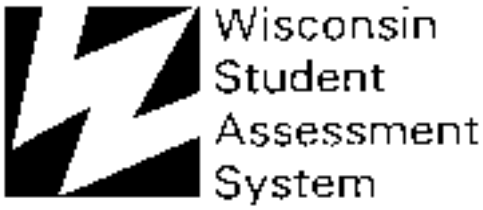
Wisconsin Knowledge and Concepts Examinations

An Alignment Study

at

Grade 4



Wisconsin Department of Public Instruction

Wisconsin Knowledge and Concepts Examinations

An Alignment Study at Grade 4

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Executive Summary

Alignment of Level 14 *TerraNova,* Form A,
to Wisconsin Model Academic Standards

On April 20–21, 1998, CTB/McGraw-Hill staff conducted a workshop for the Department of Public Instruction (DPI) to match items on *TerraNova,* Form A, at Levels 14, 18, and 20 to the Model Academic Standards for Grades 4, 8, and 12 respectively. *TerraNova* is currently administered to Wisconsin students in Grades 4, 8, and 10. The purpose of conducting the match was to determine whether individual *TerraNova* items assess the Model Academic Standards and the extent to which the Model Academic Standards are addressed by *TerraNova* items–that is, breadth of coverage. Approximately ten Wisconsin educators participated in the alignment workshop for each of the four content areas assessed by *TerraNova:* reading/language arts, mathematics, science, and social studies. CTB facilitated content area groups by providing instructions on the specific tasks to be performed and on documentation procedures. Participants worked in pairs to review a draft match completed by CTB, then presented their findings to the whole group for discussion; groups reached consensus on each item. Test items could be matched to more than one performance standard, and an item was considered to match if it either assessed the content of the standard directly or assessed related content.

Major Findings

- At Grade 4, 170 of the 176 (97%) *TerraNova*, Form A, items on Level 14 match one or more of the Model Academic Standards.
- All of the 64 Reading/Language Arts items match one or more performance standards.
- All 35 Science items match one or more performance standards.
- In Social Studies, 33 of 34 (97%) items match at least one performance standard.
- In Mathematics, 38 of 43 (88%) *TerraNova* items match one or more performance standards.

At Grade 4 there is a total of 142 performance standards, of which 123 were judged to be appropriate for large-scale, paper-and-pencil kinds of tests. Of the 123 assessable standards, 82 (67%) are measured by items on *TerraNova*, Form A.

- All of the 10 Reading/Language Arts standards that are appropriate for large-scale assessments are addressed by one or more *TerraNova* items.
- Eighty percent of the Mathematics assessable standards are measured by *TerraNova* items.
- In Science, 54 percent of the 41 assessable standards are tested by *TerraNova* items.
- In Social Studies, 26 of 42 (62%) assessable standards are measured by *TerraNova* items.

Table of Contents

The purpose of this document is to present the findings of the alignment study completed by Wisconsin educators in April 1998. On the following pages are summary tables showing how many *TerraNova*, Form A, items match the Wisconsin Model Academic Standards. In addition, the breadth of coverage of the performance standards by *TerraNova* items is also presented. Sample items for each content area show the kinds of items found on *TerraNova* Level 14.

Grade 4
TerraNova Level 14

A standardized achievement test is designed to sample the skills and knowledge that students are usually expected to acquire as they progress through school. No standardized test can measure all of the academic standards that Wisconsin students are expected to learn. *TerraNova* Level 14 was matched to the Grade 4 Wisconsin Model Academic Standards to determine how well the test does measure the Wisconsin standards.

This table shows that nearly all of the items on the fourth-grade test measure at least one Wisconsin Model Academic Standard. Some items may measure more than one standard. For example, a math test item might measure both geometry and problem solving.

TerraNova, Form A, Items Measuring Wisconsin Model Academic Standards

	Number of Test Items on *TerraNova,* Form A	Number of Items Measuring Wisconsin Performance Standards	Percent of Items Measuring Wisconsin Performance Standards
Reading/Language Arts	64	64	100%
Mathematics	43	38	88%
Science	35	35	100%
Social Studies	34	33	97%
Total Battery	**176**	**170**	**97%**

Grade 4
TerraNova Level 14

On the following pages are tables summarizing the extent to which *TerraNova* items measure the Grade 4 Wisconsin Model Academic Standards. It is important to keep in mind that some performance standards cannot be efficiently or effectively measured on an achievement test like *TerraNova*. This is because some performance standards require students to do an oral performance or to participate in a discussion of a topic. Other standards might require students to create a product or to complete a project that may take several days or weeks to complete. Standards such as these are more appropriately assessed by regular classroom assessments, observing students at work, or examining students' work products.

Following the tables are sample items illustrative of those on *TerraNova* Level 14. For each item, the Wisconsin Model Academic Standard to which the item is matched is highlighted in the shaded box beside the item. The descriptive information explains what the item measures and identifies other skills measured by similar items.

Grade 4
TerraNova Level 14

About half of the Wisconsin Model Academic Standards for English Language Arts cannot be assessed with a large-scale, paper-and-pencil test. The standards that cannot be assessed in this way include all of the Oral Language and Research and Inquiry standards and all but one of the Media and Technology standards. These standards require students to do oral presentations, use computers and other types of resources, and conduct research on a topic using a variety of information-collection methods. These are essential skills for Wisconsin students to acquire, but they are best measured using other assessment methods.

English Language Arts

Wisconsin Model Academic Standards			
Content Standards	**Number of Performance Standards**	**Performance Standards That Can Be Assessed by Large-Scale Tests**	**Number of Performance Standards Matched by *TerraNova*, Form A, Items**
A. Reading/Literature	4	4	4
B. Writing	3	3	3
C. Oral Language	3	0	n/a
D. Language	2	2	1
E. Media/Technology	5	(1 partial)	1
F. Research/Inquiry	1	0	1*
Total	**18**	**10**	**10**

*Although the Research/Inquiry performance standards were judged to be inappropriate for large-scale, paper-and-pencil tests, one item matched a performance standard.

Wisconsin Model Academic Standards Measured

Mathematics

Wisconsin Model Academic Standards			
Content Standards	**Number of Performance Standards**	**Performance Standards That Can Be Assessed by Large-Scale Tests**	**Number of Performance Standards Matched by *TerraNova*, Form A, Items**
A. Mathematical Process	5	4	3*
B. Number Operations & Relations	7	7	7
C. Geometry	4	4	3
D. Measurement	5	5	3
E. Statistics & Probability	5	4	3
F. Algebraic Relationships	6	6	5
Total	**32**	**30**	**24**

*Three performance standards are addressed by items; a fourth standard is addressed by the scoring rubrics for constructed response items.

Grade 4
TerraNova Level 14

Science

Wisconsin Model Academic Standards			
Content Standards	**Number of Performance Standards**	**Performance Standards That Can Be Assessed by Large-Scale Tests**	**Number of Performance Standards Matched by *TerraNova*, Form A, Items**
A. Science Connections	5	4	3
B. Nature of Science	3	2	0
C. Science Inquiry	8	6	3
D. Physical Science	8	8	3
E. Earth & Space Science	8	8	4
F. Life & Environmental Science	4	4	4
G. Science Applications	5	5	2
H. Science in Personal and Social Perspectives	4	4	3
Total	**45**	**41**	**22**

Grade 4
TerraNova Level 14

Social Studies

Wisconsin Model Academic Standards			
Content Standards	**Number of Performance Standards**	**Performance Standards That Can Be Assessed by Large-Scale Tests**	**Number of Performance Standards Matched by *TerraNova*, Form A, Items**
A. Geography	9	8	7
B. History	10	8	8
C. Political Science & Citizenship	6	5	5
D. Economics	7	7	3
E. The Behavioral Sciences	15	14	3
Total	**47**	**42**	**26**

Wisconsin Model Academic Standards Measured

English/Language Arts Sample Items Grade 4, Level 14

My Aunt Lily enjoyed life. Her sisters thought rules were the most important thing, but my Aunt Lily had other ideas.

