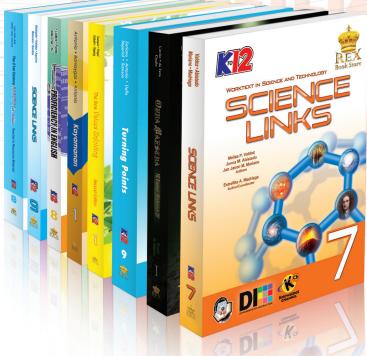




**VOL. 2 NO. 1 JUNE 2014** 

#### GNING TOTHENE COMPETENCIES



#### **About Rex K to 12 Pointers on Curriculum Changes**

#### Dear Partners in Education.

Greetings of peace!

Once again, the Philippine educational landscape is experiencing great changes in the K to 12 curriculum. Hence, we at Rex Book Store present to you the **Rex K to 12 Pointers** – an exclusive annual additional teacher's resource material designed to guide teachers by giving useful suggestions on how to best address specific academic concerns using both Rex teaching and learning materials. Particularly for this issue, the focus is on how teachers can better understand curriculum crosswalks as they impact teaching and learning. Also, this new volume of the Rex K to 12 Pointers for School Year 2014–2015 focuses on how to respond to the K to 12 curriculum version transitions per subject and grade level.

Since the implementation of the K to 12 curriculum in 2011, the DepEd has released several versions of it through its official memoranda, necessitating changes in scope and sequence, and competencies per subject per grade level with each latest release. This regular updating has had more impact on some subjects more than others. For instance, the most notable changes are in the Social Studies subject in which Grade 3 now covers appreciation of one's own region, and Grades 7 to 10 now cover new topics per level. These latest developments in the curriculum pose a challenge to educators, as they must ensure strict compliance in their implementation of the K to 12 program, from the administrative down to the classroom level.

In response, Rex Book Store shares your need to address the curriculum transitions, and we are committed to provide the necessary support to adopters of Rex titles. As your trusted partner, Rex has endeavored to come up with this new edition of the Rex K to 12 Pointers, covering the K to 12 curriculum transitions per subject as they relate to Rex titles. To ensure that Rex teaching and learning materials comply with the latest K to 12 curriculum standards and competencies, the Rex K to 12 Pointers features a curriculum crosswalk. In this crosswalk, our academic specialists have identified the additional lessons and exercises required to maximize the achievement of student learning outcomes per standard in the curriculum. In addition, the output of this crosswalk has been presented through a visual tabulation of what the curriculum transitions are, and how these transitions are addressed by the teaching and learning materials provided by Rex. Thus, this edition of the Rex K to 12 Pointers serves as a guide for you, while the additional lessons may be accessed in the Rex Interactive website via <a href="https://www.rexinteractive.com">www.rexinteractive.com</a>.

We hope that through the full compliance to the latest K to 12 curriculum that this new resource material offers, you would gain the confidence and peace of mind that you need in becoming effective educators. We are one with you in aspiring toward a successful implementation of the K to 12 basic education program for the benefit of our students. May our concerted efforts be the light to others as well as the mirror that reflects it.

Sincerely,

**Rex Book Store** 

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#### **Publisher's Note**

Leaders should recognize that one of their prime obligations is to help members of their organizations feel confident and capable as they become motivated (Doll, 2009). Indeed, as principals, subject area coordinators, or classroom teachers, you are leaders in your own schools or classrooms. Part of your responsibilities as leaders is to provide assistance to your members. With the recent changes occurring in the K to 12 curriculum, leaders such as yourselves should support your members as they transition from one curriculum version to another.

The tasks of tracking changes in the curriculum, defining new competencies, and making new lessons to implement the new competencies are grueling for any teacher. But these are necessary tasks to ensure that learners won't be shortchanged by the changes happening, rather, that they reap the fulfillment of the objectives of those changes.

