficulties with lyrics from the songs that they listen to. They hear the song once and they remember lyrics. When listening to the other student presentations, I hope that they remember the lyrics since they will be about what they are learning in their chemistry class. This activity will enhance the student chemistry literacy level.

Lesson Plan Critiques

<http://www.middleschoolscience.com/balance.html>

Balancing Chemical Equations Activity

Summary:

This lesson plan demonstrates how students can interactively learn how to balance chemical equations.

Positive Aspects:

It is difficult to keep the students attention on a daily basis. Lectures become monotonous to the students. This lesson plan exhibits how a lecture can be transformed into an interactive activity. Since students are always looking for excitement and interaction, this activity would be great for the classroom. The procedure, objective, and materials on the handout for the activity are great. The notes at the end of the lesson are useful. They give you insight about the lesson, things that you usually learn after using the lesson. The follow-up handout is appropriate since it would demonstrate and enforce what the students have learned from the activity and class.

Development Areas:

Although the lesson plan is an activity, the author should have included a more detailed procedure for a teacher to follow throughout the class period. It might also be helpful if the lesson plan stated how much time was allotted for each step in the class procedure. There is only a detailed handout and nothing else. Some of the directions on the handout could be clearer, changed or deleted. The assessment is brief.

How would I adapt this lesson for my classroom?

I would use this activity in my classroom and would follow up with a handout as suggested. I would change the table and add more detailed procedures for the lesson plan. I would use the handout. I would also give a 5-minute lecture on previous material that has led to this activity. At the end of the period, I would also have the students put a few of the problems on the board and explain how they balanced the chemical reaction.

<http://www.askeric.org/cgi-bin/printlessons.cgi/Virtual/Lessons/Science/Chemistry/CHM0050.html>

VISUAL MODELS OF SOLUTIONS AND CONCENTRATIONS

Summary:

This lesson plan is an interactive lesson plan. It demonstrates how a normal lecture can be transformed into a fun interactive activity. The lesson plan teaches students about solutions and concentrations.

Positive Aspects:

The lesson plan is effective because it allows the students to see what they are actual learning about. It is a hands-on, visual, lesson plan. It is a different way to teach and since so many learn in different manners, it seems appropriate for the classroom. The objective is clear and detailed.

Development Areas:

The activity is presented well yet there is no real procedure for the entire class period. It might also be helpful if the lesson plan stated how much time was allotted for each step in the class procedure. The purpose could be more detailed and as I have read the lesson plan, it is missing some important aspects of the lesson plan. The lesson plan should have the materials and resources written separately from the procedure. The lesson plan is missing a handout. There should be a table for the students to write what they observe during the activity. The activity is completed yet there is no conclusion to the activity. There is also no assessment or follow-up activity.

How would I adapt this lesson for my classroom?

I would use the activity in my classroom. I would create a handout that would make the activity more effective. I would have the students calculate the volumetric change as well as the initial and final concentrations of the solution.

<http://www.sciencenetlinks.com/lessons.cfm?BenchmarkID=4&DocID=154>

Carbon: Structure Matters

Summary:

The lesson plan incorporates technology into the classroom to aid in teaching the students about physical characteristics of materials.

Positive Aspects:

The lesson plan enables the students to research and independently learn about characteristics of matter. Students have the opportunity to use a computer

instead of listening to a teacher. Integrating technology into the classroom is something that I would like to accomplish. The context and motivation are helpful. It is always important to have motivation behind what is being taught and why it is important to know. The resources are great. There are enough to which the students should be able to understand the material from one page or another. They also assist with the lesson plan. The assessment is nice since all the students could share what they have learned from the lesson. They can learn from their peers and enhance their communication skills.

Development Areas:

The purpose is good yet could be more detailed such that it would be clear about what was going to be accomplished during the lesson. The lesson plan could be formatted differently. If each step was numbered, it might be easier to follow. It might also be helpful if the lesson plan stated how much time was allotted for each step in the class procedure. A handout would be an effective addition to the lesson plan. The students could turn in the handout for a grade at the end of the period. There is no follow-up activity for the lesson plan yet I am not sure what I would follow-up with.

How would I adapt this lesson for my classroom?