One clear spring day, she invited my twin sister and me to walk with her to the candy store. It was a long walk from her house to the store, but Aunt Lily made it interesting. She didn't lead us down the same old streets. Instead, we explored the back roads and followed her along the old railroad tracks. On the way home, we ate our candy and sang silly songs. She taught us funny poems. We danced on the path by the tracks, twirling and jumping.

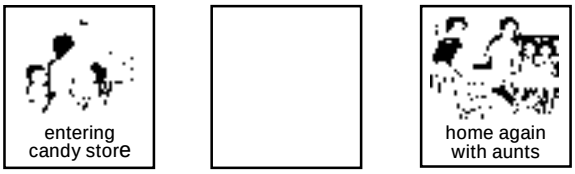
When we got home, we didn't tell our other aunts about the candy, because they didn't want us to eat candy. We didn't tell them about the singing and funny poems, because they thought we should learn more important things. And we didn't tell them about our dancing, because they probably just wouldn't understand. They asked us where we had been and what we had been doing, but we just looked at our thin, brown Aunt Lily and smiled.

A Reading/Literature

TerraNova Objective 02
Basic Understanding

After reading the story, the student demonstrates ability to recall elements and details of story structure by recognizing the correct sequence of events in the story. Related items focus on identifying significant details or a stated main idea and understanding on-grade-level vocabulary.

1



The boxes above show what happened in the story. One box is empty. Now look at the pictures below. Find the picture below that shows what belongs in the empty box.

○ ✔ ○ ○

English/Language Arts Sample Items Grade 4, Level 14

Wisconsin Model Academic Standards Measured

2 Which of these is the best name for the story?

- ○ Aunt Lily Buys Lunch
- ○ Aunt Lily Follows the Rules
- ✔ ○ Aunt Lily and the Special Trip

A Reading/Literature

TerraNova Objective 03
Analyze Text

This item asks the student to demonstrate an understanding of an implied main idea or theme by choosing the most appropriate title for the story. Other items require the student to summarize main ideas and key points in literature and informational texts.

3 If it were Aunt Lily's turn to make dinner, she would probably

- ○ say that someone else should do it
- ✔ ○ ask the girls to help her make something interesting
- ○ worry that the other aunts would not like what she cooked

A Reading/Literature

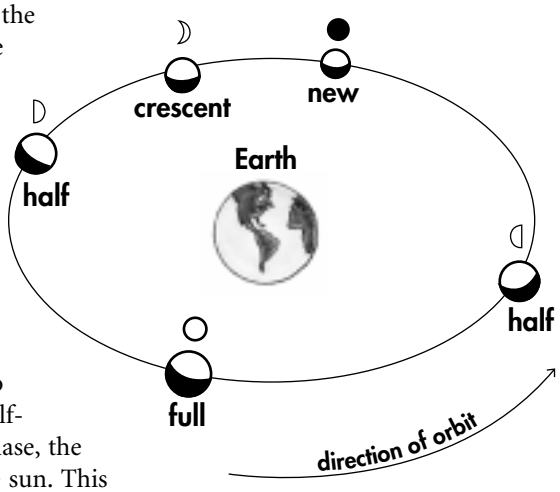
TerraNova Objective 04
Evaluate and Extend Meaning

In this item, the student is asked to transfer what has been learned about a character to evaluate a new situation and predict future actions. Other items measure the student's ability to extend the literal meaning of a text by making inferences.

The Moon

Perhaps you have gazed at the moon and wondered why it looks different at different times. This article will help explain why the moon seems to change shape. Read the article. Then do Numbers 1 through 4.

Throughout the ages, the moon, our closest neighbor in space, has excited our curiosity. Have you ever heard of the dark side of the moon? It is the side that never faces Earth. We are always looking at the same side of the moon! And what do we really see when the moon shines? Moonlight? Actually, the moon has no light of its own. It is like a mirror, reflecting the sun's light. Perhaps the most curious thing about the moon is that even though the side we see is always lighted by the sun, it appears to change its shape. Sometimes we see a full moon, sometimes we see a half moon, and other times we see just a sliver of the moon.



The moon seems to change shape because we see different amounts of the moon's lighted side as it revolves around Earth. These apparent changes are called phases. In the first phase, called the new moon, we see no moon at all. In the nights following, the moon seems to grow from a sliver of light to a crescent moon. After a week, the moon has moved far enough in its circle around Earth for us to see half of its lighted side. This phase is called the half-moon phase. About one week after the half-moon phase, the entire side of the moon facing Earth is lighted by the sun. This is the full-moon phase. As the moon continues on its journey, it appears to grow smaller again, shrinking to a sliver and then disappearing altogether to become, once again, a new moon.

English/Language Arts Sample Items Grade 4, Level 14

4 The words ***full, half,*** and ***crescent*** describe ***phases*** of the moon. Find the word that means about the same as ***phases***.

A names
B lights
C colors
✔ **D** stages

Wisconsin Model Academic Standards Measured

A Reading/Literature

TerraNova Objective 02
Basic Understanding

In this item, the student is asked to identify the meaning of an on-grade-level vocabulary word. Other items for this content standard focus on measuring the student's ability to recall passage details, sequence events, understand a stated main idea, and gather stated information from graphics.

Wisconsin Model Academic Standards Measured

English/Language Arts Sample Items Grade 4, Level 14

A Reading/Literature

TerraNova Objective 03
Analyze Text

This item measures the student's ability to determine the main idea of a passage and choose a title that most accurately conveys that main idea. Other items measure the student's ability to interpret text and draw conclusions, gather supporting evidence, infer relationships such as cause and effect, identify story elements such as plot and setting, and analyze characters and character actions.

5 Which of these is the best title for this article?

✔ **A** "The Different Faces of the Moon"
B "The Dark Side of the Moon"
C "Our Neighbor, the Sun"
D "Earth's Journey in Space"

English/Language Arts Sample Items Grade 4, Level 14

6 Which of these statements from the article is a fact about the moon?

- ✔ **A** The moon does not shine with its own light.
- **B** Moonlight is more mysterious than sunlight.
- **C** The moon has a sinister side that intrigues us.
- **D** People have been more curious about the moon than about the sun.

Wisconsin Model Academic Standards Measured

A Reading/Literature

TerraNova Objective 04
Evaluate and Extend Meaning

In this item, the student is asked to distinguish between facts and opinions. Other items require the student to extend the meaning of text by understanding the author's purpose and predicting future events or actions.

Wisconsin Model Academic Standards Measured

English/Language Arts Sample Items Grade 4, Level 14

A Reading/Literature

TerraNova Objective 05
Identify Reading Strategies

This item focuses on the student's ability to make connections between the text and graphic representations of text concepts. Other items measuring the use of reading strategies focus on the student's ability to formulate questions about the text or to use context clues to determine the meaning of above-grade-level vocabulary.

7 Here are the first four phases of the moon, beginning with the new moon.

Which phase is missing?

✔

B Writing

TerraNova Objective 07
Sentence Structure

This item asks the student to identify correct sentence structure. Other items cover sentence fragments, run-on sentences, and sentence combining.

8 Which is the best way to write Sentence 1?

A Last night it was very warm, so I go outside and look at the full moon.

✔ **B** Last night it was very warm, so I went outside and looked at the full moon.

C Last night it was very warm, I went outside and looked at the moon.