As your trusted partner, Rex Book Store understands the efforts and resources needed to track and implement the changes in the curriculum. Hence, it has endeavored to give you the **Rex Pointers** – a learning supplement that traces the different changes in the curriculum through a curriculum crosswalk, develops new lessons to accomplish the intentions of the competencies, and journeys with the teachers as they execute the new lessons in their classrooms. The curriculum crosswalk found in the Rex Pointers gives the teachers a view of the spiral movement of the curriculum by comparing old standards and competencies to the new ones. It identifies if there are gaps in the curriculum that should be filled to help students attain the intended learning outcomes. The Rex Pointers also contains readymade lesson plans to address the new learning competencies, saving time for teachers in preparing their instruction. These lesson plans include combined competencies to show the integration of the topics. Finally, the Rex Pointers journeys with the teachers as they execute the new whole curriculum by providing a range of appropriate techniques and strategies.

Rex Book Store hopes that the Rex Pointers will point teachers toward the direction of becoming true leaders of K to 12 in their schools and their classrooms. With the preparation and assistance that this material offers, teachers are assured that with Rex, "You are booked for success."

Don Timothy Buhain

Chief Operating Officer, Rex Book Store, Inc.

#### **A Primer on Curriculum Crosswalks**

The Philippine K to 12 curriculum has undergone various improvements since its implementation last 2011. The improvements can either be in terms of substitution, alteration, variation, restructuring, or value orientation change (Doll, 2001). And as in all changes or improvements, their success depended on how these have been planned, communicated, and accepted. The latest of the improvements were the December 2012 and December 2013 versions released by the DepEd.

In order for schools and teachers to plan and implement these recent improvements in the curriculum, there are processes needed to track them. The simplest but most useful way of tracking them is through a curriculum crosswalk or content map. The purposes of a curriculum crosswalk are (1) to gain information about the curriculum changes; (2) to ensure spiral progression; (3) to provide provision in analyzing gaps in student learning and to fill in these gaps; and (4) to find and integrate natural curriculum connections with the nature of the discipline (Jacobs, 2009).

#### **Defining a Curriculum Crosswalk**

The elements in the curriculum that have undergone major changes are the content standards, performance standards, and learning competencies. In order to track these changes and plan actions to comply with them, a curriculum crosswalk is necessary. A curriculum crosswalk refers to a process used to cross-reference or to align the learning outcomes of the courses in a pathway (Bitters and Wigner, 2009).

#### Why perform a curriculum crosswalk?

A curriculum crosswalk allows for gaps to be found between current standards or learning competencies and expected knowledge and skills required by the discipline. These gaps and deficiencies can then be used to develop new competencies, additional lessons, new courses, and/or new opportunities for students to gain the necessary knowledge and skills.

#### When should a curriculum crosswalk be done?

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Ideally, a curriculum crosswalk should be done before making a course syllabus or the subject's scope and sequence. This allows for changes of curriculum or course development to be incorporated in the instruction or instructional materials being developed.

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#### **Steps in Performing a Curriculum Crosswalk**

#### Step 1:

Identify who will be involved in the curriculum review.

- The proponents determine the procedures used in completing the curriculum review.
- Documentation and update of the curriculum review are done by the proponents.

#### Step 2:

Assemble all relevant standards and benchmarks.

- Content Standards
- **Performance Standards**
- **Learning Competencies**

Example:

#### **GRADE 1**

Week	Listening Comprehension  EN1OL-Illa-j- 1.1  1-> Listen to short stories/poems and note important details pertaining to
	Listen to short stories/poems and note important details
3rd Quarter 1–10 and 4th Quarter 1–5	a. character b. setting c. events 2. Give the correct sequence of three events NEW 3. Infer the character feelings and traits NEW 4. Identify cause and/or effect of events NEW 5. Identify the speaker in the story or poem NEW 6. Predict possible ending of a story read 7. Relate story events to one's experience 8. Discuss, illustrate, and dramatize specific events NEW 9. Identify the problem and solution NEW 10. Retell a story listened to

#### **December 2012 version**

#### **December 2013 version**

Notice that the competencies were compared line by line. This not only helps track what happened to a particular competency, but also gives an idea of the changes that happened. In the example above, some of the competencies were either retained, deleted, moved, revised, or added.