I would use the lesson plan in my classroom if I had access to a computer lab. If I didn't have access to a computer lab, I would have a packet of handouts for the students. I might also make the lesson into a homework assignment. I would use a handout for the students to answer all of the questions stated in the lesson plan. I would compose a list of materials in which the students could pick from, research and write a one-page paper on. Students would have the opportunity to enhance their writing and research skills.

<http://ofcn.org/cyber.serv/academy/ace/sci/cecsci/cecsci199.html>

PV = nRT = BANG!

Summary:

This lesson plan is suppose to introduce the ideal gas law to 11th -12th grade students.

Positive Aspects:

Demonstrations are always exciting in the classroom. They also help students understand what it is that they are studying. Learning Chemistry is often difficult and real life applications are often helpful in this process. The objective is clear and concise. The materials and resources are also clear.

Development Areas:

The activity seems dangerous. I don't think that the objective is completed through the demonstration. The ideal gas law is algebraic and therefore it must be presented in an algebraic manner. A demonstration is not sufficient for students to learn about the ideal gas law. The procedure would be helpful if more detailed since the demonstration seems dangerous and the objective is unclear. There is no assessment or follow-up activity. It is unclear how long this activity should take.

How would I adapt this lesson for my classroom?

I wouldn't use this lesson plan in my classroom. It is dangerous and I don't think that it would be effective in the learning process of the ideal gas law. The activity ends with no real conclusion. I think that there are better ways to introduce the ideal gas law.

<http://www.lessonplanspage.com/ScienceInDepthpHScaleLesson6.htm>

The pH scale**Summary:**

The lesson enables students to learn about and identify acids and bases. The lesson plan is thorough, well thought out and organized. The lesson plan is written for students in junior high yet I feel that the lesson plan could be implemented in a high school chemistry class.

Positive Aspects:

This lesson plan is the best that I was able to find. Every aspect of the lesson is covered in detail: time allotment, resources, demographics, rationale, objective, activity, evaluation and notes. A substitute teacher could go into a classroom and implement this lesson plan. The demographics are detailed such that one could envision the students in the classroom. The activity is broken down into increments that are each allotted a certain amount of class time. The assessment is appropriate for the lesson plan. The notes at the end of the lesson plan cover everything that one might need to say or know during the class period in order for the activity to run smoothly.

Development Areas:

The only thing that I feel is missing from the lesson plan is a handout. The students could write down their and others thoughts. Writing is an essential tool for students to have and whenever possible, students should be able to practice and better their ability to write. The handout could also serve as a guide for the class period, students like to know what they are going to do and how much time they have to finish things.

How would I adapt this lesson for my classroom?

I would use the lesson plan in my classroom. I wouldn't change anything about the lesson. It incorporated writing, communication, group work, critical thinking, and hands-on interaction. It is a fun activity to use to introduce acids and bases.

Current Research Articles

<http://teachers.net/gazette/JUN02/brekke.html>

June 2002

Volume 3 Number 6

Teacher Feature...

True Scientific Literacy for All Students

by Stewart E Brekke, MS in Ed, MA

Physics teacher (retired)

Chicago Public Schools

Summary:

Scientific, Chemical and Physics Literacy are defined and described in this article. The author also describes the role that the teacher plays in student achievement of these three types of Literacy. He describes the substantial effort that a teacher must put forth for the slow learners, disabled students and at-risk students. He also acknowledges that all the effort pays off in the end and that Scientific Literacy can be applied in other fields and guide the student to success.

Connections to Literacy:

This article clearly defines what Scientific, Chemical and Physics Literacy are. It also shows the relationship between Scientific Literacy and other fields of study. The importance of Scientific Literacy and what it helps achieve are also presented in this article.

Significance:

The article reinforces that scientific literacy is important even if the student isn't going to be a chemist or physicist or biologist. These types of literacy are stepping-stones to other intellectual thoughts and actions. It also reassures a teacher that all the hard effort does pay off in the end and I think that is very important to know.

<http://www.advance.uconn.edu/00101613.htm>

University of Connecticut Advance on the Web

October 16, 2000

New Class Seeks to Develop Scientific Literacy for Non-Majors

Summary:

Chemistry can be taught to non-science majors in a non-traditional way. Students can learn about the impact that Chemistry plays on their daily lives. They can learn about the ozone, global warming, drinking water and other things that they encounter on a daily basis. The mathematics applications are not demanding for it is more a conceptual course. The teacher assigns the students to obtain articles that pertain to chemistry and search the web for several different projects.

