



Life Science 7

Mrs. Duddles

**Q4 – Human Body Systems,
Chemistry of Life, & Evolution**

Thursday 06/15

Agenda:

- o **WCS District Last Day of School**
- o **1/2 Day for students; Homeschools only**
- o **Have a safe and happy Summer Break!**

Wednesday 06/14

Agenda:

- o Take Attendance
- o Clean out lockers
- o Dismiss for (MS)2TC Field Day Activities

Monday 06/12 & Tuesday 06/13

Objectives:

- o Students will analyze the inheritance of traits in individuals
- o Students will explain how patterns of heredity can be predicted by Punnett squares

White Space Question:

Monday: What is evolution?

Tuesday: List the evidence for evolution.

Agenda:

- o Read and follow Procedures to complete Activity 20
“Evidence for Evolution”

Friday 06/09

Objectives:

- o Students will analyze the inheritance of traits in individuals
- o Students will explain how patterns of heredity can be predicted by Punnett squares

White Space Question:

Define trait.

Agenda:

- o Finish Crazy Traits Investigation lab activity B3 “Crazy Traits”
 - o Read & follow directions in pink lab packet to complete Parts 3 & 4
 - o Answer Assessment Questions.

Thursday 06/08

Objectives:

- o Students will analyze the inheritance of traits in individuals
- o Students will explain how patterns of heredity can be predicted by Punnett squares

White Space Question:

What two factors determine the alleles you have for your traits?

Agenda:

- o Watch video on Mendelian Genetics
- o Go to FOD presentations

Wednesday 06/07

Objectives:

- o Students will analyze the inheritance of traits in individuals
- o Students will explain how patterns of heredity can be predicted by Punnett squares

White Space Question:

Where are the genes that determine whether an individual is female or male found?

Agenda:

- o PM Classes attend Adventure Park field trip today
- o Start Crazy Traits Investigation lab activity B3 “Crazy Traits”
 - o Read & follow directions in pink lab packet to complete Parts 1 & 2

Tuesday 06/06

Objectives:

- o Students will analyze the inheritance of traits in individuals
- o Students will explain how patterns of heredity can be predicted by Punnett squares

White Space Question:

Where are the genes that determine whether an individual is female or male found?

Agenda:

- o AM Classes attend Adventure Park field trip today
- o Start Crazy Traits Investigation lab activity B3 “Crazy Traits”
 - o Read & follow directions in pink lab packet to complete Parts 1 & 2

Monday 06/05

Objectives:

- o Students will analyze the inheritance of traits in individuals
- o Students will explain how patterns of heredity can be predicted by Punnett squares

White Space Question:

What can be shown with a Punnett square?

Agenda:

- o Discuss and review Crazy Traits Investigation lab activity B1 “Dominant and Recessive Traits” Parts 3 & 5
- o Discuss and review Activity 19 AQ, Vocabulary, & Cornell Notes

Friday 06/02

Objectives:

- o Students will analyze the inheritance of traits in individuals
- o Students will explain how patterns of heredity can be predicted by Punnett squares

White Space Question:

Explain the difference between phenotype and genotype.

Agenda:

- o PM Session shortened classes for MSVPA play “Civil War Voices” performance
- o Finish Crazy Traits Investigation lab activity B1 “Dominant and Recessive Traits” Parts 3 & 5
 - o Use data sheets given to you to record data & make graph

Thursday 06/01

Objectives:

- o Students will analyze the inheritance of traits in individuals
- o Students will explain how patterns of heredity can be predicted by Punnett squares

White Space Question:

What does it mean when a trait is dominant?

Agenda:

- o AM Session shortened classes for MSVPA play “Civil War Voices” performance
- o Finish Crazy Traits Investigation lab activity B1 “Dominant and Recessive Traits” Parts 3 & 5
 - o Use data sheets given to you to record data & make graph

Wednesday 05/31

Objectives:

- o Students will analyze the inheritance of traits in individuals
- o Students will explain how patterns of heredity can be predicted by Punnett squares

White Space Question:

What does it mean when a trait is recessive?