#### Step 3:

Analyze and crosswalk the standards and competencies.

Note deficiencies and gaps in the curriculum. This part of the curriculum crosswalk can ensure that the learning competencies are in spiral progression. Also, at this vantage, the teacher can see the gaps that the curriculum may have.

#### Example:

April 2013	Remarks	December 2013		
1st Quarter: Living Things and The	st Quarter: Living Things and Their Environment			
Content Standards:  Demonstrate understanding of photosynthesis and respiration as life energy processes DELETED	In this instance, the content standards were revised to give emphasis on content. The new learning standards discuss both content as well as the process of photosynthesis, whereas the old standards just focused on the process of photosynthesis and respiration.	Content Standards:  Demonstrate understanding of the structure and function of plant parts and organelles involved in photosynthesis NEW		
	The new content standards necessitates that there is a discussion on the plant part that procures photosynthesis and why this part provides that mechanism.			

#### Step 4:

Align the standards to the curriculum.

- After a comprehensive synopsis of standards and expectations has been developed, it must be compared to the goals and objectives of the subject area, subject scope and sequence, and the total curriculum.
- The most effective approach is to look at the curriculum in total and across all subject areas (vertical and horizontal alignments).
- This step should be able to accomplish integration, eliminate duplication, and optimize use of student time.

#### Step 5:

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Redesign the curriculum to correct the deficiencies.

- ☐ Design new courses or revise current courses.
- Design teaching enhancements to support the standards.
- Both content as well as teaching and learning strategies can be modified to address the deficiencies.

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	Step	6:			
	Desi	gn assessments that verify attainment of standards.			
		Verification of student success is essential if the curriculum is to produce student mastery of required skills.			
		The assessment methods and tools must be developed in direct reference to the standards.			
In looking at the crosswalk, the teacher can identify which are the competencies that need to be developed. Thus, the teacher can now considerable assessment to accomplish these targeted competencies. It is easier to view that the curriculum crosswalk.					
	addı	One limitation is in identifying the assessment tools to be used. This limitation is addressed by the curriculum map that can be developed when using the crosswalk.			
	Step 7:				
	Deve	Develop an implementation plan.			
		Include items such as deadlines and timelines, resources, staff/professional development, barriers, and benefits.			
		Professional development must be provided to assist teachers in dealing with the changes.			
		Realistic timelines for implementation must be included.			
	Step	ep 8:			
	Eval	lluate the results.			
		The implementation plan should include collection of suitable data to document the effects of the reform on student performance.			
		The concept of continuous improvement should be adopted with the recognition that reform is an ongoing and never-ending effort.			

In this Rex Pointers, steps 1 to 5 have already been provided for the teacher. Thus, teachers no longer have to do the grueling process of identifying changes and developing new lesson plans to apply these changes.

#### **Advantages of Doing a Curriculum Crosswalk**

The advantages of doing a curriculum crosswalk are the following:

A crosswalk is a simple and clear way to communicate the connections between curriculums. It is useful for explaining the changes in standards and competencies.

- 2. It is a good review tool. It can point to gaps in the standards and generate ideas/discussion on how to fill in those gaps. It is useful for writing and revising standards.
- 3. It supports an argument for face validity. The crosswalk can point to the extent to which a competency can cover the concept it purports to measure. This can also show the relevance of the assessment produced.

#### **Limitations of a Crosswalk:**

However, a crosswalk should not be used to:

- 1. Link standards and assessments. It is not good for calibrating standards to test content. It can only describe the content. As a result, teachers would need to conduct a more sophisticated analysis on the test items.
- 2. Write standards to match test content.
- 3. Support an argument to establish validity. At most, a crosswalk can show connections (i.e., face validity), but it lacks the analysis necessary for a validity study.

Despite the limitations, the advantages of doing a curriculum crosswalk are still immense. The output can help in developing additional lessons that teachers can use for new and revised competencies.