Connections to Literacy:

No matter if a student is math, writing, art, or history inclined, there is room to be scientific literate. The students, even though non-science majors, found the chemistry course to be interesting and exciting. While researching for the course, their computer literacy was being enhanced. It is nice to see that other multiple aspects of literacy can be developed simultaneously.

Significance:

All students aren't mathematically inclined to level in which they can solve problems in a high school chemistry class. This article demonstrates how to teach these students chemistry in a quantitative way and in such a way that they enjoyed and benefited from. Students always like to be able to relate what they are learning to real life scenarios and this course allowed for this. It is always easier to remember something if you have something to relate it to.

http://fidelio.ingentaselect.com/vl=11084855/cl=49/nw=1/fm=docpdf/rpsv/catchword/carfax/00131911/v51n3/s7/p273_s.pdf

Title: Secondary Teachers' Views and Actions Concerning Literacy and Literacy Teaching

Author(s): Maureen Lewis; David Wray

Source: Educational Review Volume: 51 Number: 3 Page: 273 -- 281

DOI: 10.1080/00131919997515

Publisher: Carfax Publishing, part of the Taylor & Francis Group

Summary:

Issues surrounding literacy are thoroughly discussed in this article. Recommendations, questions and studies about schools and literacy are also presented. The role of the teachers, math and science, is presented as being minimal to nothing. Some math and science teachers are taking a pro-active approach and are admitting that they need extra training. Three quarters of the teachers surveyed reported that they had received little to no literacy training. Teachers need to go through literacy courses to support their students.

Connections to Literacy:

The entire article is about literacy. It pinpoints all the problems with the schools literacy programs. The teachers are not properly trained and in the end the only person that suffers is the student. Literacy plays an important role in a person's life and when there is no one to teach and develop them this essential skill, it is no wonder why the students' literacy levels are low.

Significance:

I find it hard to believe that so many teachers have had little to no training on literacy especially after I have had to take an entire course on literacy. I also find it discouraging that the math and science teachers were those that were less likely to provide literacy help and barely used literacy support teaching strategies since I would like to be a math and

chemistry teacher. I can admit that is why I favored math and science while in school; I didn't like to read or write and in these classes I was not asked to do these things. I do regret not reading and writing more as a youth yet I partially blame my teachers for not forcing me to do more writing and reading. With these regrets, I hope that my students become chemistry literate as well as writing and reading literate.

<http://www.news.harvard.edu/gazette/1998/05.21/TeachingChemist.html>

Teaching Chemistry as a Liberal Art
Painting, Poetry, and Safaris interact to form potent concoction
By Dudley Herschbach

Summary:

A professor summarizes all of his teaching techniques for his chemistry course. He discusses what type of language to use in the classroom, how to present the material, problem solving methods, laboratory text, exams, grading, and science literacy.

Connections to Literacy:

It presents methods, techniques and strategies to use in the classroom to enable the students to become chemistry literate.

Significance:

He comments on the low level of science literacy among college graduates. This encourages and motivates me to ensure that all of my students are chemistry literate after completing my course.

http://www.lalc.k12.ca.us/uclasp/csp-ucla/past_articles/national_standards.htm

National Science Education Standards
University of California Los Angeles

Summary:

"This nation has established as a goal that all students should achieve scientific literacy." The suggest that scientific literacy enables one to be able to reason, think creatively, solve problems, and make decisions. They present a standard that has been established to obtain scientific literacy amongst students, present the proper actions that must be taken and give an example of this process.

Connections to Literacy:

The article tells a story of how a teacher prepared and then implemented a unit for her science class. This unit will lead the students to scientific literacy as well as other things. While planning the unit, she realized how important it was and how other subject areas could fit into the unit.

Significance:

Teaching appears to be easier than it is. All the planning that goes into a unit is tremendous yet alone tiring. The thought process of planning a unit is well presented yet deceiving. While brainstorming for a topic for the thematic unit, I found it very difficult to find a subject that we could all incorporate into our classrooms. The author made it sound easier than it is.