D Best as it is

Mathematics Sample Items Grade 4, Level 14

Wisconsin Model Academic Standards Measured

9 Choose the best way to write Sentence 5.

- ✔ **A** It was the most beautiful night I've seen in a long time.
- **B** It was the beautifullest night I've seen in a long time.
- **C** It was the more beautiful night I've seen in a long time.
- **D** Best as it is

B Writing

TerraNova Objective 09
Editing Skills

This item asks the student to demonstrate an understanding of the correct use of a superlative adjective form. Other items measuring writing skills focus on correct use of nouns, pronouns, verbs, and capitalization and punctuation in existing or related texts.

(Examiner reads directions aloud to students.)

Molly and Simon are little gray squirrels who live near a picnic area. This morning they found raisins, peanuts, popcorn, and chips on the ground. The tally chart shows how many of each type of food they found. We will use this chart to do Numbers 2 and 3.

TALLY CHART

RAISINS	PEANUTS	POPCORN	CHIPS
			
𝍸 ||	𝍸 |	𝍸 ||||	𝍸 ||

A Mathematical Processes

TerraNova Objective 16
Patterns, Functions, Algebra

At Level 14, items for this content standard focus on pattern recognition and generation and the use of patterns to solve problems. In this sample item, the student demonstrates the ability to recognize a pattern by modeling it in a more abstract format.

1 **Look at the chart again. Look at the pattern Molly made with the food. Which of these is the same kind of pattern?**

- ○ A B A B A B A B
- ○ A B C A B C A B
- ○ A A B B A A B B
- ✔ ○ A B C C A B C C

Wisconsin Model Academic Standards Measured

Mathematics Sample Items Grade 4, Level 14

B Number Operations and Relationships

TerraNova Objective 11
Computation and Numerical Estimation

Items of this type present a realistic problem in a familiar context. In the sample, the student identifies the operation to be used, and then performs quick mental computations to find the solution. Other skills in this content standard include performing operations with whole numbers, decimals, fractions, and money.

Nick and Nora are going to mail some postcards. Look at the prices shown in the picture. Then do Numbers 5 and 6.

2 Nora bought 5 postcards. How much did she pay for the postcards?

A $1.00
B $1.50
C $2.00
✔ **D** $2.50

Mathematics Sample Items Grade 4, Level 14

3 Nick wants to send postcards to as many of his friends as he can. He has $3.00. For every postcard he buys, he also needs to buy a stamp. Check the prices above. What is the greatest number of postcards with stamps that Nick can buy?

A 3
✔ **B** 4
C 5
D 6

Wisconsin Model Academic Standards Measured

A Mathematical Processes

TerraNova Objective 17
Problem Solving and Reasoning

Like other items in this objective, this item presents a problem that can be solved in several ways. Here, the student determines the solution by selecting the correct data, identifying the mathematical constraints of the situation, devising a solution strategy, and then solving the problem. This is an example of an item that also measures Number Operations and Relationships.

Wisconsin Model Academic Standards Measured

Mathematics Sample Items Grade 4, Level 14

D Measurement

TerraNova Objective 13
Measurement

At Level 14, students are asked to use measurement tools and various units of measure. In this case, the student uses a punch-out ruler provided with the test. Concepts in this content standard also include measurement vocabulary, the relationships of measurable attributes, and indirect measurement (e.g., area, volume, and scale diagrams).

4 Use the centimeter side of your ruler to solve this problem.

These leaves are for a science project. How long is the longest leaf?

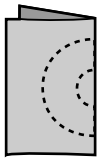
- ○ 2 centimeters
- ○ 5 centimeters
- ✔ ○ 6 centimeters
- ○ 8 centimeters

C Geometry

TerraNova Objective 14
Geometry and Spatial Sense

The focus of this item is on spatial sense. Shape and symmetry recognition are measured by asking the student to correlate one shape with another. Spatial location, two- and three-dimensional shape recognition, geometric relationships, and the observation of physical properties are also measured by items for this content standard.

5 Marie folded this paper in half and cut along the dotted lines. What letter did she cut out?



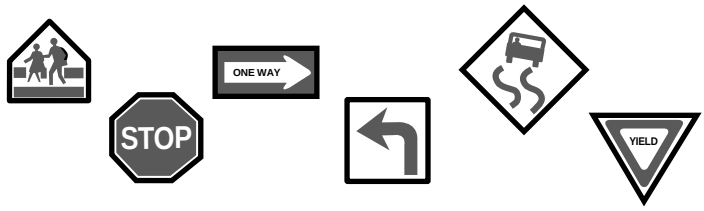
C Q G O

○ ○ ○ ✔ ○

Mathematics
Sample Items
Grade 4, Level 14

Wisconsin Model Academic Standards Measured

6 Look at the shapes of the road signs.



Sort the shapes into two groups by drawing them on the notepads below. Then explain why the shapes in each group go together.

Group 1

Why do these shapes make a group?

_____
_____
_____

Group 2

Why do these shapes make a group?

_____
_____
_____

C Geometry

TerraNova Objective 14
Geometry and Spatial Sense
and
TerraNova Objective 17
Problem Solving and Reasoning

In this item, the student compares and analyzes objects to find common shape attributes, identifies an attribute that would separate the group into two sets, and then classifies the items by those criteria.

Wisconsin Model Academic Standards Measured

Science Sample Items Grade 4, Level 14

B Nature of Science

TerraNova Objective 25
History and Nature of Science

Items for this content standard measure the student's knowledge of science-related history. This body of knowledge includes scientists and their discoveries; inventors and inventions; and the historical background or conditions that made science advancement probable, necessary, or possible. The sample item asks the student to recognize qualities that define a scientific perspective.

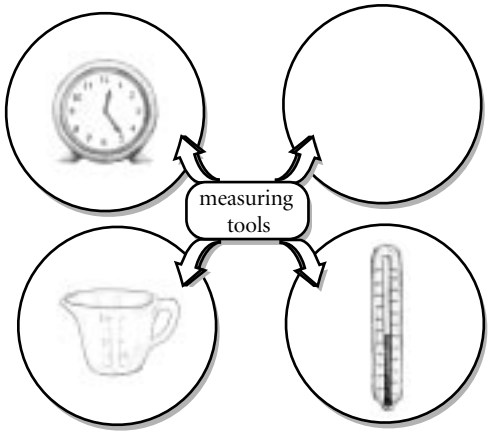
1 The first person to reach the North Pole and the first person to step on the moon were explorers, but they were also scientists. Which of these best tells why they can be thought of as scientists?

- **A** They were the first to reach their goals.
- **B** They became famous as a result of their discoveries.
- ✔ **C** They had a strong desire to question and discover the unknown.
- **D** They had to travel great distances to reach their destinations.

C Science Inquiry

TerraNova Objective 19
Science Inquiry

At Grade 4, Science Inquiry items focus on the student's awareness of science principles exemplified both in and out of the classroom, and on the student's readiness to begin laboratory exploration. Skills measured include the student's ability to observe, compare, group, classify, read and interpret data, infer cause-and-effect relationships, and use simple science equipment.



2 Which of these belongs in the empty circle in the diagram?

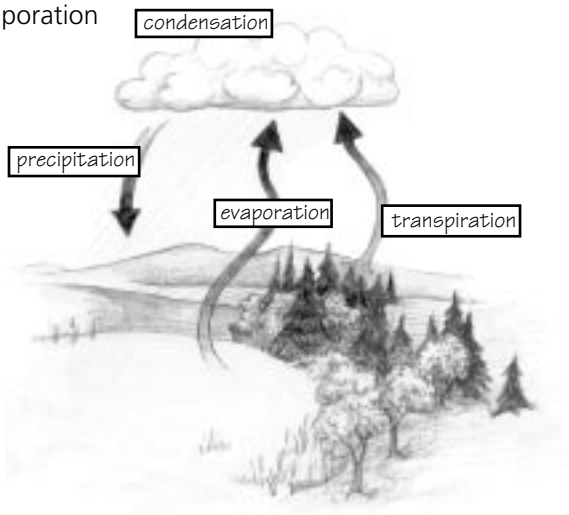
○ ○ ○ ○ ✔

Science
Sample Items
Grade 4, Level 14

3

Which process of the water cycle is the same as the process that causes dew to form in the morning?