#### **References:**

- 1. Doll, Robert C. (2009). *Curriculum Improvement Decision Making and Process*. New York, USA: Allyn and Bacon.
- 2. Jacobs, H. and Johnson, A. (2009). *Curriculum Mapping Planner*. Virginia, USA: ASCD.
- 3. Ornstein, Behar-Horenstein et al. (2003). *Contemporary Issues in Curriculum, 3rd Edition*. Boston, USA: Pearson.
- 4. http://cte.dpi.wi.gov/files/cte/pdf/curriccrosswalk.pdf
- 5. www.adultedcontentstandards.ed.gov/.../Using%20Crosswalks%20for%2...
- 6. http://www.deped.gov.ph/ (Department of Education 2013 Curriculum Guides)

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#### A Closer Look at the Curriculum Change: April 2013 vs. December 2013 Science Curriculum Guides

Developing the curriculum is a dynamic process, and this is evident in the two releases of curriculum guides dated April 2013 and December 2013. In the course of plotting the changes and differences in the two versions of science curriculum guide, the following are the common observations:

- Most of the content standards were retained except for a few that were revised.
- 2. Performance standards were lessened.
- 3. Many of the competencies were deleted and revised.

The grade 3 science curriculum was used as an example in this article to show the comparison between April 2013 and December 2013 versions. Below is the legend to better understand the changes in the curriculum:

#### Legend

- The following tags are used:
  - **NEW**
  - REVISED
  - DELETED
- The following symbols are used to compare the standards and competencies:

Symbol	Description
<b>—</b>	Standards/Competencies are the same/retained.
<b>=</b>	Standards/Competencies are totally different.
Words/Phrases	Words/Phrases highlighted in RED indicate additional words or phrases.

#### GRADE 3 FIRST QUARTER – MATTER

#### **PROPERTIES**

#### **APRIL** 2013

1st Quarter: Matter

**Properties** 

## DECEMBER 2013

Matter

1st Quarter: Matter

#### Content Standards:

 demonstrates ways of sorting materials and describing them as solid, liquid, or gas based on properties such as having definite shape and volume, and ease of flow \*REVSED

## Performance Standards:

• groups common objects found at home and in school NEW

### Learning Competencies:

- describes different objects based on their different characteristics NEW
- classifies objects and materials as solids, liquids, and gases based on their characteristics REWISED
- describes ways on the proper use and handling of solid, liquid, and gas found at home and in school REVISED

#### s properly-labeled produ

## Performance Standards:

demonstrates understanding of grouping different

Content Standards:

materials based on their properties

- safely handles and stores properly-labeled products
- practices proper disposal of wastes

### Learning Competencies:

- classifies materials based on these properties:
- absorb water
- float or sink

decaying or non-decaying

 investigates the effects of decaying materials to health and safety DELFTED

## GRADE 3 FIRST QUARTER – MATTER

## **CHANGES THAT MATERIALS UNDERGO**

#### **APRIL 2013**

#### 1\* Quarter: Matter

## **Changes that Materials Undergo**

#### Content Standards:

 demonstrates understanding of changes materials undergo when exposed to certain conditions

### Performance Standards:

 practices ways that prevent changes which may have harmful effects on the immediate environment and living organisms

### **Learning Competencies:**

- describes changes in materials when they are bent, pressed, hammered, or cut DELETED
- conducts investigation to show changes in properties of materials when exposed to certain conditions such as temperature changes or when mixed with other materials DELETED
- describes the properties of water that make it safe for drinking DELETED

#### **DECEMBER 2013**

#### 1 Quarter: Matter

#### Content Standards:

demonstrates understanding of the effects of temperature on

materials REVISED

Performance Standards:

• investigates the different changes in materials as affected by temperature NEW

### Learning Competencies:

- describes changes in materials based on the effect of temperature: NEW
- Solid to liquid
- Liquid to solid
- · Liquid to gas
- Solid to gas