Resources

<http://www.chem4kids.com/>

Positive Aspects:

The site is great for the first semester of chemistry. The concepts are well presented and very well organized. It is easy to understand, there are great pictures and good examples. Students should refer to this page if they don't understand their textbook or information that was presented in class.

Development Areas:

The site only covers material for the first semester of the class. If the author of the site was to put more information about chemistry on the page, I think that it would even more helpful. It doesn't cover the more detailed aspects of the course.

How I would use this resource in my classroom:

I would prepare a worksheet for the students to complete with the help of the site. This would allow them to realize what a great resource it is and that there are others out there besides the book, myself and their peers.

Teacher and Peers

Positive Aspects:

I will always willingly help a student. When I become a teacher, I will have an open door policy. Students will have no excuse not to know what is going on in the class. Asking a peer is always helpful for both parties. The peer explaining will have to know what they are saying and will most likely understand more clearly after they explain the question.

Development Areas:

The teacher and peers are resources that are not used as much as they should be. Students are intimidated to ask questions and embarrassed if they do not understand. I learned when I was in the University that the teacher was almost always the best resource. I found to get the most out of them when I actually went to see them. Students need to know that the teacher, myself, will always be available. The only way to understand is to ask questions to you do understand. There is no reason why a student can never ask a teacher or a peer a question; the teacher and peers are the most easily accessed resource.

How I would use this resource in my classroom:

I will encourage the students on a daily basis to ask questions even if before, during lunch, at break or after school. I might also have a mandatory meeting with each student throughout the semester to sit down with each of them and answer their questions.

Test

Positive Aspects:

Tests are the most accurate reflection upon what a student knows in a specific course. They allow for students to demonstrate their knowledge and or lack of knowledge. They are great to take and then retake. They show improvement or deterioration. An excellent activity with Test is homework. After a student has completed and received their test back, they must correct all of the mistakes. It reinforces what they don't know so well.

Development Areas:

Some teachers don't hand back test. They let the students see them and then they take them back. How are students supposed to learn what they don't know? Some students don't test well and in some cases it is an inaccurate way to measure a students' knowledge of the course material. Test shouldn't be the main measurement of student knowledge.

How I would use this resource in my classroom:

I will always make my students correct their mistakes. I will also use commonly missed questions on future test in which all the students should get correct since they had to redo the problem already once.

<http://antoine.frostburg.edu/chem/senese/101/index.shtml>

Positive Aspects:

The site has numerous resources, from notes, to quizzes and exams, to tutorials, to a toolbox, to a glossary. It will also answer questions that you have. All of the questions that a student has should be able to be answered at this site. It is easy to understand and easy to search through.

Development Areas:

I do not have any negative comments about the site. The only thing that I am concerned with would be the fact that students might depend on the sight instead of the book and in consequence, might not learn everything that is needed or might try to take in too much information.

How I would use this resource in my classroom:

I would again prepare a worksheet that could only be completed with the assistance of the site. It would allow for the students to learn about all of the resources that are out there. If students are unable to get there questions answered in class and do not have time to discuss their questions with me, there will be somewhere that they can go to, to get an answer.

<http://www.middleschoolscience.com/index.html>

Positive Aspects:

The site presets lesson plans in activity/laboratory form. It is helpful since I am always searching for different ways in which I will teach my lesson plans. High school students will be bored if I lecture everyday and with this site I will be able to have interactive activity lessons. Students like to interact in the classroom and that is why I think that this site would be helpful. With different activities on a weekly basis, I think that I will be able to keep the attention of all my students. They will be excited and want to go to Chemistry because they know that they are going to be doing something fun. Learning in a fun atmosphere is always enjoyable for students.

Development Areas:

The only thing missing from this site are handouts. All of the activities are great yet a handout might make them even better. Some of the activities are short and some seem to be lacking objectives but overall, I do not have any major complaints.

How I would use this resource in my classroom:

I would try to have one activity per week. I would try to do this activity mid-week to break up the week. I think that students will respond well to the activities. They like change and excitement. I might deviate from some of the activities yet I would still use the main ideas. I want to have a fun, high energy, enthusiastic, classroom and with different activities and change constantly going on, I think that I could achieve this.