- **A** precipitation
- ✔ **B** condensation
- **C** transpiration
- **D** evaporation



Wisconsin Model Academic Standards Measured

E Earth and Space Science

TerraNova Objective 22
Earth and Space Science

Earth and Space Science items at Level 14 cover geology, knowledge of the solar system, and patterns and cycles in the earth's daily, yearly, and long-term changes. This item focuses on understanding and using correct terminology related to the water cycle.

Wisconsin Model Academic Standards Measured

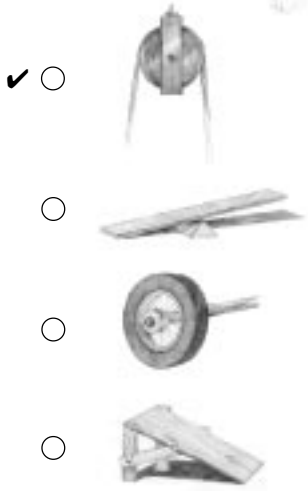
Science Sample Items Grade 4, Level 14

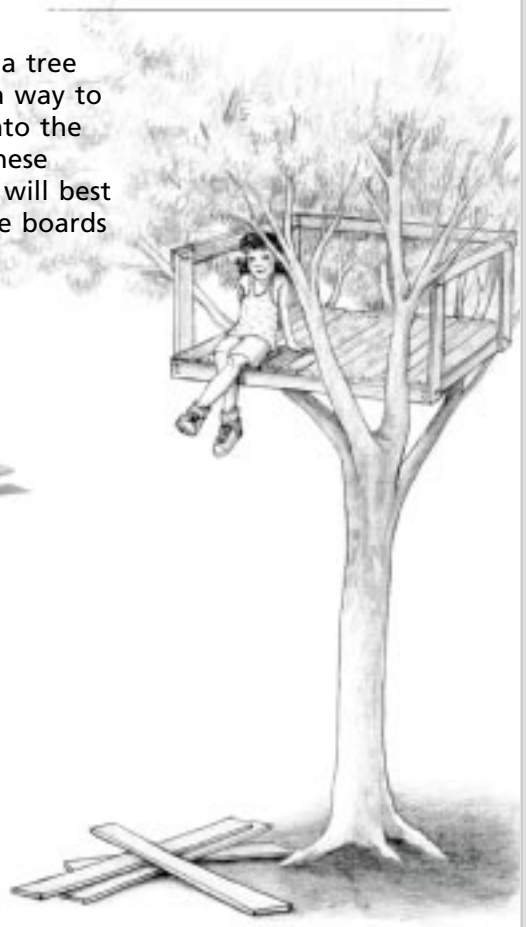
G Science Applications

TerraNova Objective 20
Physical Science

This item focuses on the student's ability to identify the simple machine for a specific task, thus showing understanding of the different actions of simple tools by matching them to practical applications.

4 Terry is building a tree fort. She needs a way to lift the boards into the tree. Which of these simple machines will best help Terry lift the boards into the tree?



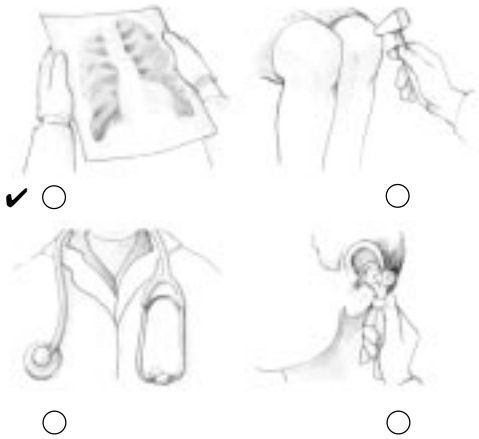


G Science Applications

TerraNova Objective 23
Science and Technology

Other items measuring Science Applications focus on identifying the technology used by someone in a job or relating science discoveries to changes in technologies that are used in the workplace.

5 Find the picture of something that can help a doctor tell if a bone is broken.



Science
Sample Items
Grade 4, Level 14

Wisconsin Model Academic Standards Measured

H Science in Social and Personal Perspectives

TerraNova Objective 24
Personal and Social Perspectives in Science

Items for this content standard cover situations of social concern which are either caused or affected by advances in science or technology, e.g., population, waste management, pollution, and the effects of scientific developments on the individual and the workplace. Items like this one measure the student's awareness of the issues and their relation to science.

Wisconsin Model Academic Standards Measured

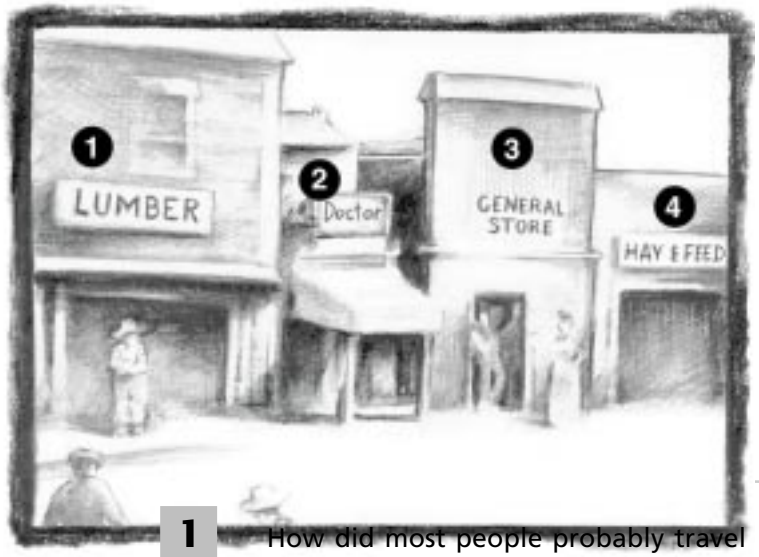
Social Studies Sample Items Grade 4, Level 14

B History

TerraNova Objective 27
Historical and Cultural Perspectives

In this item, the student connects a transportation method to a certain time period. Other items measuring this content standard require students to construct an understanding of the past or to compare the present and the past by using sources of information such as artifacts, documents, letters, diaries, maps, textbooks, photos, paintings, architecture, oral presentations, graphs, and charts.

This picture shows a street in the community of Oakton in the 1800s. Buildings in the picture are labeled 1, 2, 3, and 4. Use the picture to do Numbers 4 and 5.



1 How did most people probably travel to Oakton in the 1800s?

- ○ by car
- ○ by bus
- ✔ ○ by horse
- ○ by airplane

D Economics

TerraNova Objective 29
Economic Perspective

Understanding the difference between goods and services is the focus of this item. The student must analyze the purpose of each business pictured and apply this basic economic concept. Other economic concepts included in this standard relate to limited resources and opportunity costs and the roles of various economic institutions.