Agenda:

- o TENS Science Symposium @ Indian Springs Metropark (Euclid & Plato)
- o Continue Crazy Traits Investigation lab activity B1 “Dominant and Recessive Traits”
- o Read and follow directions in pink lab packet to complete Parts 3 & 5
 - o You DO NOT need the Crazy Trait kit today
 - o Use data sheets given to you to record data & make graph

Tuesday 05/30

Objectives:

- o Students will analyze the inheritance of traits in individuals
- o Students will explain how patterns of heredity can be predicted by Punnett squares

White Space Question:

What are the different forms of a gene called?

Agenda:

- o Complete Post-Survey for TENS Program (Euclid)
- o Turn in Activity 19 “Heredity, Punnett Squares and Pedigrees” work for a grade (Cornell Notes, Vocabulary and Analysis Questions)
- o Start Crazy Traits Investigation lab activity B1 “Dominant and Recessive Traits”
- o Read and follow directions in pink lab packet to complete Part 1 & Part 2

Monday 05/29

**WCS District – No School
Memorial Day Observance**



Friday 05/26 – ½ Day PM Only

Objectives:

- Students will analyze data collected at local park to determine the water quality in a stream at the park
- Students will create a scientific poster to communicate their findings from a nature study conducted at Lake St. Clair Metropark

White Space Question:

What type of plant did Gregor Mendel experiment with?

Agenda:

- Finish Activity 19 “Heredity, Punnett Squares and Pedigrees”
 - Cornell Notes, Vocabulary and Analysis Questions are due Tuesday 05/30

Thursday 05/25

Objectives:

- Students will analyze data collected at local park to determine the water quality in a stream at the park
- Students will create a scientific poster to communicate their findings from a nature study conducted at Lake St. Clair Metropark

White Space Question:

Does breeding a large dog with a small dog automatically produce a medium-sized dog?

Agenda:

- Continue working on Activity 19 “Heredity, Punnett Squares and Pedigrees”
 - Read and follow directions in Procedures section

Wednesday 05/24

Objectives:

- o Students will analyze data collected at local park to determine the water quality in a stream at the park
- o Students will create a scientific poster to communicate their findings from a nature study conducted at Lake St. Clair Metropark

White Space Question:

What does it mean that cells are the basic unit of life?

Agenda:

- o Start Activity 19 “Heredity, Punnett Squares and Pedigrees”
- o Distribute 7th Grade Awards Ceremony notice letter

Tuesday 05/23

Objectives:

- o Students will analyze data collected at local park to determine the water quality in a stream at the park
- o Students will create a scientific poster to communicate their findings from a nature study conducted at Lake St. Clair Metropark

White Space Question:

Do you have a trait that you share with one of your parents?

Agenda:

- o Introduction to Heredity and Evolution unit
- o Learn how to use sweep nets to discover insect biodiversity

Monday 05/22

Objectives:

- o Students will analyze data collected at local park to determine the water quality in a stream at the park
- o Students will create a scientific poster to communicate their findings from a nature study conducted at Lake St. Clair Metropark

White Space Question:

Do you have a trait that you share with one of your parents?

Agenda:

- o Work with your group to turn in Stream Leaders Data Analysis Project or TENS Research Project (Euclid & Plato); due today
 - o You have 35 minutes
 - o Remember to attach a rubric with group members' names to the back of your poster
- o Read for remainder of class period

Friday 05/19

Objectives:

- o Students will analyze data collected at local park to determine the water quality in a stream at the park
- o Students will create a scientific poster to communicate their findings from a nature study conducted at Lake St. Clair Metropark

White Space Question:

What does the turbidity value indicate about the quality of water?

Agenda:

- o Last in-class work day for Stream Leaders Data Analysis Project; due Monday 05/22
- o Last in-class work day for TENS Research Project (Euclid & Plato); due Monday 05/22

Thursday 05/18

Objectives:

- o Students will analyze data collected at local park to determine the water quality in a stream at the park
- o Students will create a scientific poster to communicate their findings from a nature study conducted at Lake St. Clair Metropark

White Space Question:

How do nutrients like N and P affect water quality?

Agenda:

- o Work on Stream Leaders Data Analysis Project; due Monday 05/22
- o Work on TENS Research Project (Euclid & Plato); due Monday 05/22

Wednesday 05/17

Objectives:

- o Students will analyze data collected at local park to determine the water quality in a stream at the park
- o Students will create a scientific poster to communicate their findings from a nature study conducted at Lake St. Clair Metropark

White Space Question:

How does dissolved oxygen (DO) affect water quality?

