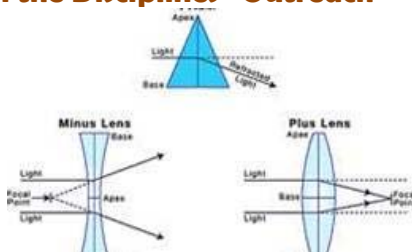
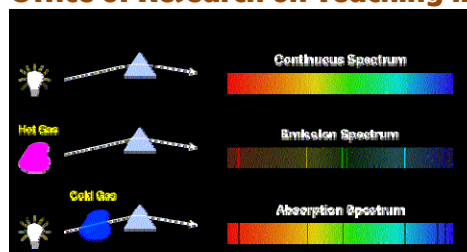


## Office of Research on Teaching in the Disciplines- Outreach



Periodic Table of Elements. The table is color-coded by groups: Alkali Metals (yellow), Alkaline Earth Metals (orange), Transition Metals (blue), Other Metals (purple), Non-Metals (green), Metalloids (light blue), and Noble Gases (red). A legend at the bottom explains the color coding.



## *Physical Science in the 21<sup>st</sup> Century (PS-21): Improving Teacher Quality and Mastery of Content*

Partners: Alabama Commission on Higher Education (ACHE), UA College of Education –Science Education; UA College of Arts and Sciences – Physics Department and Chemistry Department; UA Office of Research on Teaching in the Disciplines; and Alabama School Systems

The University of Alabama introduces a newly funded professional development project, *Physical Science in the 21<sup>st</sup> Century*, and extends an invitation to you participate in the activities during the school year 2012 - 2013. This institute is open for all in-service teachers involved in teaching, or planning to teach, in the physical sciences. Teacher substitute funding is available for each workshop.

**When and Where:** Workshops to be held in local West Alabama schools and on campus

<b>2012-13 Institute Dates:</b>	<b>Tentative Topic Areas (teacher input considered)</b>
<b>Friday, September 28, 2012</b>	Institute Day 1: Light, reflection, refraction, lenses, color, and atom/electron structure through spectroscopy
<b>Friday, November 2, 2012</b>	Institute Day 2: Physical and chemical change, solutions, and data collection technology
<b>Friday, February 1, 2013</b>	Institute Day 3: Nuclear composition and isotopes, and the Law of Conservation of Matter
<b>Friday, March 8, 2013</b>	Institute Day 4: Density, heat capacity, and the structure of atoms using the periodic table and data collection technology

Continuous Professional Development Online - Group activities, communication, mentors  
All topics integrate – inquiry pedagogy, using technology in teaching the physical sciences, and working with other teachers in a professional learning community

### **Project Personnel from the University of Alabama involve:**

Dr. James W. Harrell and Dr. Stanley Jones - UA Physics and Astronomy Department  
Dr. John Vincent - UA Chemistry Department  
Dr. Dennis Sunal, Dr. Cynthia Sunal & Dr. Donna Turner -UA Department of Curriculum and Instruction  
Dr. Michael Odell, project evaluator, in science education at the University of Texas at Tyler

If you are interested in participation in this project, you are encouraged to contact Dr. Dennis Sunal at [dwsunal@bama.ua.edu](mailto:dwsunal@bama.ua.edu) or Donna Turner at [dpturner@crimson.ua.edu](mailto:dpturner@crimson.ua.edu).

Funded with a grant awarded through the *No Child Left Behind/Title II Program* administered by *Alabama Commission on Higher Education (ACHE): Improving Teacher Quality: Mastery of Content.*