2 In which building did the people of Oakton receive services rather than buy goods?

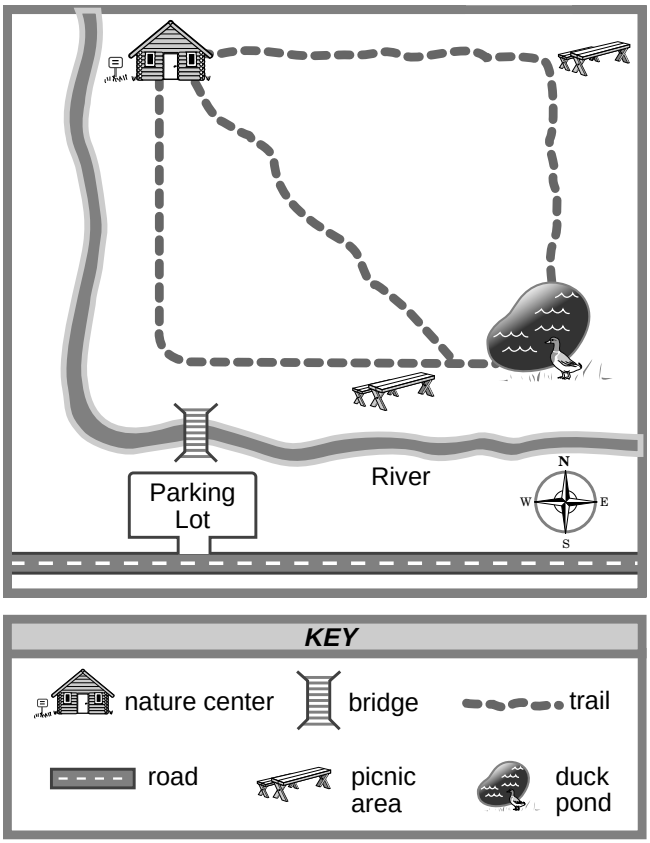
- ○ Building 1
- ✔ ○ Building 2
- ○ Building 3
- ○ Building 4

Social Studies Sample Items Grade 4, Level 14

Wisconsin Model Academic Standards Measured

Use the map to do Number 6.

GROVE PARK



A Geography

TerraNova Objective 26
Geographic Perspectives

In this item, the student applies geographic skills by evaluating the information in the map to choose the best location for a specific land use and then provides a justification. In addition to map skills, other geographic concepts and skills addressed relate to human-environment interactions, mental mapping, and analyzing environmental changes and their effects.

3 **A third-grade class went to Grove Park on a field trip. First the students crossed the bridge and walked north to the nature center. Then they walked east to a picnic area to have lunch.**

A On the map, draw a line that shows the route the students took.

B An information booth where visitors can get maps is going to be built in the park. Think about the best place for the information booth.

- Draw an X on the map in the place you think is best for the information booth.
- Explain why you think this is the best place.

_____

_____

_____

_____

Appendix A • Wisconsin Alignment Participants

WSAS Test Alignment Workshop Participants

Language Arts

Sandra Dickerson
Milwaukee Public Schools

Mark Hieke
Howard-Suamico Public Schools

Jacqueline Hill
Whitnall Public Schools

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Milwaukee Public Schools

Joe Papenfuss
Racine Public Schools

Sue Reader
Ashland Public Schools

Connie Russell
Eau Claire Public Schools

Roni Telfer
Whitewater Public Schools

Lisa Wiedmann
Rhinelander Public Schools

Brad Wiese
Appleton Public Schools

Mathematics

Janet Alekna
Wisconsin Rapids Public Schools

William Breisch
Monona Grove Public Schools

Jane Howell
Platteville Public Schools

J. Marshall Osborn
UW-Madison

Barbara Martinko
Milwaukee Public Schools

Steve Reinhart
Chippewa Falls Public Schools

Pat Reisdorf
Madison Metropolitan Schools

James Marty
Waukesha Public Schools

Science

Kathleen Damrow
Milwaukee Public Schools

Kris Dimock
Bloomer Public Schools

Alfred A., Jr. Hovey
Wauwatosa Public Schools

Mark Klawiter
Ladysmith Public Schools

Pat Marinac
Appleton Public Schools

Sharon Nelson
Waunakee Public Schools

Tom Reisenauer
Marshall Public Schools

Rhulene Swanigan
Milwaukee Public Schools

Paul Tweed
Augusta Public Schools

Social Studies

Susan Gogue
Baraboo Public Schools

Walt R. Herscher
Appleton Public Schools

James D. Kraft
Wausau Public Schools

Jeanne M. Kress
Franklin Public Schools

Margaret Laughlin
UW-Green Bay

MichaelMcKinnon
Janesville Public Schools

Iris Othrow
McFarland Public Schools

Michelle T. Trevino
Milwaukee Public Schools

Dave C. Wessel
Spencer Public School

Michael M. Yell
Hudson Public Schools

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Instructional Services

Sue Grady, Director
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Jacque Karbon, Education Consultant
Language Arts

Susan Ketchum, Measurement Specialist
Office of Educaton Accountability

Ellen Last, Education Consultant
Language Arts

Shelley Lee, Education Consultant
Social Studies

Jennifer Thayer, Education Consultant
Mathematics, Title I

Marsha Behnke, Program Assistant
Office of Education Accountability

Maggie Burke, Education Consultant
High School Graduate Test

Verlena Johnson, Special Assistant
High School Graduation Test

Guests and Observers

Luther Olson, State Representative
Chairman, State Assembly
Committee on Education

Sue Gehn, Mathematics Teacher
Monona Grove Public Schools

Lowell Gillette, Chair
Title I Committee of Practitioners

Appendix B • Description of Alignment Procedures

Alignment Procedures

On April 20-21, 1998, CTB/McGraw-Hill staff conducted a workshop for the Department of Public Instruction (DPI) to match items on *TerraNova*, Form A, at Levels 14, 18, and 20 to the Model Academic Standards for Grades 4, 8, and 12, respectively. *TerraNova* is currently administered to Wisconsin students in Grades 4, 8, and 10. A common criticism of nationally standardized, norm-referenced tests is that the items do not assess a particular state's or locality's curriculum. Therefore, one purpose of conducting the match was to determine whether individual *TerraNova,* Form A, items assess the Model Academic Standards and the extent to which the Model Academic Standards are addressed by *TerraNova,* Form A, items—that is, breadth of coverage.

The content assessed by *TerraNova* was defined by reviewing objectives and frameworks in state, district, and diocesan curriculum guides; standards in the most recent national standards publications; content of current, widely used basal texts and series; and practices in model educational programs. Based on this review, items were written to address the content that was common to these documents. Nonetheless, the Wisconsin Department of Public Instruction wanted to provide Wisconsin educators with information about the breadth of coverage of the Model Academic Standards and how many *TerraNova,* Form A, items match one or more standards.

At the time the workshop was conducted, only *TerraNova,* Form A, had been administered in Wisconsin; however, Form B will also be administered in future years. The *TerraNova* objective structure and the number of items measuring each objective remain constant across, Form A, and Form B. However, if the Wisconsin Model Academic Standards were to be matched to *TerraNova* Form B, it is likely that the number of items measuring the Wisconsin content standards may shift slightly.

The Department of Public Instruction invited Wisconsin educators to participate in the workshop. Many of the teachers selected for completing the match were also involved in the development of the Model Academic Standards. The participating educators represented elementary, middle, and high school grades. Approximately ten educators were selected for each of the four content areas assessed by TerraNova: reading/language arts, mathematics, science, and social studies. At least one Department of Public Instruction staff member observed each content area group and provided information or responded to questions only when requested by the participants.

Prior to the workshop, CTB content specialists reviewed the Model Academic Standards and completed a draft match of *TerraNova,* Form A, items to the standards. CTB also indicated which Model Academic Standards could or could not be reasonably assessed using large-scale, paper-and-pencil tests. These drafts served as a starting point for discussion.

CTB provided each participant with a copy of the draft match for each grade level and a *TerraNova,* Form A, test booklet for Levels 14, 18, and 20. Participants also had a *TerraNova* Teacher's Guide as a resource document.

During the morning of the first day of the workshop, participants received information about the nature and purpose of the alignment task. The national assessment consultant for CTB provided basic foundation information about the different purposes of norm-referenced and criterion-

referenced tests and the information derived from each. The presentation included information about different assessment formats (selected response, constructed response, essay, performance tasks, observation, and personal communication) and how different formats are better suited for certain types of achievement targets than other formats. The participants were also provided with information about the specific tasks each group would be completing and the record-keeping procedures that the groups would be using.