## SECOND QUARTER – LIVING THINGS AND THEIR ENVIRONMENT **GRADE 3**

**HUMANS** 

#### **APRIL 2013**

## 2 duarter: Living Things and Their Environment

#### Humans

#### Content Standards:

### functions of the sense organs of the human body demonstrates understanding on the parts and

### Performance Standards:

 practices healthful habits to protect and keep the sense organs of the human body healthy

### Learning Competencies:

- identifies the sense organs of the human body
- describes the parts and functions of the sense organs of the human body
- communicates healthful practices to protect the sense organs using multimedia/non-multimedia resources

#### **DECEMBER 2013**

## 2nd Quarter: Living Things and Their Environment

## Content Standards:

Human/Sense Organs

## demonstrates understanding on the parts, and functions of the sense organs of the human body

#### Performance Standards:

## practices healthful habits in taking care of the sense organs

#### Learning Competencies:

- describes the parts and functions of the sense organs of the human body
- enumerates healthful habits to protect the sense organs

Various online tools which make teaching and learning richer and more meaningful are just a few clicks away!

## GRADE 3 SECOND QUARTER – LIVING THINGS AND THEIR ENVIRONMENT

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ANIMALS

#### **APRIL 2013**

## 2<sup>nd</sup> Quarter: Living Things and Their Environment

Animals

#### Content Standards:

## demonstrates understanding of the parts of animals and their functions and the importance of animals to humans

### Performance Standards:

- practices safety measures of handling animals
- practices proper ways of taking care of animals

### Learning Competencies:

- identifies and describes animals in the environment
- identifies the parts and functions of animals
- · groups or classifies animals according to body parts and use
- states the importance of animals to humans

#### **DECEMBER 2013**

## 2<sup>nd</sup> Quarter: Living Things and Their Environment

#### Animals

#### Content Standards:

 demonstrates understanding of the parts and functions of animals and the importance to humans

### Performance Standards:

enumerate ways of grouping animals based on their structure and importance

### Learning Competencies:

- describes animals in the environment REVISED
- identifies the parts and functions of animals
- classifies animals according to body parts and use REVISED
- states the importance of animals to humans
- describes ways of proper handling of animals NEW

# GRADE 3 SECOND QUARTER – LIVING THINGS AND THEIR ENVIRONMENT

#### SECOND

#### **APRIL 2013**

## **DECEMBER 2013**

## 2<sup>nd</sup> Quarter: Living Things and Their Environment

**Plants** 

#### Content Standards:

demonstrates understanding of the external parts of plants and their functions

#### Performance Standard:

 demonstrates proper care of plants used for food, and sources of materials and other by-products

### Learning Competencies:

- identifies the parts of plants and their functions DELETED
- describes the parts of different kinds of plants
- states the importance of plants to humans

## 2<sup>nd</sup> Quarter: Living Things and Their Environment

## Plants

#### **Content Standards:**

demonstrates understanding of the external parts of plants and their functions and importance to humans REVISED

### Performance Standards:

illustrates the difference between living and nonliving things NEW

### Learning Competencies:

- describes the parts of different kinds of plants
- states the importance of plants to humans
- describes ways of caring and proper handling of plants NEW
- compares living with nonliving things NEW

#### **GRADE 3**

# SECOND QUARTER – LIVING THINGS AND THEIR ENVIRONMENT

## **CHARACTERISTICS OF LIVING THINGS**

#### **APRIL 2013**

## 2<sup>nd</sup> Quarter: Living Things and Their Environment Characteristics of Living Things

#### **Content Standards:**

demonstrates understanding of the characteristics of living and nonliving things

## Performance Standards:

makes a collage of living and nonliving livings

### Learning Competencies:

compares living with nonliving things

#### **DECEMBER 2013**

## 2<sup>nd</sup> Quarter: Living Things and Their Environment

#### Content Standards:

demonstrates understanding of the characteristics of living and nonliving things

## Performance Standards:

#

illustrates the difference between living and nonliving things

## Learning Competencies:

compares living with nonliving things

## 2<sup>nd</sup> Quarter: Living Things and Their Environment

Heredity: Inheritance and Variation

#### **Content Standards:**

 demonstrates understanding of the reproduction among humans, animals, and plants and certain characteristics from parents to offspring REVISED

