

GRADE 9 – SCIENCE

K HUB

Deeper discussions, illustrations and application of scientific principles and concepts are shown in featured episodes of K Hub with real-life expert teachers as hosts.

The episodes are good resource materials for the study of Science for Grade 9.

Medium: English

Learning Competencies: Respiratory and Excretory Systems

Respiratory and Excretory System

In this episode, students are expected to understand the structure of the respiratory system as well as the mechanism and control of breathing. It also talks about the structures of the urinary system and kidney functions.

Jun 7 (Wed) 10:40am - 11:00am

3:20pm - 3:40pm

Jun 14 (Wed) 10:40am - 11:00am

3:20pm - 3:40pm

Learning Competencies: Digestive and Endocrine Systems

Digestive and Endocrine System

In this episode, students should be able to understand the digestive system and the processes of breaking down of food, and absorption of nutrients. It also talks about the endocrine glands and its hormones.

Jun 21 (Wed) 10:40am - 11:00am
3:20pm - 3:40pm

Learning Competencies: Muscular and Skeletal Systems

Muscular and Skeletal System

In this episode, students are expected to learn the different structures and functions of the bone, and bone formation during development. It also talks about muscle contraction and the types of muscles in terms of structure and location.

Jun 28 (Wed) 10:40am - 11:00am
3:20pm - 3:40pm

Learning Competencies: Gregor Mendel and the Science of Genetics

Gregor Mendel and the Science of Genetics

This episode focuses on the Science of Genetics, and the roles of chromosomes and genes in hereditary variations. It also explains the chromosomal basis of genetic inheritance and the role of DNA as the blueprint of life.

Jul 5 (Wed) 10:40am - 11:00am
3:20pm - 3:40pm

Jul 12 (Wed) 10:40am - 11:00am
 3:20pm - 3:40pm

Learning Competencies: Mendelian and Non-Mendelian Inheritance

Mendelian and Non-Mendelian Inheritance

This episode covers the Mendelian and Non-Mendelian Traits. It shows how hereditary characteristics are passed from parent organisms to their offspring. It also discusses why specific traits do not segregate.

Jul 19 (Wed) 10:40am - 11:00am
 3:20pm - 3:40pm

Jul 26 (Wed) 10:40am - 11:00am
 3:20pm - 3:40pm

Learning Competency: Human Genetics

Human Genetics

This episode shows Mendel's discovery of the Mendelian ratio, the first and second hybrid generation. It also explains that the gene, the factor in Mendel's experiment, has recessive and dominant traits.

Aug 2 (Wed) 10:40am - 11:00am
 3:20pm - 3:40pm

Aug 9 (Wed) 10:40am - 11:00am
3:20pm - 3:40pm

Learning Competencies: Theories and Evidence of Evolution

Theories and Evidence of Evolution

This episode explains the theories of Darwin, speciation and natural selection, and the gene pool. It also talks about the implications of evolution to all living things and how natural selection works.

Aug 16 (Wed) 10:40am - 11:00am
3:20pm - 3:40pm

Aug 23 (Wed) 10:40am - 11:00am
3:20pm - 3:40pm

Learning Competency: Biodiversity

Bringing Order to Biodiversity

This episode explains the ways scientists organize and categorize the tremendous diversity of life and shows the difference among kingdoms. The program likewise looks at the most important phyla and classes of plants and animals.

Aug 30 (Wed) 10:40am - 11:00am
3:20pm - 3:40pm

Sep 6 (Wed) 10:40am - 11:00am
3:20pm - 3:40pm

Learning Competency: Photosynthesis

Photosynthesis Part 1

The episode talks about photosynthesis as a process that converts carbon dioxide into organic compounds, especially sugars, using energy from the sun. It occurs in plants, algae, and many species of bacteria, but not in Achaea.

Sep 13 (Wed) 10:40am - 11:00am
3:20pm - 3:40pm

Sep 20 (Wed) 10:40am - 11:00am
3:20pm - 3:40pm

Learning Competencies: Photosynthesis and Respiration

Photosynthesis Part 2

The episode explains the process of oxidizing food molecules, like glucose to carbon dioxide and water. The energy released is trapped in the form of ATP to be used by all the energy consuming activities of the cell.

Sep 27 (Wed) 10:40am - 11:00am
3:20pm - 3:40pm

Oct 4 (Wed) 10:40am - 11:00am
3:20pm - 3:40pm

Learning Competencies: Oxygen, Carbon Dioxide, Water Cycling

Oxygen Carbon Dioxide, Water Cycling

This episode talks about the flow of energy: the cells storing energy in ATP by transferring the terminal phosphate groups to other compounds; the release of energy and the formation of a new and more reactive compound; and the release of energy when electrons move closer to electronegative atoms.

Oct 11 (Wed) 10:40am - 11:00am

3:20pm - 3:40pm

Oct 18 (Wed) 10:40am - 11:00am

3:20pm - 3:40pm

Learning Competency: Human Genetics

Human Genetics

This episode shows Mendel's discovery of the Mendelian ratio, the first and second hybrid generation. It also explains that the gene, the factor in Mendel's experiment, has recessive and dominant traits.

Oct 25 (Wed) 10:40am - 11:00am

3:20pm - 3:40pm

Nov 1 (Wed) 10:40am - 11:00am

3:20pm - 3:40pm