The alignment tasks were completed for each grade level, one grade at a time. Participants worked in dyads to complete the match for a portion of the Model Academic Standards for each grade level. Each dyad then presented their findings to the whole group; the whole group either accepted the findings or engaged in discussion until consensus was reached. CTB facilitators encouraged discussion and frequently checked to ensure that the participants had reached consensus.

CTB facilitators recorded changes to the draft match documents while participants discussed their findings. In addition, participants' comments or concerns about individual items or about other large-scale assessment issues were documented. When the participants could not reach consensus, CTB facilitators asked for a show of hands and made note of any discrepancies.

CTB staff kept a record of each *TerraNova,* Form A, item and the performance standards each item matched. If, at the end of the review, any item was not matched to a standard, the participants reviewed the item to determine whether it matched any standard. The results of the matches completed by the Wisconsin educators have been summarized and presented in this document.

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Mary Waldorf
Development Manager

Appendix C • Summary of *TerraNova* Items and Objectives Matching Wisconsin Model Academic Standards

Wisconsin Model Academic Standards		*TerraNova*, Form A, Multiple Assessments Level 14 Items Matched	*TerraNova* Objectives
A. Reading/Literature			
A.4.1	Use effective reading strategies to achieve their purposes in reading.	2, 4, 19, 20, 24, 26, 27, 31, 46, 47, 49, 51, 54	02, 03, 04, 05
A.4.2	Read, interpret, and critically analyze literature.	14–17, 21–27, 29, 42, 50–55, 60- 64	02, 03, 04, 05, 08
A.4.3	Read and discuss literary and nonliterary texts in order to understand human experience.	8, 14, 21, 31, 43, 50, 64	03, 04, 05
A.4.4	Read and acquire information.	1, 3, 5, 6, 7, 8, 31, 41, 43, 44, 45, 48	03, 05
B. Writing			
B.4.1	Create or produce writing to communicate with different audiences for a variety of purposes.	31, 62, 64	03, 04, 05
B.4.2	Plan, revise, edit, and publish clear and effective writing.	11, 13, 33–36, 40, 58, 62, 64	03, 04, 07, 08, 09
B.4.3	Understand the function of various forms, structures, and punctuation marks of standard American English and use them appropriately in communications.	9, 10, 12, 28, 32, 37, 38, 39, 40, 56, 57, 59, 62, 64	03, 04, 07, 08, 09
C. Oral Language			
C.4.1	Orally communicate information, opinions, and ideas effectively to different audiences for a variety of purposes.		
C.4.2	Listen to and comprehend oral communications.		
C.4.3	Participate effectively in discussion.		
D. Language			
D.4.1	Develop their vocabulary of words, phrases, and idioms as a means of improving communication.	4, 18, 30, 49	02, 03, 05
D.4.2	Recognize and interpret various uses and adaptations of language in social, cultural, regional, and professional situations, and learn to be flexible and responsive in their use of English.		
E. Media and Technology			
E.4.1	Use computers to acquire, organize, analyze, and communicate information.		
E.4.2	Make informed judgments about media and products.	62	03
E.4.3	Create products appropriate to audience and purpose.		
E.4.4	Demonstrate a working knowledge of media production and distribution.		
E.4.5	Analyze and edit media work as appropriate to audience and purpose.		
F. Research and Inquiry			
F.4.1	Conduct research and inquiry on self-selected or assigned topics, issues, or problems and use an appropriate form to communicate their findings.	64	04

Appendix C • Summary of *TerraNova* Items and Objectives Matching Wisconsin Model Academic Standards

Wisconsin Model Academic Standards		*TerraNova,* Form A, Multiple Assessments Level 14 Items Matched	*TerraNova* Objectives
A. Mathematical Processes			
A.4.1	Use reasoning abilities to	9, 22, 24, 26, 34, 38, 41, 42	11, 12, 13, 16, 17
A.4.2	Communicate mathematical ideas in a variety of ways, including words, numbers, symbols, pictures, charts, graphs, tables, diagrams, and models	36	12, 18
A.4.3	Connect mathematical learning with other subjects, personal experiences, current events, and personal interests		
A.4.4	Use appropriate mathematical vocabulary, symbols, and notation with understanding based on prior conceptual work		
A.4.5	Explain solutions to problems clearly and logically in oral and written work and support solutions with evidence	36, 38, 41, 42	12, 16, 17, 18
B. Number Operations and Relationships			
B.4.1	Represent and explain whole numbers, decimals, and fractions with	34	13, 18
	physical materials		
	number lines and other pictorial models		
	verbal descriptions		
	place-value concepts and notation		
	symbolic renaming (e.g., 43 = 40 + 3 = 30 + 13)		
B.4.2	Determine the number of things in a set by	21, 29, 40	10, 12, 17
	grouping and counting (e.g., by threes, fives, hundreds)	21, 29, 20, 39	10, 12, 17
	combining and arranging (e.g., all possible coin combinations amounting to thirty cents)	39, 40	12, 17
	estimation, including rounding	35	11
B.4.3	Read, write, and order whole numbers, simple fractions (e.g., halves, fourths, tenths, unit fractions) and commonly used decimals (monetary units)	28	10
B.4.4	Identify and represent equivalent fractions for halves, fourths, eighths, tenths, twelfths, sixteenths	27	10
B.4.5	In problem-solving situations involving whole numbers, select and efficiently use appropriate computational procedures such as	5, 6, 7, 27, 29, 30, 35, 38, 41	10, 11, 12, 16, 17, 18
B.4.6	Add and subtract fractions with like denominators	3	11
B.4.7	In problem-solving situations involving money, add and subtract decimals	20, 40	10, 12, 17
C. Geometry			
C.4.1	Describe two- and three-dimensional figures (e.g., circles, polygons, trapezoids, prisms, spheres) by	18, 32, 33	14
C.4.2	Use physical materials and motion geometry (such as slides, flips, and turns) to identify properties and relationships, including but not limited to	33	14
C.4.3	Identify and use relationships among figures, including but not limited to	23	14
C.4.4	Use simple two-dimensional coordinate systems to find locations on maps and to represent points and simple figures		

Appendix C • Summary of *TerraNova* Items and Objectives Matching Wisconsin Model Academic Standards

Wisconsin Model Academic Standards		*TerraNova,* Form A, Multiple Assessments Level 14 Items Matched	*TerraNova* Objectives
	D. Measurement		
D.4.1	Recognize and describe measurable attributes, such as length, liquid capacity, time, weight (mass), temperature, volume, monetary value, and angle size, and identify the appropriate units to measure them		
D.4.2	Demonstrate understanding of basic facts, principles, and techniques of measurement, including		
D.4.3	Read and interpret measuring instruments (e.g., rulers, clocks, thermometers)	31, 24	13, 17
D.4.4	Determine measurements directly by using standard tools to these suggested degrees of accuracy	24, 43	13, 17
D.4.5	Determine measurements by using basic relationships (such as perimeter and area) and approximate measurements by using estimation techniques	25, 43	13
	E. Statistics and Probability		
E.4.1	Work with data in the context of real-world situations by	15, 37	15, 18
E.4.2	Describe a set of data using		
E.4.3	In problem-solving situations, read, extract, and use information presented in graphs, tables, or charts	16, 17	15
E.4.4	Determine if future events are more, less, or equally likely, impossible, or certain to occur	19	15
E.4.5	Predict outcomes of future events and test predictions using data from a variety of sources		
	F. Algebraic Relationships		
F.4.1	Use letters, boxes, or other symbols to stand for any number, measured quantity, or object in simple situations (e.g., N + 0 = N is true for any number)	21	12
F.4.2	Use the vocabulary, symbols, and notation of algebra accurately (e.g., correct use of the symbol "="; effective use of the associative property of multiplication)		
F.4.3	Work with simple linear patterns and relationships in a variety of ways, including	13, 22, 42	13, 16, 18
F.4.4	Recognize variability in simple functional relationships by describing how a change in one quantity can produce a change in another (e.g., number of bicycles and the total number of wheels)	30,	16
F.4.5	Use simple equations and inequalities in a variety of ways, including	27	10
F.4.6	Recognize and use generalized properties and relationships of arithmetic (e.g., commutativity of addition, inverse relationship of multiplication and division)		

