

# SCIENCE – Grade 5

## SINE'SKWELA 5

The episodes will help the learners learn how new materials are formed when there are changes in their properties. Learners will recognize that different materials react differently with heat, light, and sound. They should be able to describe the changes that earth materials undergo. They will also learn about the effects of typhoons and of planning for calamities.

### Medium: English or Filipino

#### Learning Competency: Physical & Chemical Changes – Physical Changes

##### PHYSICAL CHANGE “DRY ICE”

*This episode describes the physical change that occurs in matter characterized by changes in form, appearance or shape but not in its composition or atomic make-up. The episode uses dry ice as it demonstrates the physical changes that occur.*

|             |                                    |
|-------------|------------------------------------|
| Oct 31(Mon) | 2:00pm – 2:20pm                    |
| Nov 2(Wed)  | 9:20am – 9:40am                    |
| Nov 3(Thu)  | 7:40am – 8:00am<br>1:40pm – 2:00pm |
| Nov 7(Mon)  | 2:00pm – 2:20pm                    |
| Nov 9(Wed)  | 9:20am – 9:40am                    |
| Nov 10(Thu) | 7:40am – 8:00am<br>1:40pm – 2:00pm |

#### Learning Competency: Physical & Chemical Changes – Chemical Changes

##### CHEMICAL CHANGES

*This episode explains the process of chemical transformation, as substances undergo changes in its composition resulting in the formation of new substances with their own properties. It involves the transformation of the molecules of a substance and the chemical reactions produced under natural conditions.*

|             |                                    |
|-------------|------------------------------------|
| Nov 14(Mon) | 2:00pm – 2:20pm                    |
| Nov 16(Wed) | 9:20am – 9:40am                    |
| Nov 17(Thu) | 7:40am – 8:00am<br>1:40pm – 2:00pm |

## **Learning Competency: Energy – Electric Circuit**

### **ELECTRIC CIRCUIT\***

*This episode discusses the parts of a simple electric circuit and how it works. It also distinguishes conductors from insulators. The episode includes tips in using electricity properly and safely.*

|             |                                    |
|-------------|------------------------------------|
| Nov 21(Mon) | 2:00pm – 2:20pm                    |
| Nov 23(Wed) | 9:20am – 9:40am                    |
| Nov 24(Thu) | 7:40am – 8:00am<br>1:40pm – 2:00pm |

## **Learning Competency: Energy – Transformation of Electrical Energy**

### **ELECTRICAL ENERGY**

*This episode explains the principles of electricity, its source, how batteries and generators change other forms of energy into electrical energy, and how a circuit works.*

|             |                                    |
|-------------|------------------------------------|
| Nov 28(Mon) | 2:00pm – 2:20pm                    |
| Nov 30(Wed) | 9:20am – 9:40am                    |
| Dec 1(Thu)  | 7:40am – 8:00am<br>1:40pm – 2:00pm |

## **Learning Competency: Energy – Transformation of Electrical Energy**

### **ELECTRICITY “SI ELEKTRA AT KALYE KURYENTE”**

*This episode shows how electrical energy can be changed into other forms such as mechanical, elastic and kinetic energies. It shows their usefulness in daily life through the windmill, water wheel, and solar heater.*

|            |                                    |
|------------|------------------------------------|
| Dec 5(Mon) | 2:00pm – 2:20pm                    |
| Dec 7(Wed) | 9:20am – 9:40am                    |
| Dec 8(Thu) | 7:40am – 8:00am<br>1:40pm – 2:00pm |

## **Learning Competency: Energy – Transformation of Electrical Energy, Electromagnet**

### **MAGNET AND ELECTRICITY**

*This episode features the composition and importance of magnets, and the relationship between magnetism and electricity. It discusses magnetism as a force that cannot be seen, touched, smelled or felt.*

|             |                                    |
|-------------|------------------------------------|
| Dec 12(Mon) | 2:00pm – 2:20pm                    |
| Dec 14(Wed) | 9:20am – 9:40am                    |
| Dec 15(Thu) | 7:40am – 8:00am<br>1:40pm – 2:00pm |

## **Learning Competency: Energy – Simple Machines**

### **SIMPLE MACHINES (Part 1)**

*This episode enumerates the uses and functions of simple machines in making work easier. This initial episode focuses on the inclined plane, the screw, and the wedge.*

|             |                 |
|-------------|-----------------|
| Dec 19(Mon) | 2:00pm – 2:20pm |
| Dec 21(Wed) | 9:20am – 9:40am |
| Dec 22(Thu) | 7:40am – 8:00am |
|             | 1:40pm – 2:00pm |
| Jan 2(Mon)  | 2:00pm – 2:20pm |
| Jan 4(Wed)  | 9:20am – 9:40am |
| Jan 5(Thu)  | 7:40am – 8:00am |
|             | 1:40pm – 2:00pm |

### **RECAP 5**

#### **Review of the Third Grading Period**

|             |                 |
|-------------|-----------------|
| Jan 9(Mon)  | 2:00pm – 2:20pm |
| Jan 11(Wed) | 9:20am – 9:40am |
| Jan 12(Thu) | 7:40am – 8:00am |
|             | 1:40pm – 2:00pm |

