



Quarter 2: Gr. 7, Science

Unit: Science , Grade(s) 7

Quarter 2 at a glance for Science grade 7

Duration: 0 Day

Unit	
Year at a Glance	



Science 7

YEAR AT A GLANCE Student Competencies by Quarter 2013-2014

Refer To the Weekly
view (PSTs) for
Instructional Details

Adopted Text: HOLT SCIENCE AND TECHNOLOGY: Cells, Heredity and
Classification
HOLT SCIENCE AND TECHNOLOGY: Weather and Climate
[PA Common Core Resources from SAS](#)

Quarter 2 - 43 Instructional Days

Textual References

To Demonstrate Proficiency By The End Of The Quarter Students Will (with eligible content references):

HOLT: Science And
Technology: *Cells, Heredity
And Classification*

Observation

- Engage in various hands-on- activities in which the senses are used to collect information (S8.A.1.1.2)

Chapter 2

Measurement

- Gather quantitative data by using scientific instruments (balances etc.) (S8.A. 2.2.1)

Section 2

Section 3

Chapter Test

Classification

- Compare cellular respiration with fermentation (S8.C.1.1.3)
- Compare dominant and recessive traits (S8.B.2.2.2)

Chapter 3

Communicating

- Describe photosynthesis and cellular respiration (S8.C.1.1.3)
- Describe the process of mitosis, and explain how it differs in plant and animal cells (S8.B.2.2.2)
- Explain how genes and alleles are related to genotype and phenotype (S8.B.2.2.1) (S8.B.2.2.2)
- Describe Mendel’s observations and explain the relationship between traits and heredity (S8.B.2.2.1) (S8.B.2.2.2)
- Use Science Notebooks to record and summarize thoughts and ideas (S8.A.2.1.5)

Section 1

Section 2

Section 3

Chapter Test

Inference

- Make statements about an observation that provides a reasonable explanation (S8.A.1.3.4)

Prediction

- Use probability and a Punnett square to predict possible genotypes and phenotypes of offspring (S8.A.1.1.4)

Holt Science And
Technology: *Weather And
Climate*

Observation

- Engage in various hands-on- activities in which the senses are used to collect information (S8.A.1.1.2)

Chapter 1

Measurement

- Gather quantitative data by using scientific instruments (anemometer, thermometers etc.) (S8.A. 2.2.1)



Section 1

Section 2

Section 3

Section 4

Chapter Test

Chapter 2

Section 1

Section 2

Section 3

Classification

- Compare the processes of radiation, conduction, and convection (S8.C.2.1.2)

Communicating

- Describe the composition and the layers of the Earth's atmosphere
- Describe what happens to solar energy that reaches the earth (S8.C.2.2.1)
- Describe the greenhouse effect and global warming
- Describe global wind patterns (S8.D.2.1.3)
- Identify the major sources of air pollution (S8.D.2.1.2)
- Model and explain what happens when two air masses meet and identify the four kinds of air masses (S8.D.2.1.2)
- Explain how water moves through the water cycle (S8.D.1.3.1)
- Describe the four major types of fronts and explain how fronts cause weather changes (S8.D.2.1.2)
- Describe thunderstorms, tornadoes, and hurricanes and explain how to stay safe during them
- Use Science Notebooks to record and summarize thoughts and ideas (S8.A.2.1.5)

Inference and Prediction

- Make statements about an observation to provide a reasonable explanation / Guess the outcome of an event (S8.A.1.1.4) (S8A.1.3.4)

Additional Properties

Author: School District of Philadelphia

Cost/Fee: No

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Keywords:

Created by: MCGRATH, TRACEY (7/12/2011 4:01:00 PM)

Last modified by: KANE, CAROL (8/26/2013 10:31:00 AM)

Other revisions of this resource:

- Quarter 2: Kindergarten, Science modified by KANE, CAROL (8/26/2013 10:11:00 AM)
- Quarter 1: Gr. 1, Science modified by KANE, CAROL (8/26/2013 10:07:00 AM)