### Performance Standards:

 makes a checklist of certain characteristics they inherited from either their father or mother

## Learning Competencies:

 identifies characteristics passed on from parents to offspring (e.g., humans, animals, plants)

infers that living things reproduce

## **HEREDITY: INHERITANCE AND VARIATION**

## 2<sup>nd</sup> Quarter: Living Things and Their Environment

Heredity: Inheritance and Variation

#### **Content Standards:**

 demonstrates understanding that parents reproduce and certain characteristics are passed on to their offspring

### Performance Standards:

 makes a checklist of certain characteristics they inherited from either their father or mother

### **Learning Competencies:**

 identifies characteristics passed on to offspring from parents (e.g., humans, animals, plants)

infers that living things reproduce

## SECOND QUARTER – LIVING THINGS AND THEIR ENVIRONMENT **GRADE 3**

#### **ECOSYSTEMS**

#### **APRIL 2013**

#### **DECEMBER 2013**

## 2<sup>nd</sup> Quarter: Living Things and Their Environment

Ecosystems

#### Content Standards:

demonstrates understanding that plants, animals, and humans have basic needs such as food, air, water, and shelter that come from the environment

#### Performance Standards:

lists down activities which they can perform at home, in school, or in their neighborhood to keep the environment clean

### **Learning Competencies:**

- identifies the basic needs of humans, plants, and animals such as air, food, water, and shelter
- explains how living things depend on the environment to meet their basic needs **PELETED**
- recognizes that there is a need to protect and conserve the environment **DELETED**

## 2<sup>nd</sup> Quarter: Living Things and Their Environment

#### **Ecosystems**

#### Content Standards:

demonstrates understanding of the basic needs of plants, animals, and humans REVISED

### Performance Standards:

lists down activities which they can perform at home, in school, or in their neighborhood to keep the environment clean

### Learning Competencies:

identifies the basic needs of humans, plants and animals such as air, food, water, and shelter

## GRADE 3 THIRD QUARTER – FORCE, MOTION, AND ENERGY

## MOVING OBJECTS

#### **APRIL 2013**

## 3<sup>rd</sup> Quarter: Force, Motion, and Energy

**Moving Objects** 

#### Content Standards:

## demonstrates understanding of motion

### Performance Standards:

describes when an object has moved

### Learning Competencies:

- describes the position of a person or an object in relation to a reference point (e.g., chair, door, another person)
- identifies things that can make objects move (e.g., people, water, wind, magnets)
- compares and contrasts the movements of objects (e.g., faster/slower, forward/backward, stretching/compressing)

#### **DECEMBER 2013**

3rd Quarter: Force, Motion, and Energy

#### **Force and Motion**

#### Content Standards:

Performance Standards:

demonstrates understanding of motion of objects

observes, describes, and investigates the position and

movement of things around them

### Learning Competencies:

- describes the position of a person or an object in relation to a reference point such as chair, door, or another person
- identifies things that can make objects move such as people, water, wind, or magnets
- describes the movements of objects such as fast/slow, forward/backward, stretching/compressing REMSED

## THIRD QUARTER – FORCE, MOTION, AND ENERGY **GRADE 3**

# SOURCES AND USES OF LIGHT AND SOUND, HEAT AND ENERGY

#### **APRIL 2013**

#### **DECEMBER 2013**

#### Sources and Uses of Light and Sound, Heat and 3rd Quarter: Force, Motion, and Energy

Electricity

## 3rd Quarter: Force, Motion, and Energy

Energy: Light, Sound

#### **Content Standards:**

demonstrates understanding of the sources and uses of light, sound, heat, and electricity

### Performance Standards:

demonstrates understanding of the sources and uses of

**Content Standards:** 

light, sound, heat, and electricity

 applies the knowledge of the sources and uses of light, sound, heat, and electricity NEW