### **RECAP 6**

#### **Review of the Third Grading Period**

|             |                 |
|-------------|-----------------|
| Jan 16(Mon) | 2:00pm – 2:20pm |
| Jan 18(Wed) | 9:20am – 9:40am |
| Jan 19(Thu) | 7:40am – 8:00am |
|             | 1:40pm – 2:00pm |

## **Learning Competency: Energy – Simple Machines**

### **SIMPLE MACHINES 2**

*This episode continues the discussion from the previous episode, adding more simple machines such as the pulley, and the wheel and axle. It introduces the concept of a compound machine as a combination of simple machines.*

|             |                 |
|-------------|-----------------|
| Jan 23(Mon) | 2:00pm – 2:20pm |
| Jan 25(Wed) | 9:20am – 9:40am |
| Jan 26(Thu) | 7:40am – 8:00am |
|             | 1:40pm – 2:00pm |

## **Learning Competency: Earth – Formation of Rocks**

### **ROCK FORMATION**

*This episode features the formation of different rocks and how they differ in color, shape and weight depending on the kind of minerals they contain. The character in the story discovers the three types of rocks: sedimentary, igneous and metamorphic.*

|             |                                    |
|-------------|------------------------------------|
| Jan 30(Mon) | 2:00pm – 2:20pm                    |
| Feb 1(Wed)  | 9:20am – 9:40am                    |
| Feb 2 (Thu) | 7:40am – 8:00am<br>1:40pm – 2:00pm |

## **Learning Competency: Earth – Rock Weathering**

### **WEATHERING**

*This episode describes the causes and effects of weathering — the breaking down of rocks — on soil and the environment.*

|            |                                 |
|------------|---------------------------------|
| Feb 6(Mon) | 2:00pm – 2:20pm                 |
| Feb 8(Wed) | 9:20am – 9:40am                 |
| Feb 9(Thu) | 7:40am – 8:00am 1:40pm – 2:00pm |

## **Learning Competency: Earth – Care and Concern for Water Resources**

### **PASIG RIVER REHABILITATION, PART 1**

*Clean water is important to all life on earth. Water pollution is any change in water that makes it harmful to living things. The episode discusses pollution of the Pasig River and the efforts to rehabilitate it.*

|             |                                    |
|-------------|------------------------------------|
| Feb 13(Mon) | 2:00pm – 2:20pm                    |
| Feb 15(Wed) | 9:20am – 9:40am                    |
| Feb 16(Thu) | 7:40am – 8:00am<br>1:40pm – 2:00pm |

## **Learning Competency: Earth – Care and Concern for Water Resources**

### **PASIG RIVER REHABILITATION, PART 2**

*Clean water is important to all life forms on earth and its pollution makes it harmful to all living things. The episode discusses the pollution of Pasig River and the efforts to rehabilitate it.*

|             |                                    |
|-------------|------------------------------------|
| Feb 20(Mon) | 2:00pm – 2:20pm                    |
| Feb 22(Wed) | 9:20am – 9:40am                    |
| Feb 23(Thu) | 7:40am – 8:00am<br>1:40pm – 2:00pm |

## **Learning Competency: Earth – Tropical Cyclone, Precautionary Measures**

### **TROPICAL CYCLONE**

*This episode discusses the nature of storms and typhoons in the Philippine context. It provides a discussion on the formation of winds and how this affects the severity of the tropical cyclone. It also*

*emphasizes certain precautionary measures to be made before and during the event of the typhoon.*

|             |                 |
|-------------|-----------------|
| Feb 27(Mon) | 2:00pm – 2:20pm |
| Mar 1(Wed)  | 9:20am – 9:40am |
| Mar 2(Thu)  | 7:40am – 8:00am |
|             | 1:40pm – 2:00pm |

### **Learning Competency: Solar System – The Solar System**

#### **WHAT IS THE SOLAR SYSTEM?**

*This episode introduces and discusses the planets in our solar system and their characteristics and roles. It also expounds on the billions of other solar systems found in the universe.*

|            |                 |
|------------|-----------------|
| Mar 6(Mon) | 2:00pm – 2:20pm |
| Mar 8(Wed) | 9:20am – 9:40am |
| Mar 9(Thu) | 7:40am – 8:00am |
|            | 1:40pm – 2:00pm |

### **Learning Competency: Solar System – The Solar System, Characteristics of The Planets**

#### **SOLAR SYSTEM**

*This episode explores the important concepts related to the solar system. It investigates the different characteristics of planets from their composition to their relative rotation and revolution. Experiments were shown to better explain gravitation and inertia.*

|             |                 |
|-------------|-----------------|
| Mar 13(Mon) | 2:00pm – 2:20pm |
| Mar 15(Wed) | 9:20am – 9:40am |
| Mar 16(Thu) | 7:40am – 8:00am |
|             | 1:40pm – 2:00pm |

### **Learning Competency: Solar System – Other Members of the Solar System**

#### **COMETS AND ASTEROIDS**

*This episode features comets, meteors, meteorites and other celestial bodies. To make the episode interesting, characters are introduced such as a mystery man who prophesizes the end of the world because of an appearance of a comet.*

|             |                 |
|-------------|-----------------|
| Mar 20(Mon) | 2:00pm – 2:20pm |
| Mar 22(Wed) | 9:20am – 9:40am |
| Mar 23(Thu) | 7:40am – 8:00am |
|             | 1:40pm – 2:00pm |