



**KENOSHA UNIFIED SCHOOL DISTRICT NO. 1
CURRICULUM AND INSTRUCTIONAL SERVICES**

**STANDARDS AND BENCHMARKS
SCIENCE**

Introduction

The Kenosha Unified School District No. 1 Science Standards and Benchmarks document is useful to teachers in viewing a developmental sequence. In the future the document will be reformatted for ease of website use, printing, etc.

Key Definitions

Standard—A summary description of what students should understand or be able to do within a specific content area

Benchmark—A clear, specific description of knowledge or skill that students acquire by a particular grade level or course

Most essential benchmark—A benchmark that is essential/critical to student success

In the Kenosha Unified School District No. 1 Science Standards and Benchmarks, ***most essential benchmarks*** are a thoughtfully chosen subset of all the benchmarks that meet the following criteria:

- Skills and concepts students need for success in the next grade/course
- Skills and concepts students need for success in other content areas
- Skills and concepts students need for success in state testing (Wisconsin Knowledge and Concepts Examinations)
- Skills and concepts students need for success in life

In the Kenosha Unified School District No. 1 Science Standards and Benchmarks, most essential benchmarks are italicized and bolded.

Revision of Standards and Benchmarks

- At the September 21, 2005, district half-day inservice, the newly hired kindergarten through twelfth grade science teacher consultant, Christine Pratt, met with all science teachers in grades 6 through 12 to begin reviewing Kenosha Unified School District No. 1 Science Standards and Benchmarks per Strategy IV of the Kenosha Unified School District No. 1 Strategic Plan. The review process continued at each of the middle school and high school district science content meetings during the 2005-06 and 2006-07 school years (8 high school meetings and 12 middle school meetings).
- In conjunction with the work done by all middle and high school teachers at content meetings, curriculum teams (see following) met during the last two years (as resources for substitute teachers and curriculum writing funds allowed) to review and guide the work done in content meetings. Members of the curriculum teams were chosen with input from department chairs and administrators at each of the middle schools and high schools. After each meeting the members of the team shared information with their department members and administrators and sought feedback.
- On October 7, 2005, Christine Pratt met with the elementary resource teachers to discuss the review of elementary science standards and benchmarks. An elementary science team was convened to carry out the work of reviewing the elementary science standards and benchmarks. After each curriculum team meeting, the team members shared information with and sought feedback from the teachers and administrators in their building.

- During their work the Science Curriculum Teams studied the current Kenosha Unified School District No. 1 Standards and Benchmarks, state and national standards and benchmarks, and the Wisconsin Knowledge and Concepts Examination Assessment Framework to determine what the newly adopted Kenosha Unified School District No. 1 science curriculum should encompass. In the fall 2006, efforts were begun to incorporate the work of refining kindergarten through twelfth grade science standards and benchmarks with the first year of the curriculum adoption cycle.
- The kindergarten through twelfth grade Science Curriculum Teams determined that for future tracking of strengths and weaknesses on the science portion of the Wisconsin Knowledge and Concepts Examination, it would be most appropriate to use the eight Wisconsin Model Academic Standards for Science as the backbone of the Kenosha Unified School District No. 1 Science Standards and Benchmarks. Wisconsin Standards and Benchmarks closely mirror those found in the national documents, *Benchmarks for Science Literacy*, produced by the American Association for the Advancement of Science and the *National Science Education Standards* produced by the National Research Council with funds from the National Science Foundation.
- Revised standards, benchmarks, and most essential benchmarks were shared with kindergarten through twelfth grade administrators and teachers in spring 2007 in the spirit of allowing all stakeholders to have a chance for feedback before seeking board approval of the Kenosha Unified School District No. 1 Science Standards and Benchmarks.

SOURCES

Criterion-Referenced Test Framework: For the Fall Wisconsin Knowledge and Concepts Examinations Statewide Assessment, Wisconsin Department of Public Instruction, Wisconsin, March 2006.