Agenda:

- o Work on Stream Leaders Data Analysis Project; due Monday 05/22
- o Work on TENS Research Project (Euclid & Plato); due Monday 05/22

Tuesday 05/16

Objectives:

- o Students will analyze data collected at local park to determine the water quality in a stream at the park
- o Students will create a scientific poster to communicate their findings from a nature study conducted at Lake St. Clair Metropark

White Space Question:

Name the key indicators of water quality.

Agenda:

- o Work on Stream Leaders Data Analysis Project; due Monday 05/22
- o Work on TENS Research Project (Euclid & Plato); due Monday 05/22

Monday 05/15

Objectives:

- o Students will analyze data collected at local park to determine the water quality in a stream at the park
- o Students will create a scientific poster to communicate their findings from a nature study conducted at Lake St. Clair Metropark

White Space Question:

What bird species did you spot on the ride to school this morning?

Agenda:

- o Collect TENS Symposium at Indian Springs Metropark permission slip; last day today (Euclid & Plato)
- o Work on Stream Leaders Data Analysis Project or
- o TENS Research Project (Euclid & Plato)

Friday 05/12

Objectives:

- o Students will learn the basics of birding
- o Students will analyze data collected at local park to determine the water quality in a stream at the park

White Space Question:

What is a watershed?

Agenda:

- o Collect TENS Symposium at Indian Springs Metropark permission slip; last day today (Euclid & Plato)

AM Classes:

- o Field of Dreams project work (15 mins)
- o Work on Stream Leaders Data Analysis Project or
- o TENS Research Project (Euclid)

PM Classes:

- o Birding presentation & nature walk with Oakland Audubon Society guest speaker Mr. David Frye

Thursday 05/11

Objectives:

- o Students will learn the basics of birding
- o Students will analyze data collected at local park to determine the water quality in a stream at the park

White Space Question:

What is the purpose of stream monitoring programs like Stream Leaders?

Agenda:

- o Collect TENS Symposium at Indian Springs Metropark permission slip; due Friday 05/12 (Euclid & Plato)

AM Classes:

- o Birding presentation & nature walk with Oakland Audubon Society guest speaker Mr. David Frye

PM Classes:

- o Field of Dreams project work (15 mins)
- o Work on Stream Leaders Data Analysis Project or
- o TENS Research Project (Plato)

Wednesday 05/10

Objectives:

- o Students will learn the basics of birding
- o Students will analyze data collected at local park to determine the water quality in a stream at the park

White Space Question:

What did you learn about your bird species that was interesting?

Agenda:

- o Collect TENS Symposium at Indian Springs Metropark permission slip (Euclid & Plato)
- o Work on Stream Leaders Data Analysis Project or
- o TENS Research Project (Euclid & Plato)

Tuesday 05/09

Objectives:

- o Students will learn the basics of birding
- o Students will analyze data collected at local park to determine the water quality in a stream at the park

White Space Question:

How useful is macroinvertebrate collection data on its own?

Agenda:

- o Collect TENS Symposium at Indian Springs Metropark permission slip (Euclid & Plato)
- o Finish informational sheet on your chosen bird species including an original drawing of your bird (15 mins)
- o Work on Stream Leaders Data Analysis Project or
- o TENS Research Project (Euclid & Plato)

Monday 05/08

Objectives:

- o Students will learn the basics of birding
- o Students will analyze data collected at a local park to determine the water quality in a stream at the park

White Space Question:

Name your favorite bird.

Agenda:

- o Collect TENS Symposium at Indian Springs Metropark permission slip (Euclid & Plato)
- o Prepare for Oakland Audubon Society birding event
- o Research one of the neighborhood birds of Warren using the field guide at your table and/or your smart device
- o Make an informational sheet on this species including an original drawing of your bird

Friday 05/05 – ½ Day AM Only

Objectives:

- Students will discuss the chemical makeup of living things.
- Students will describe the different levels of organization in living things.
- Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

What do the arrows in a food web represent?

Agenda:

- Take Attendance
- Enjoy Leslie Science & Nature Center program presentation “Walking Down a Food Chain”

Thursday 05/04

Objectives:

- Students will discuss the chemical makeup of living things.
- Students will describe the different levels of organization in living things.
- Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

Why should we monitor the water quality in local streams?