### Learning Competencies:

describes sources of light and sound, heat and electricity

enumerates uses of light, sound, heat and electricity REVISED

## practices safe and wise use of light, sound, heat, and electricity in daily life

Learning Competencies:

Performance Standards:

observes sources of light and sound, heat and electricity





## FOURTH QUARTER – FORCE, MOTION, AND ENERGY **GRADE 3**

## THE SURROUNDINGS

#### **APRIL 2013**

4" Quarter: Earth and Space

The Surroundings

## **DECEMBER 2013**

## 4" Quarter: Earth and Space

#### The Surroundings

#### **Content Standards:**

 demonstrates understanding of the people, animals, plants, lakes, rivers, streams, hills, and mountains forms and their importance REVISED

demonstrates understanding of the importance of things

found in the surroundings

Content Standards:

### Performance Standards:

through teacher-guided and self-directed activities expresses their concerns about their surroundings

### Learning Competencies:

- describes the things found in the surroundings NEW
- relates the importance of surroundings to people and other living things



participates in taking care of his/her surroundings

Learning Competencies:

Performance Standards:







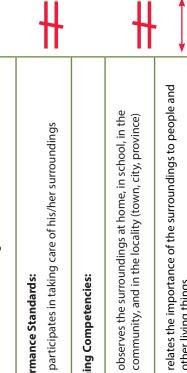






community, and in the locality (town, city, province)

other living things





## FOURTH QUARTER – FORCE, MOTION, AND ENERGY **GRADE 3**

#### THE WEATHER

#### **APRIL 2013**

## 4" Quarter: Earth and Space

**The Weather** 

#### **Content Standards:**

weather as they relate to daily activities, health, and safety demonstrates understanding of the types and effects of

### Performance Standards:

decides safety and precautionary measures in different types of weather

### Learning Competencies:

- describes the changes in the weather over a period of
- communicates how different types of weather affect activities in the community

#### **DECEMBER 2013**

## 4" Quarter: Earth and Space

**The Weather** 

#### Content Standards:

effects of weather as they relate to daily activities, demonstrates understanding of the types and health, and safety

### Performance Standards:

different weather conditions creatively (through expresses ideas about safety measures during artwork, poem, song) <sub>NEW</sub>

### **Learning Competencies:**

- describes the changes in the weather over a period of time
- communicates how different types of weather affect activities in the community

# GRADE 3 FOURTH QUARTER – FORCE, MOTION, AND ENERGY

## NATURAL OBJECTS SEEN IN THE SKY

#### **APRIL 2013**

## 4" Quarter: Earth and Space

## Natural Objects Seen in the Sky

#### **Content Standards:**

 demonstrates understanding of natural objects seen in the sky during daytime and nighttime and how these affect the activities of people and the community

### Performance Standards:

 plans activities that he/she can do during day and night that make him/her healthy and useful to his/her family and/or community

### Learning Competencies:

- describes the natural objects that are seen in the sky during daytime and nighttime DELETED
- communicates how the natural objects in the sky affect daily activities

practices precautionary measures to avoid the harmful effects of the sun's heat and light DELETED

#### **DECEMBER 2013**

## 4th Quarter: Earth and Space

## Natural Objects Seen in the Sky

#### **Content Standards:**

 demonstrates understanding of the natural objects in the sky and how these affect one's daily activities REVSED

### Performance Standards:

lists down activities which affect their daily activities NEW

#### Learning Competencies:

- communicates how the natural objects in the sky affect daily activities
- enumerates safety measures to avoid the harmful effects of the sun's heat and light NEW

#### **Summary of Changes**

#### **First Quarter: Matter**

There are two topics in this quarter, namely:

- A. Properties of Materials
- B. Changes that Materials Undergo

The content standards for both topics were retained in the December version. Performance Standards of Properties of Materials in the April version was moved to be a learning competency in the December version. Performance Standards of Changes that Materials Undergo was changed into a new standard in the December version. Learning competencies were deleted from the April version of Changes that Materials Undergo; and new learning competencies replaced the old competencies.