National Research Council, *National Science Education Standards*, National Academy Press, Washington, DC, 1996.

American Association for the Advancement of Science, *Benchmarks for Science Literacy*, Oxford University Press, New York, 1993.

DEVELOPMENT TEAMS

ELEMENTARY SCHOOL SCIENCE CURRICULUM TEAM			
2005-06	2006-07	Position	Location
Judy Ginkowski		Early childhood	Head Start
Vicki Barquero		Kindergarten	Frank
Andy Schmelling		Kindergarten	Strange
Heidi Curty		Grade 1	Strange
	Wendy Matrise	Grade 1	Jeffery
Thuy Patterson		Grade 1	Wilson
Cynthia Sklansky	Cynthia Sklansky	Grade 1	Columbus
Ruth Walls	Ruth Walls	Grade 2	Stocker
Ellen Wilson	Ellen Wilson	Grade 2	Pleasant Prairie
Christine Ruggaber	Christine Ruggaber	Grade 3	Pleasant Prairie
Erin Kuiper		Grade 4	Grewenow
Gretchen Smith		Grade 4	Somers
Scott Wolf	Scott Wolf	Grade 4	McKinley
Heidi Jones	Heidi Jones	Grade 4/5	Grant
Linda Dubaniewicz		Grade 5	Whittier
Gary Hodel	Gary Hodel	Grade 5	Lincoln
Jane Larsen	Jane Larsen	Grade 5	Vernon
Renato Ruffalo		Grade 5	Strange
Ginny Thompson		Grade 5	Vernon
Diane Wood	Diane Wood	Grade 5	Roosevelt
Marie Ellis		Teacher consultant	Professional Development

ELEMENTARY SCHOOL SCIENCE CURRICULUM TEAM			
Melody Orban	Melody Orban	Resource teacher	Southport
Christine Pratt	Christine Pratt	Teacher consultant	Curriculum and Instructional Services

MIDDLE SCHOOL SCIENCE CURRICULUM TEAM	
2006-07	Location
Kim Bielewicz	Lincoln
Jim Cetera	Lance
Sheila Flox	Lance
Amy Holm	McKinley
Christina Oldani	McKinley
LuAnn Pitts	Mahone
Christine Pratt	Curriculum and Instructional Services
Mark Rizzo	Paideia
Michelle Santelli	Bullen
Susan Schneck	Mahone
Bonnie Skurski	Mahone
Paulette Smith	Lincoln
Duane Sturino	Washington
Janet Tarkowski	Bullen
Betsy Wagner	Bullen

HIGH SCHOOL SCIENCE CURRICULUM TEAM			
2005-06	June 2006	2006-07	Location
		Susan Akina	Bradford
Paul Boyer	Paul Boyer	Paul Boyer	Hillcrest
Christy Bradley			Tremper
Jesse Gonzalez			LakeView
	John Gransee	John Gransee	Tremper
Jim Jorsch	Jim Jorsch	Jim Jorsch	Tremper
	Jason Ladd	Jason Ladd	Tremper
Jean Lee		Jean Lee	Bradford
Judy Miller			Bradford
Heidi Newberry		Heidi Newberry	Indian Trail
		Cara Pfeiffer	Tremper
Christine Pratt	Christine Pratt	Christine Pratt	Curriculum and Instructional Services
Sarah Retalis	Sarah Retalis	Sarah Retalis	Reuther
Helen Rose	Helen Rose	Helen Rose	Indian Trail
		Joe Sens	Bradford
Art Smurawa	Art Smurawa	Art Smurawa	Bradford
Jason Standish	Jason Standish	Jason Standish	Bradford
	Valerie Taylor	Valerie Taylor	Tremper
Howard Towne	Howard Towne	Howard Towne	LakeView
Dave Tuttle	Dave Tuttle	Dave Tuttle	Tremper
	Annamarie Wacker	Annamarie Wacker	Tremper