

# SCIENCE STATEWIDE ASSESSMENT ACHIEVEMENT STANDARDS

In science, students are expected to meet state achievement/performance standards on:

- State Knowledge and Skills tests; and
- Classroom Local Performance Assessments (Work Samples scored by the Official Scientific Inquiry Scoring Guides are the only State Board approved Scientific Inquiry Local Performance Assessment at this time).

## STATE KNOWLEDGE AND SKILLS TESTS

On state knowledge and skills tests, students must achieve the following scores to meet or exceed the achievement standards in science.

	Meet Standard	Exceed Standard
<b>Benchmark 2</b> (Tested at Grade 5)	225	238
<b>Benchmark 3</b> (Tested at Grade 8)	234	246
<b>High School</b>	240	249

By sampling from the areas described below, state knowledge and skills tests report student scores in the following categories.

### **Physical Science**

Students understand structures and properties of matter and changes that occur in the physical world, including matter, force, and energy.

### **Life Science**

Students understand the structure, functions, and interactions of living organisms and the environment, including organisms, heredity, diversity and interdependence.

### **Earth and Space Science**

Students understand physical properties of the Earth, how those properties change, and the Earth's relationship to other celestial bodies, including the dynamic Earth, Earth in space and the universe.

## SCIENCE WORK SAMPLES

The scientific inquiry content standards call for students to use interrelated processes to pose questions and investigate the physical and living world. For 2008-09, these content standards are assessed by using Oregon's Official Scientific Inquiry Scoring Guides as required by OAR 581-022-0615.

As established by the State Board of Education in 2001, and again adopted in June 2008 for the Assessment of Essential Skills, at least one scientific inquiry local performance assessment (work sample) is required to be completed by students in grades 3-8 and High School. Teachers are required to provide instruction and classroom assessment in all four dimensions of Scientific Inquiry as outlined in each scoring guide.

The Official Scientific Inquiry Scoring Guides are available on the Oregon Department of Education's Assessment web site at [www.ode.state.or.us/search/page/?id=1414](http://www.ode.state.or.us/search/page/?id=1414) . Work samples are collected in Physical, Life, or Earth and Space Science. Official Scientific Inquiry Anchor Papers are available at <http://www.ode.state.or.us/search/page/?id=519> .

<b>2008-09 School Year</b>		
<b>Scientific Inquiry Work Sample Requirements</b>		
<b>Grades 3, 4, and 5 using the Benchmark 2 Official Scoring Guide</b>	<b>Meet Standard</b>	<b>Exceed Standard</b>
Minimum score in the <b>Designing, Collecting, and Analyzing</b> dimensions*	4	5
Number of Work Samples required at each grade	1	1
<b>Grades 6, 7, and 8 using the Benchmark 3 Official Scoring Guide</b>		
Minimum score in the <b>Forming, Designing, Collecting, and Analyzing</b> dimensions	4	5
Number of Work Samples required at each grade	1	1
<b>High School level using the High School Official Scoring Guide</b>		
Minimum score in the <b>Forming, Designing, Collecting, and Analyzing</b> dimensions	4	5
Number of Work Samples required at least once in High School	1	1

\*Teachers are expected to provide instruction and classroom assessment in all four dimensions of the Scientific Inquiry Official Scoring Guide. The implementation phase-in schedule that outlines requirements can be found at <http://www.ode.state.or.us/search/page/?id=518> .

### **Scientific Inquiry Scoring Guide Dimensions Defined**

**FORMING THE QUESTION/HYPOTHESIS:** Formulate and express scientific questions or hypotheses to be investigated.

**DESIGNING THE INVESTIGATION:** Design safe and ethical scientific investigations to address questions or hypotheses.

**COLLECTING AND PRESENTING DATA:** Conduct procedures to collect, organize, and display scientific data.

**ANALYZING AND INTERPRETING RESULTS:** Analyze scientific information to develop and present conclusions.