Appendix C • Summary of *TerraNova* Items and Objectives Matching Wisconsin Model Academic Standards

Wisconsin Model Academic Standards		*TerraNova,* Form A, Multiple Assessments Level 14 Items Matched	*TerraNova* Objectives
A. Science Connections			
A.4.1	When conducting science investigations, ask and answer questions that will help decide the general areas of science being addressed		
A.4.2	When faced with a science-related problem, decide what evidence, models, or explanations previously studied can be used to better understand what is happening now	35	22
A.4.3	When investigating a science-related problem, decide what data can be collected to determine the most useful explanations	7, 16	19, 21
A.4.4	When studying science-related problems, decide which of the science themes are important		
A.4.5	When studying a science-related problem, decide what changes over time are occurring or have occurred	3, 5, 10, 32, 35	21, 22, 24
B. Nature of Science			
B.4.1	Use encyclopedias, source books, texts, computers, teachers, parents, other adults, journals, popular press, and various other sources, to help answer science-related questions and plan investigations		
B.4.2	Acquire information about people who have contributed to the development of major ideas in the sciences and learn about the cultures in which these people lived and worked		
B.4.3	Show how the major developments of scientific knowledge in the earth and space, life and environmental, and physical sciences have changed over time		
C. Science Inquiry			
C.4.1	Use the vocabulary of the unifying themes to ask questions about objects, organisms, and events being studied		
C.4.2	Use the science content being learned to ask questions, plan investigations, make observations, make predictions, and offer explanations		
C.4..3	Select multiple sources of information to help answer questions selected for classroom investigations		
C.4.4	Use simple science equipment safely and effectively, including rulers, balances, graduated cylinders, hand lenses, thermometers, and computers, to collect data relevant to questions and investigations	9, 13, 16, 23	19
C.4.5	Use data they have collected to develop explanations and answer questions generated by investigations		
C.4.6	Communicate the results of their investigations in ways their audiences will understand by using charts, graphs, drawings, written descriptions, and various other means, to display their answers	30	19
C.4.7	Support their conclusions with logical arguments	30	19
C.4.8	Ask additional questions that might help focus or further an investigation		
D. Physical Science			
PROPERTIES OF EARTH MATERIALS			
D.4.1	Understand that objects are made of more than one substance, by observing, describing and measuring the properties of earth materials, including properties of size, weight, shape, color, temperature, and the ability to react with other substances	12, 13, 16, 17, 23	19, 20
D.4.2	Group and/or classify objects and substances based on the properties of earth materials		

Appendix C • Summary of *TerraNova* Items and Objectives Matching Wisconsin Model Academic Standards

Wisconsin Model Academic Standards		*TerraNova,* Form A, Multiple Assessments Level 14 Items Matched	*TerraNova* Objectives
D.4.3	Understand that substances can exist in different states—solid, liquid, gas	8, 14, 21	20
D.4.4	Observe and describe changes in form, temperature, color, speed, and direction of objects and construct explanations for the changes		
D.4.5	Construct simple models of what is happening to materials and substances undergoing change, using simple instruments or tools to aid observations and collect data		
POSITION AND MOTION OF OBJECTS			
D.4.6	Observe and describe physical events in objects at rest or in motion		
D.4.7	Observe and describe physical events involving objects and develop record-keeping systems to follow these events by measuring and describing changes in their properties, including position relative to another object, motion over time, and position due to forces		
LIGHT, HEAT, ELECTRICITY, AND MAGNETISM			
D.4.8	Ask questions and make observations to discover the differences between substances that can be touched (matter) and substances that cannot be touched (forms of energy, light, heat, electricity, sound, and magnetism)	18, 31	20, 22
E. Earth and Space Science			
PROPERTIES OF EARTH MATERIALS			
E.4.1	Investigate that earth materials are composed of rocks and soils and correctly use the vocabulary for rocks, minerals, and soils during these investigations		
E.4.2	Show that earth materials have different physical and chemical properties, including the properties of soils found in Wisconsin		
E.4.3	Develop descriptions of the land and water masses of the earth and of Wisconsin's rocks and minerals, using the common vocabulary of earth and space science	11, 24	22
OBJECTS IN THE SKY			
E.4.4	Identify celestial objects (stars, sun, moon, planets) in the sky, noting changes in patterns of those objects over time	35	22
CHANGES IN THE EARTH AND SKY			
E.4.5	Describe the weather commonly found in Wisconsin in terms of clouds, temperature, humidity, and forms of precipitation, and the changes that occur over time, including seasonal changes		
E.46	Using the science themes, find patterns and cycles in the earth's daily, yearly, and long-term changes	3, 25, 33	22
E.4.7	Using the science themes, describe resources used in the home, community, and nation as a whole	32	24
E.4.8	Illustrate human resources use in mining, forestry, farming, and manufacturing in Wisconsin and elsewhere in the world		
F. Life and Environmental Science			
THE CHARACTERISTICS OF ORGANISMS			
F.4.1	Discover how each organism meets its basic needs for water, nutrients, protection, and energy in order to survive	1, 6, 26, 28	21
F.4.2	Investigate how organisms, especially plants, respond to both internal cues (the need for water) and external cues (changes in the environment)	27	21

Appendix C • Summary of *TerraNova* Items and Objectives Matching Wisconsin Model Academic Standards

Wisconsin Model Academic Standards		*TerraNova,* Form A, Multiple Assessments Level 14 Items Matched	*TerraNova* Objectives
LIFE CYCLES OF ORGANISMS			
F.4.3	Illustrate the different ways that organisms grow through life stages and survive to produce new members of their type	2	
ORGANISMS AND THEIR ENVIRONMENT			
F.4.4	Using the science themes, develop explanations for the connections among living and non-living things in various environments	4, 5, 10, 22	21, 24
G. Science Applications			
G.4.1	Identify the technology used by someone employed in a job or position in Wisconsin and explain how the technology helps	15, 29	23
G.4.2	Discover what changes in technology have occurred in a career chosen by a parent, grandparent, or an adult friend over a long period of time		
G.4.3	Determine what science discoveries have led to changes in technologies that are being used in the workplace by someone employed locally	19	24
G.4.4	Identify the combinations of simple machines in a device used in the home, the workplace, or elsewhere in the community, to make or repair things, or to move goods or people		
G.4.5	Ask questions to find answers about how devices and machines were invented and produced		
H. Science in Social and Personal Perspectives			
H.4.1	Describe how science and technology have helped, and in some cases hindered, progress in providing better food, more rapid information, quicker and safer transportation, and more effective health care	20	23
H.4.2	Using the science themes, identify local and state issues that are helped by science and technology and explain how science and technology can also cause a problem	19, 32	24
H.4.3	Show how science has contributed to meeting personal needs, including hygiene, nutrition, exercise, safety, and health care	34	24
H.4.4	Develop a list of issues that citizens must make decisions about and describe a strategy for becoming informed about the science behind these issues		

Appendix C • Summary of *TerraNova* Items and Objectives Matching Wisconsin Model Academic Standards

