

Science Grade: 7

Text: By Design Level 7, Explore God's World,

First Marking Period

September Lab:

gummy DNA, cell membrane p 146 BFEK

Lab safety procedures

Scientific method review

Project assignment

Chapter 1

Bacteria, Protists and Fungi

How are living things classified?

What are Bacteria?

What are Protists?

What are Fungi?

IOWA Tests of Basic Skills

**October Lab: Chances Are, Diffusion and Osmosis
BFEK p 8-9, OSMOSIS p. 114 BKFEK**

Marker is more permanent internet

Chapter 2

Characteristics of invertebrates

How are invertebrates classified?

What are Sponges, Cnidarians and Worms?

What are Mollusks and Echinoderms?

What are Arthropods?

How do invertebrates use their senses?

Second Marking Period

November:

Lab/ Projects: Head or Tails text, Punnett squares, which permanent marker is more permanent internet

Chapter 3

Characteristics of Vertebrates

What are Fish?

What are Amphibians and Reptiles?

What are Birds and Mammals?

How do vertebrates behave and communicate?

December

Chapter 4

How Organisms Inherit Traits

How are DNA, Genes and Cell Division Connected?

What is simple inheritance?

What is genetic engineering?

January

Chapter 5

Human Development and Sexuality

How do organisms reproduce?

What are the challenges of sexual maturity?

Why is sexual abstinence important?

Review for Midterm Exams

Midterms January 12-19, 2019

February

Lab: air pressure w/ soda p.128 ESFEK,
heads/tails BFEK p.118

Chapter 6

Infectious Disease

How does the immune system protect the body?

What are infectious diseases?

How are STD's prevented?

How does the world combat disease?

Third Marking Period

March

Lab: rock bridge center of gravity ESFEK p 114,
Salty Water text

Chapter 8

Objects in our Solar System

What are the planets in our solar system?

What other objects are in our solar system?

Why do we study space?

Chapter 9

The effect of the earth's movement

How does the earth move in space?

Why does earth have seasons?

How do earth and moon interact?

April Lab: hot dog mummy, lasting blooms internet

Chapter 11

Energy Waves

What are transverse and longitudinal waves?

What are the properties of sound?

What is the electromagnetic spectrum?

What are the properties of light?

Chapter 12

Motion and Forces

How can motion be described?

How are acceleration and momentum determined?

How do forces affect motion?

What are some forces around us?

Fourth Marking period

May

Lab: preserving foods, water in plant cells internet

Chapter 13

Work, Power and Machines

How are work and power related?

What are inclined planes, wedges, and screws?

What are levers, wheels, and axles and pulleys?

Chapter 14

Energy Transferred and Transformed

What are the forms of energy?

How is energy transformed?

What is thermal energy?

How is thermal energy transferred?

June

Review for finals

Final exams May 31-5, 2019