

Bob Jones Physical Science CHASE Schedule

2010 - 2011

Welcome to Physical Science!!

This course uses Physical Science by BJU Press, the fourth edition. This is the newest edition, published in 2008. Students need the textbook, laboratory manual, and tests. Because we only meet one hour a week, the majority of the learning will take place at home between CHASE classes. Therefore, it is strongly recommended that the parent have access to the Teacher's materials for the course.

Physical Science is a ninth-grade study of chemistry and physics. (21 chapters) We will begin with the foundations (first three chapters) and then skip to the chemistry material in chapters 16-21. Then, we will return to chapters 4-7, 10-11 to study physics. We will spend approximately two weeks on each chapter. We have only 30 weeks; therefore, we will need to skip six chapters (8, 9, 12,13,14,15)

COURSEWORK

Coursework will include reading assignments, worksheets and other handouts, completion of laboratory exercises and lab reports, completion of chapter study guides and tests. Since the majority of class time will be used to conduct experiments, review text material, and prepare for tests, there is much to be done at home. The attached schedule includes a checklist of assignments that need to be completed each week. This is a proposed schedule that will change based on student mastery of the material. Therefore, the weekly newsletter will always contain the current assignments.

Please refer to the weekly newsletter for class instructions regarding assignments for the week.

"Homework"-30% of grade

Homework will include reading assignments, completion of class handouts, and completion of chapter study guides. Most of the homework will be given points for completion, but will not be graded as right or wrong. Selected homework assignments will be graded. Extra credit opportunities will also be presented. Completing the homework is essential to understanding, and will lead to a higher grade!

Lab Reports-30% of grade

Laboratory exercises will be conducted, and several will be assigned to complete and turn in for a grade. Some experiments throughout the year will be chosen to write up as formal lab reports. A sample will be provided and students will be instructed as to how to write each report.

Tests-30% of grade

Each chapter includes a test in the separate test packet from BJU. These are to be completed at home, monitored by the parent. The parent is responsible for making sure the student does not refer to notes or the text. Tests are to be brought along to class the following week to be graded by the instructor and returned. If the parent wishes to provide open book tests, please inform the instructor. Occasionally, students will be tested with an in-class quiz.

Class Participation-10% of grade

Class participation will include safe and efficient completion of the laboratory exercises, class discussion, and problem solving on the blackboard. A good attitude will help your grade!!

Grades will be based on neatness, completion, and level of effort. Grades will be issued at the end of each semester.

If a test or any assignment is not received on the assigned class day, the student will receive a "0" for that assignment, unless the student/parent has made prior arrangements with the instructor.

What do I need to bring each week: It is extremely important that each student come to class prepared. Preparation entails the following:

1. A positive attitude towards learning.
2. Read through the lab to be done that week and be prepared to answer pre-lab questions
3. BJU textbook
4. BJU laboratory manual
5. 3-ring binder for handouts, notes, loose papers, periodic table, etc.
6. A pencil
7. Any tests and assignments to turn in for grading

BEFORE THE FIRST CLASS: Read Laboratory Exercise 1-2 in the Lab Manual pages 7-10. Reading Chapter 1 in the textbook is optional.

Class 1 Sep 13 Introduction to lab safety, review of the scientific method, perform Laboratory Exercise 1-2- *Scientific Reports*

Week 1 Homework: _____ Read laboratory report handouts and grading rubric
_____ Write a lab report on LE 1-2
_____ Read CH 2, *Matter*, pages 28-41
_____ Read CH 2 pages 42-51

Class 2 Sep 20 Laboratory Exercise 2-1- *Chemical and Physical Changes*

Week 2 Homework: _____ Complete LE 2-1, (data table 1, and discussion questions)
_____ Complete CH 2 Study Guide (handout)
_____ Study for CH 2 test
_____ Take CH 2 test

Class 3 Sep 27 Lecture and exercises on measuring, unit conversions, scientific notation

Week 3 Homework: _____ Read Ch 3, *Measurements*, pages 55-70
_____ Read CH 3 pages 71-79
_____ Complete Unit Conversion worksheet (handout)
_____ Complete Scientific Notation worksheet (handout)

Class 4 Oct 4 Homework review, problems and exercises on measuring, unit conversions, Scientific Notation

Week 4 Homework: _____ Finish lab exercises on measuring
_____ Complete CH 3 study guide (handout)
_____ Study for CH 3 test
_____ Take CH 3 test

Class 5 Oct 11 Introduction to the Atom, lecture, demos and activities

Week 5 Homework: _____ Read CH 16, *The Atom*, pages 382-396
_____ Read CH 16 pages 397-404
_____ Complete Atoms Family worksheet (handout)
_____ Complete CH 16 Practice Problems (handout)

Class 6 Oct 18 Laboratory Exercise 16-2 *Radioactive Decay*

Week 6 Homework: _____ Complete LE 16-2 Lab Manual p 188-190
_____ Complete CH 16 Study Guide (handout)
_____ Study for CH 16 Test
_____ Take CH 16 test

Class 7 Oct 25 Elements and the Periodic Table-demos and activities

Week 7 Homework: _____ Read CH 17, Elements and the Periodic Table, pages 410-419
_____ Read CH 17, pages 420-430
_____ Complete periodic table puzzle (handout)
_____ Complete CH 17 practice problems (handout)

Class 8 Nov 1 Laboratory Exercise 17-2, *-Metals and Non-Metals*, Assign mystery elements for presentations

Week 8 Homework: _____ Write a lab report for LE 17-2
_____ Complete CH 17 study guide (handout)
_____ Study for CH 17 test, prepare mystery element presentations
_____ Take CH 17 test

Class 9 Nov 8 Mystery Element Presentations, review games and activities

Week 9 Homework: _____ Read Ch 18, *Bonding and Compounds*, pages 440-444
_____ Read CH 18, pages 444-451
_____ Read CH 18, pages 452-459
_____ Complete Bonding Basics worksheet (handout)

Class 10 Nov 15 Perform Application 18-1, Covalent Bonding, Application 18-2, Ionic Bonding, lecture and board work

Week 10 Homework: _____ Complete Application 18-1
_____ Complete Application 18-2
_____ Complete bonding worksheet (handout)
_____ Complete Application 18-3, Bonding Summary (handout)

Class 11 Nov 22 Laboratory Exercise 18-1-*Identifying Bond Types*

Week 11 Homework: _____ Write a lab report for LE18-1
_____ Complete CH 18 Study Guide (handout)
_____ Study for CH 18 test
_____ Take CH 18 test

Class 12 Nov 29 Introduction to CH 19- naming compounds, writing chemical formulas and equations

Week 12 Homework: _____ Read CH 19, *Chemical Reactions*, pages 464-476
_____ Read CH 19, pages 477-481
_____ Complete Application 19-1 (handout)
_____ Complete Compound Naming worksheet (handout)

Class 13 Dec 6 Balancing equations, lecture, practice and board work (Balancing Act-handout)

Week 13 Homework: _____ Complete Application 19-2 (handout)
_____ Complete Chemical Equations worksheet (handout)
_____ Complete CH 19 Study Guide (handout)
_____ Take CH 19 test

Class 14 Dec 13 Laboratory Exercise 19-1T *Chemical Reactions*

CHRISTMAS VACATION-Read CH 20!!!