#### **Second Quarter: Living Things and Their Environment**

There are six topics in this quarter, namely:

- A. Humans
- B. Animals
- C. Plants
- D. Characteristics of Living Things
- E. Heredity: Inheritance and Variation
- F. Ecosystems

The topic "Humans" has no changes in the content and performance standards. It, however, has one learning competency deleted from April to December version. The topic about "Plants" retained its content standards and has a new performance standards. Two learning competencies were retained and two new additional competencies were added. The topics on "Animals" and "Characteristics of Living Things" have retained their content standards and learning competencies but have new performance standards. "Heredity" was not changed, while "Ecosystems" only has two deleted learning competencies.

#### **Third Quarter: Force, Motion, and Energy**

There are two topics in this quarter, namely:

- A. Moving Objects
- B. Sources and Uses of Light, Sound, Heat, and Energy

The content standards were all retained. Performance standards were replaced by new ones while, and all learning competencies remained with very few revisions.

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#### **Fourth Quarter: Earth and Space**

There are three topics in this quarter, namely:

- A. The Surroundings
- B. The Weather
- C. Natural Objects Seen in the Sky

In all three topics, content standards were retained while the performance standards were replaced by new ones. Learning competencies were mostly retained with some new competencies added.

#### **Sample of Supplemental Lesson Plan**

FIRST QUARTER REVISED STANDARD ON MATTER (GRADE 3)

Learning Competency: Describe ways on the proper use and handling of solid, liquid, and gas found at home and in school

Lesson Focus: Handling Solid, Liquid, and Gaseous Water

#### I. INTRODUCTION:

#### **Activating Prior Knowledge**

Ask students to identify what is being described:

- What is transparent (or colorless), odorless, and can be a refreshing drink after a long run during P.E. class? (water)
- What comes in cubes and tubes, or is even shaved—too cold to touch or taste, but particularly a wanted partner of juice drinks especially during hot summer days? (ice)
- What hot "air" comes out of the kettle's spout, when it is already whistling "I'm hot, so hot, get me out of here!" (steam)

#### II. BODY:

#### **Presenting the Key Question**

**KQ:** What are the proper ways of handling solid, liquid, and gaseous materials?

Activity: Teacher will do a class demo of "Changes in the Physical State of Water".

Materials: 2–3 ice cubes in 250-mL beaker

Alcohol lamp, match, or lighter

Tripod with wire gauze

#### **SAFETY GUIDELINES:**

Put combustible materials safely away from the burning alcohol lamp. Do not allow pupils to crowd around you. They should stay at a safe distance from the demo table.

Use potholder when holding the hot beaker. Show pupils how to properly handle water in its different physical states.

#### Procedure:

- Prepare the setup. Put wire gauze on tripod and then place the beaker on top of the tripod.
- Before heating, ask the pupils to observe the ice cubes in the beaker.

What do they see?

(Beaker "sweats," indicating that water in air condenses on the cold glass; thin "smoke-like" trail of water vapor escaping the ice cubes)

What other things do they observe? (Someone might say, "It is cold." Ask, "How do you know?")

(Other observations: ice cube melts, pool of liquid increasing)

Light the lamp and place it under the beaker.

What do they observe?

• Continue heating until all the ice has melted. Remove the alcohol lamp but do not blow off the flame.

What changes on the ice have they observed?

Is it safe to touch the beaker? (The bottom part will be hot. Unless you are sure that is safe for the pupils to touch the beaker, do not let them. You may assign someone to hold his/her hand over or near the beaker to feel the warmth.)

• Put back the alcohol lamp and continue heating until the water begins to boil.

What indicates that the water is boiling?

What do pupils observe?

#### III. CONCLUSION:

In groups of 5, pupils will discuss among them answers to the following:

- 1. What changes did water undergo?
- 2. What caused these changes?
- 3. How should each physical state of water be handled?
- 4. Why is it important to know about the physical states of matter?
- 5. Give examples of other forms of matter in solid, liquid, and gaseous states. Teacher may ask a pupil from each group to answer the questions in class.