Wisconsin Model Academic Standards		*TerraNova,* Form A, Multiple Assessments Level 14 Items Matched	*TerraNova* Objectives
A. GEOGRAPHY: People, Places, and Environments			
A.4.1	Use reference points, latitude and longitude, direction, size, shape, and scale to locate positions on various representations of the earth's surface	1, 2, 13, 27	26
A.4.2	Locate on a map or globe physical features such as continents, oceans, mountain ranges, and land forms, natural features such as resources, flora, and fauna; and human features such as cities, states, and national borders	1, 2, 14, 27	26
A.4.3	Construct a map of the world from memory, showing the location of major land masses, bodies of water, and mountain ranges	14 , 17, 22	26
A.4.4	Describe and give examples of ways in which people interact with the physical environment, including use of land, location of communities, methods of construction, and design of shelters	26, 28	26
A.4.5	Use atlases, databases, grid systems, charts, graphs, and maps to gather information about the local community, Wisconsin, the United States, and the world	1, 2, 3, 4, 5, 13, 14, 33	26, 29
A.4.6	Identify and distinguish between predictable environmental changes, such as weather patterns and seasons, and unpredictable changes, such as floods and droughts, and describe the social and economic effects of these changes		
A.4.7	Identify connections between the local community and other places in Wisconsin, the United States, and the world	31	29
A.4.8	Identify major changes in the local community that have been caused by human beings, such as a construction project, a new highway, a building torn down, or a fire; discuss reasons for these changes; and explain their probable effects on the community and the environment	31, 34	28, 29
A.4.9	Give examples to show how scientific and technological knowledge has led to environmental changes, such as pollution prevention measures, air-conditioning, and solar heating		
B. HISTORY: Time, Continuity, and Change			
Fourth-Twelfth Grade Historical Eras and Themes			
While studying Wisconsin history, students in grades 4-12 will learn about:			
	The prehistory and the early history of Wisconsin's native people		
	Early explorers, traders, and settlers to 1812		
	The transition from territory to statehood, 1787-1848		
	Immigration and settlement		
	Wisconsin's role in the Civil War, 1860-1865		
	Mining, lumber, and agriculture		
	La Follette and the Progressive Era, 1874-1914		
	The world wars and conflicts		
	Prosperity, depression, industrialization, and urbanization		
	Wisconsin's response to 20th century change		
B.4.1	Identify and examine various sources of information that are used for constructing an understanding of the past, such as artifacts, documents, letters, diaries, maps, textbooks, photos, paintings, architecture, oral presentations, graphs, and charts	6, 7, 8, 17, 18, 19, 20, 29–34	26, 27, 29
B.4.2	Use a timeline to select, organize, and sequence information describing eras in history	6, 7, 8, 32	27

Appendix C • Summary of *TerraNova* Items and Objectives Matching Wisconsin Model Academic Standards

Wisconsin Model Academic Standards		*TerraNova,* Form A, Multiple Assessments Level 14 Items Matched	*TerraNova* Objectives
B.4.3	Examine biographies, stories, narratives, and folk tales to understand the lives of ordinary and extraordinary people, place them in time and context, and explain their relationship to important historical events	26, 29, 32	26, 27, 29
B.4.4	Compare and contrast changes in contemporary life with life in the past by looking at social, economic, political, and cultural roles played by individuals and groups	30	27
B.4.5	Identify the historical background and meaning of important political values such as freedom, democracy, and justice		
B.4.6	Explain the significance of national and state holidays, such as Independence Day and Martin Luther King, Jr. Day, and national and state symbols, such as the United States flag and the state flags	23	27
B.4.7	Identify and describe important events and famous people in Wisconsin and United States history	23, 24	27, 28
B.4.8	Compare past and present technologies related to energy, transportation, and communications and describe the effects of technological change, either beneficial or harmful, on people and the environment	30	27
B.4.9	Describe examples of cooperation and interdependence among individuals, groups, and nations	15, 16, 31	28, 29
B.4.10	Explain the history, culture, tribal sovereignty, and current status of the American Indian tribes and bands in Wisconsin		
C. POLITICAL SCIENCE AND CITIZENSHIP: Power, Authority, Governance, and Responsibility			
C.4.1	Identify and explain the individual's responsibilities to family, peers, and the community, including the need for civility and respect for diversity	23	27
C.4.2	Identify the documents, such as the Declaration of Independence, the Constitution, and the Bill of Rights, in which the rights of citizens in our country are guaranteed.	24	28
C.4.3	Explain how families, schools, and other groups develop, enforce, and change rules of behavior and explain how various behaviors promote or hinder cooperation		
C.4.4	Explain the basic purpose of government in American society, recognizing the three levels of government	9	28
C.4.5	Explain how various forms of civic action such as running for political office, voting, signing an initiative, and speaking at hearings, can contribute to the well-being of the community	16 , 34	28
C.4.6	Locate, organize, and use relevant information to understand an issue in the classroom or school, while taking into account the viewpoints and interests of different groups and individuals	34	28
D. ECONOMICS: Production, Distribution, Exchange, Consumption			
D.4.1	Describe and explain of the role of money, banking, and savings in everyday life	21	29
D.4.2	Identify situations requiring an allocation of limited economic resources and appraise the opportunity cost (for example, spending one's allowance on a movie will mean less money saved for a new video game)	34	28
D.4.3	Identify local goods and services that are part of the global economy and explain their use in Wisconsin		
D.4.4	Give examples to explain how businesses and industry depend upon workers with specialized skills to make production more efficient		

Appendix C • Summary of *TerraNova* Items and Objectives Matching Wisconsin Model Academic Standards

Wisconsin Model Academic Standards		*TerraNova,* Form A, Multiple Assessments Level 14 Items Matched	*TerraNova* Objectives
D.4.5	Distinguish between private goods and services (for example, the family car or a local restaurant) and public goods and services (for example, the interstate highway system or the United States Postal Service)		
D.4.6	Identify the economic roles of various institutions, including households, businesses, and government	15	28
D.4.7	Describe how personal economic decisions, such as deciding what to buy, what to recycle, or how much to contribute to people in need, can affect the lives of people in Wisconsin, the United States, and the world		
E. THE BEHAVIORAL SCIENCES: Individuals, Institutions, and Society			
E.4.1	Explain the influence of prior knowledge, motivation, capabilities, personal interests, and other factors on individual learning		
E.4.2	Explain the influence of factors such as family, neighborhood, personal interests, language, likes and dislikes, and accomplishments on individual identity and development		
E.4.3	Describe how families are alike and different, comparing characteristics such as size, hobbies, celebrations, where families live, and how they make a living		
E.4.4	Describe the ways in which ethnic cultures influence the daily lives of people		
E.4.5	Identify and describe institutions such as school, church, police, and family and describe their contributions to the well being of the community, state, nation, and global society	9, 10, 11, 12	28, 29
E.4.6	Give examples of group and institutional influences such as laws, rules, and peer pressure on people, events, and culture	16	28
E.4.7	Explain the reasons why individuals respond in different ways to a particular event and the ways in which interactions among individuals influence behavior	34	28
E.4.8	Describe and distinguish among the values and beliefs of different group and institutions		
E.4.9	Explain how people learn about others who are different from Themselves		
E.4.10	Give examples and explain how the media may influence opinions, choices, and decisions.		
E.4.11	Give examples and explain how language, stories, folk tales, music, and other artistic creations are expressions of culture and how they convey knowledge of other peoples and cultures		
E.4.12	Give examples of important contributions made by Wisconsin citizens, United States citizens, and world citizens		
E.4.13	Investigate and explain similarities and differences in ways that cultures meet human needs		
E.4.14	Describe how differences in cultures may lead to understanding or misunderstanding among people		
E.4.15	Describe instances of cooperation and interdependence among individuals, groups, and nations, such as helping others in famines and disasters		