Agenda:

- Discuss and review Stream Leaders Data Analysis Group Project handout (AM classes)
- Start work on TENS Research Project poster (Euclid)
- Leslie Science & Nature Center program presentation “Walking Down a Food Chain” (PM classes)

Wednesday 05/03

Reminder:

You need a reading book today.

Agenda:

- o M-STEP Test Science Part 2 today
- o Take attendance
- o Go to Computer Lab 129/130 for M-STEP testing

Tuesday 05/02

**WCS District – No School
Election Day**

Monday 05/01

Reminder:

You need a reading book today.

Agenda:

- o **M-STEP Test Science Part 1 today**
- o **Take attendance**
- o **Go to Computer Lab 129/130 for M-STEP testing**

Friday 04/28

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

What happens to the genetic material (DNA) before a cell divides by mitosis?

Agenda:

- o Discuss and Review Activity 18 “Sexual and Asexual Reproduction”
- o Review Stream Leaders Spring Monitoring data and discuss possible research questions arising from data collected (if time)

Announcements

Important Dates to Remember:

- o M-STEP Test Science Part 1 Monday, 05/01
- o Election Day – WCS No Classes Tuesday, 05/02
- o M-STEP Test Science Part 2 Wednesday, 05/03

(Bring a book Monday & Wednesday to read after M-STEP testing.)

- o Leslie Science & Nature Center Program Presentation: “Walking Down a Food Chain”
 - o PM Classes Thursday, 05/04
 - o AM Classes Friday, 05/05
- o ½ Day AM Classes Only Friday, 05/05

Thursday 04/27

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

List two questions that you have based on our observations at Delia Park.

Agenda:

- o Review Stream Leaders Spring monitoring data collected (Aristotle)
- o Pass back and review Elements and the Periodic Table quiz
- o Finish work on Activity 18 “Sexual and Asexual Reproduction”:
 - o Read pages 112 – 120; Answer questions 5,7,9 & 10, 12 – 16, & 24
 - o Do Lesson Review on page 121 questions 1 – 10
 - o Complete Vocabulary; Answer Analysis Questions
 - o HW if not completed in class

Wednesday 04/26

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

What activity did you find the most interesting during the Stream Leaders monitoring trip to Delia Park?

Agenda:

- o Review Stream Leaders Spring monitoring data collected
- o Continue work on Activity 18 “Sexual and Asexual Reproduction” while you wait for your turn to use the stereoscope to view macroinvertebrates collected from Stream Leaders monitoring:
 - o Read pages 112 – 120; Answer questions 5,7,9 & 10, 12 – 16, & 24
 - o Do Lesson Review on page 121 questions 1 – 10
 - o Complete Vocabulary

Tuesday 04/25

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

Which of the following is a compound: Na, H, Co, CO₂ ?

Agenda:

- o Start Activity 18 “Sexual and Asexual Reproduction” work:
 - o Read pages 112 – 120
 - o Answer questions 5,7,9 & 10, 12 – 16, and 24
- o Dismiss for Stream Leaders Monitoring @ 7:50 am (AM classes) and 12:00 pm (PM classes)

Monday 04/24

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

Name 3 factors related to water pollution.

Agenda:

- o Elements and the Periodic Table quiz make-up for absent students
- o Copy Activity 18 “Sexual and Asexual Reproduction” set up in to Science Notebook
- o Review & prep for Stream Leaders Monitoring at Delia Park this Tuesday 04/25:
 - o Review Chemical Analysis tests
 - o Watch video on invasive species, benthic macroinvertebrate collection methods
 - o Make group assignments for Stream Leaders; choose data recorders

Friday 04/21

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

What is the difference between atoms and molecules? Give an example of each.

Agenda:

- o Elements and the Periodic Table quiz make-up for absent students
- o Review & prep for Stream Leaders Monitoring at Delia Park next Tuesday 04/25:
 - o Discuss & review Water Quality Monitoring guided reading & data sheets

Thursday 04/20

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

What family does the element strontium (Sr) belong to?

Agenda:

- o Discuss Activity 17 Quick Lab “Molecules for Life Processes” (15 mins)
- o Take Elements and the Periodic Table quiz
- o Staple colored Periodic Table to quiz sheet when done with quiz; Turn in both for grading
- o Read for remainder of class period

Wednesday 04/19

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

How many valence electrons do the elements in group 15 have?

