



“Exploring Circuits”

CNS Institute for Physics Teachers
Whittier Union High School District, CA

Friday, February 23, 2007

Schedule

- 3:30 – 3:40 p.m. Welcome and Introductions
- 3:40 – 4:30 p.m. Hands-on Activity: **Water Analogy to Electric Circuits**
- 4:30 – 5:20 p.m. Hands-on Activity: **Notebook Circuits**
- 5:20 – 5:30 p.m. Closing and Evaluation

Water Analogy to Electric Circuits: Properties of electric circuits such as current, potential, resistance and the relationships between them are often taught using a water analogy. Water circuits provide an excellent comparison to simple electric circuits, but few students have experience with fluid dynamics. This lab allows a hands-on investigation of water flow: including current, pressure and resistance, in series and parallel arrangements, which can be related to electric current, potential and electric resistance.

Notebook Circuits: Students construct simple circuits using inexpensive household items on a piece of notebook paper.

