

Note: Today is a computer lab lesson. Make sure you have signed up for the lab in advance.

TITLE OF LESSON

Physical Science Unit 1 Lesson 32 – Review for Test 3

Nature of Matter: How do tribes gain understanding of compounds and molecules?

TIME ESTIMATE FOR THIS LESSON

One class period

ALIGNMENT WITH STANDARDS

California – Sciences: Chem, Atomic and Molecular Structure 1; Chemical Bonds 2; Conservation of Matter and Stoichiometry 3; Investigation and Experimentation 1

MATERIALS

Word Table Requirements: Study Guide 1 – Student Page

Test 3: Compounds – Teacher Page

Test 3 Key – Teacher Page

Calculator (optional)

LESSON OBJECTIVES

- To review compound concepts for assessment
 - To assess students' knowledge of concepts
 - To create a table in Word as a study sheet
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FOCUS AND MOTIVATE STUDENTS

- 1) Homework Check – Collect all homework. Pass back graded work and have students place it in the appropriate sections of their binders.
 - 2) **Goal Setting** – If you have graded Lab Report 5, pass it back now. Ask students to look at the grade they earned. Have them decide what grade they would like to earn on their next lab report. Have them write the grade they will earn on their next lab report on a separate sheet of paper with their name on it. Under the grade, have them list 3 things they will do differently in order to earn the grade they say they want. This can be as simple as finishing each draft on time or making sure to get their report revised properly and thoroughly. Each student needs to decide what his/her specific weaknesses are. Collect student goals. If you do not have time for this today, open class with it tomorrow.
 - 3) **Portfolio** – Have students place Lab Report 5 in their portfolios.
 - 4) **Agenda** – Have students copy the agenda you posted.
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ACTIVITIES – INDIVIDUAL AND GROUP

1. Computer Etiquette – Remind students of appropriate computer lab behavior and the consequences for any misbehavior.
2. Assessment – Write the format of assessment on the board (from **Test 3: Compounds** in the *Teacher Pages*). Go over with students testing strategies for multiple choice, fill in the blank and problem solving tests. First, ask students if they have some ideas for good test taking strategies. List their ideas on the board. If they do not come up with the following, add them to their list:
 - a. Get good sleep the night before an exam
 - b. Eat a good breakfast and bring a snack for right before the test.
 - c. Study with a partner or a group before the test.
 - d. Bring pens, pencils, and erasers for the test.



- e. During the test, pace your self and watch the time!
- f. Never leave any answers blank. It increases the possibility you may get an answer right. Whereas no answer ensures you will get it wrong.
- g. Eliminate any answers you know are wrong. The more you can narrow an answer down, the higher your chances of getting it right.
- h. After you have eliminated all wrong answers, if you cannot figure out the right answer from the answers left, GUESS!!!
- i. If the test is timed and you cannot think of an answer within a minute, skip the problem and MAKE SURE you come back to it at the end.
- j. You're first answer is usually the correct answer. Do not change an answer unless you are absolutely positive you must.

Ask students to keep the list they have just created in their notes section. Every time they take a test from now on, you will review it with them. If they think of any new test taking strategies or strategies that work well for them, they should add them to their lists and present them to the class the next time you cover test taking strategies.

3. Study Groups and Creation of a Study Sheet Table in Word – Have students break into their lab groups to create a study sheet. Tell students that this time they will do something a little different to review. They will create a study sheet in the form of a table in Word. First, in groups they will need to determine how they want to create the table and arrange the information within. Then they will work individually to create the table on the computer.
4. Assign Roles – Have students assign group roles (see *Group Roles* below). Make sure students understand that all of them are responsible for knowing how to create a table. Therefore, it is important that they all partake in the decision making of how to set up the table (a mock table, if you will). Explain to students that the study sheet (table) should contain a list of vocabulary words, a list of different types of problems with examples of how to solve them, and a list of major concepts with examples of everyday application (all items learned since Text 2). They should agree upon what material should be placed on the study sheet (table).
5. Requirements – Post the **Word Table Requirements: Study Guide 1**. Review with students the instructions. Explain that they will first meet in their groups to plan the organization of their study guides. Tell them they will have 10 minutes to agree on the organization of their study sheet (table).
6. Group Work – Have students meet together in their groups to agree on organization. They should draw a mock layout on a sheet of paper with all group members' names on it. At the end of 10 minutes, all time. Or if groups finish earlier, they may show you their plan, get your approval, and go right to work on the computer creating the individual version of the table. Each group member should create their own table. So colors, font sizes, font styles may differ between group members. However, headings and information included should be very similar.
7. Individual Work: Tables – Have students turn on their computers, open Word, and get right to work. Tell students they will have the rest of the period to finish their table study guides. If they finish early, they should print out their study guide and study! All members should have their own copy of the study sheet so that they can study tonight, but they may work together to make sure they have all of the necessary information. Thus, they will need to print out their study sheet when they complete it. If students did not understand concepts, now is the time to ask. They should start by asking their group members for help. If no one in the group can help them to understand, then they should ask the teacher. Remember, they all have the vocabulary list done, if they have been keeping it up to date. And most everyone should have their vocabulary memorized since they were supposed to be studying the words every night. At the end of 30 minutes (or close to the end of the period), call time.
8. Save and Print – Tell students to save (ideally to a disk so students can work on them at home if they want) and then print out their study sheets. You will collect them tomorrow for credit, when students walk in the door. So if they have not finished them now, they should complete them tonight for partial credit tomorrow.

9. Quizzing Group Members – If there is time in class, students should quiz each other on concepts. They can pair up – one partner puts their study sheet face down while the other partner reads key concepts to see if the first person can answer correctly. They can work as a whole group – one person is quizzed by the rest of the group members. They can use their flash cards or the table they just created in Word. Or they can choose another method that works for them. The idea is not to work alone. Tell students they will have the rest of the period to make sure each person is quizzed on all of the information at least once. If all students have been quizzed once and there is still time left in the class, they should quiz each other again! No one should be sitting around with nothing to do.

Note: If you have discipline problems in your class, it is best to choose the method they must use to study rather than allowing choice.

4. Answer Questions – Walk around the room and answer any remaining student questions. Sit in on quizzes. Or pick a partner and quiz him/her. If there is a group with an odd number, offer to quiz. It's important to the students that you participate, too!
 5. Wrap Up – Five minutes before the end of the period, call time. Have students clean up. Make sure that each member of the group leaves class with a study sheet. Remind students that they should study tonight. It's important that they have someone continue to quiz them. If that means they exchange phone numbers with group members and plan to get together, that's great! If it means they have a parent or sibling quiz them, that's fine too. The idea is that they should be developing study habits now.
 6. Homework Review – Explain the homework assignment. Quickly, remind students to come prepared tomorrow. Study sheets are due at the beginning of the period before they start their exam. So they should make sure they bring them to class.
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HOMEWORK

- 1) Study for the test using the table you created and/or your flash cards. Study with a partner (family member or friend.)
 - 2) Finish Word Table Study Guides.
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GROUP ROLES

Manager – You are responsible for making sure the study sheet is completed.

Recorder – All students will be recording the study sheet, but the Recorder is responsible for making sure all students are writing and are writing the same information.

Facilitator – You are responsible for keeping your group focused on task.

Computer Specialist – All students will be creating a portion of the table. Make sure you divide up the tasks of creating the table.

DOCUMENTATION FOR PORTFOLIO

Lab Report 2
Test 1: Matter
Lab Report 3
Class Periodic Table
Lab Report 4
Test 2: Atoms and Periodicity
Lab Report 5