Agenda:

- o Review & prep for Stream Leaders Spring Monitoring (Tuesday, 04/25):
 - o Complete “Water Quality Monitoring” Guided Reading
- o Study for Elements and the Periodic Table quiz; Thursday 04/20 (10 mins)

Tuesday 04/18

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

What are metalloids?

Agenda:

- o Finish “Coloring the Periodic Table” activity today; discuss & review
- o Complete in-class review for Elements and the Periodic Table quiz
- o Do Activity 17 Quick Lab “Molecules for Life Processes”
- o Elements and the Periodic Table quiz this week, Thursday 04/20

Reminder: TENS Program visit to Lake St. Clair Wednesday 04/19 (Euclid & Plato groups)

Monday 04/17

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

Where would you find elements that are metals on the Periodic Table?

Agenda:

- o Turn in Stream Leaders Program Spring Monitoring permission letter; due today
- o Coloring the Periodic Table activity:
 - o Listen & follow the teacher's direction to color-code your copy of the Periodic Table

Notice: Elements and the Periodic Table quiz this week: Thursday 04/20

Friday 04/14

WCS District – No School

Thursday 04/13 – ½ Day PM Only

Objectives:

- Students will discuss the chemical makeup of living things.
- Students will describe the different levels of organization in living things.
- Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

What are some important molecules found in cells?

Agenda:

- Finish discussion & review Activity 17B; turn in Guided Reading handout for a grade (Hippocrates)
- Watch BBC Planet Earth series segment “Mountains”
- Turn in Stream Leaders Program Spring Monitoring permission letter; due Monday 04/17

Wednesday 04/12

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

What are some important molecules found in cells?

Agenda:

- o Finish Activity 17B “Elements and the Periodic Table” Guided Reading activity (10 mins)
- o Discuss & review Activity 17B
- o Turn in Stream Leaders Program Spring Monitoring permission letter; due Monday 04/17

Tuesday 04/11

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

What is water? What atoms make up water?

Agenda:

- o Work on Activity 17B “Elements and the Periodic Table” Guided Reading activity
- o Turn in Stream Leaders Program Spring Monitoring permission letter; due Monday 04/17

Monday 04/10

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

Rank the following terms by level of organization: cell, atom, molecule.

Agenda:

- o Discuss and review Activity 17 “The Chemistry of Life”
- o Distribute Stream Leaders Program Spring Monitoring permission letter

Monday 04/03 – Friday 04/07

WCS District – Spring Break

No Classes

Friday 03/31 – ½ Day AM Only

Objectives:

- Students will discuss the chemical makeup of living things.
- Students will describe the different levels of organization in living things.
- Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

Can you think of an example of an atom and an example of a molecule?

Agenda:

- Watch BBC Planet Earth series segment “Mountains”
- Finish Activity 17 “The Chemistry of Life”; be ready for discussion & review after break
- Have a great Spring Break!

Thursday 03/30

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

Finish “Families of Elements” lab packet Analysis Questions.

Agenda:

- o Discuss and review Activity 17A “Families of Elements” lab activity
- o Discuss and review Activity 17 “The Chemistry of Life” assigned book reading and questions if time

Wednesday 03/29

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

Read “Families of Elements” lab packet to understand what you are doing in lab today.

Agenda:

- o Work with your lab group to complete Activity 17A “Families of Elements” lab;
- o Read and follow directions in lab packet

Tuesday 03/28

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

True or False? The nucleus of an atom is the same as the nucleus of a cell.

Agenda:

- o Work on Activity 17 “The Chemistry of Life”:
 - o Read pages 14 – 21; Answer questions 1 – 3 & 5 – 13
 - o Do Lesson Review on page 23; questions 1 – 9
 - o Complete Vocabulary
- o **HW: Copy Activity 17A “Families of Elements” set up in to Science Notebook**

Monday 03/27

Objectives:

- o Students will discuss the chemical makeup of living things.
- o Students will describe the different levels of organization in living things.
- o Students will see that cells are alive and the functions of living organisms, including respiration, are performed by cells.

White Space Question:

Describe the process of cellular respiration.

Agenda:

- o Copy Activity 17 “The Chemistry of Life” set up in to Science Notebook
- o Start Activity 17 work:
 - o Read pages 14 – 21; Answer questions 1 – 3 & 5 – 13