

# STOUCIS ationa

# ENERGY & WAVES PHYSICS LAB 101

## **APPLIED SCIENCES**

**Designed For Students:** 

Grades 3rd-5th Ages 8-11 **Program Length:** 3 hours

Park:

*Disneyland*® Park in California

# Standard 8. Understands the structure and properties of matter

### Grade 3-5

- Knows that matter has different states (i.e., solid, liquid, gas) and that each state has distinct physical properties; some common materials such as water can be changed from one state to another by heating or cooling
- Knows that materials may be composed of parts that are too small to be seen without magnification

# Standard 9. Understands the sources and properties of energy

### Grade 3-5

- Knows that heat is often produced as a byproduct when one form of energy is converted to another form
- · Knows that light can be reflected, refracted, or absorbed
- · Knows that the pitch of a sound depends on the frequency of the vibration producing it

# Standard 11. Understands the nature of scientific knowledge

### Grades 3-5

• Knows that although the same scientific investigation may give slightly different results when it is carried out by different persons, or at different times or places, the general evidence collected from the investigations should be replicable by others

# Standard 12. Understands the Nature of Scientific Inquiry

### Grade 3-5

- Knows that scientific investigations involve asking and answering a question and comparing the answer to what scientists already know about the world
- Plans and conducts simple investigations

