



Life Science 7
Mrs. Duddles

**Q2 – Soil, Ecosystems &
Cells**

Friday 01/20 – 1/2 Day PM Only

Objectives:

- Students will explain how cells capture & release energy.
- Students will understand the flow of energy & the cycles of matter in ecosystems.
- Students will study how abiotic & biotic factors affect the growth & development of living organisms.

White Space Question:

Write the word equation for photosynthesis.

Agenda:

- Finish Activity 11A “A Producer’s Source of Energy” lab activity Part 1 & 2:
 - Read & follow directions in lab packet
 - Answer Analysis Questions #1 & 2; write answers on back of Recording Results lab data sheet. Turn in for grading

Thursday 01/19

Objectives:

- o Students will explain how cells capture & release energy.
- o Students will understand the flow of energy & the cycles of matter in ecosystems.
- o Students will study how abiotic & biotic factors affect the growth & development of living organisms.

White Space Question:

How are producers different from consumers?

Agenda:

- o **SF Project Display Board due today**
- o **AM classes:** Copy Activity 11A “A Producer’s Source of Energy” in to Science Notebook and Continue work on Activity 11 “Photosynthesis and Cellular Respiration”
- o **PM classes:** Start Activity 11A “A Producer’s Source of Energy”; Read & follow directions in lab packet and watch teacher demo to complete lab activity

Wednesday 01/18

Objectives:

- Students will explain how cells capture & release energy.
- Students will understand the flow of energy & the cycles of matter in ecosystems.
- Students will study how abiotic & biotic factors affect the growth & development of living organisms.

White Space Question:

What do you think a plant uses energy for?

What are the starting materials for photosynthesis?

Agenda:

- You have 25 mins to review SF Project Display Board and Logbook with your partner: update logbook, put finishing touches on display board, etc. Both due at end of class today
- Continue work on Activity 11 “Photosynthesis and Cellular Respiration”
- PM classes only: Copy Activity 11A “A Producer’s Source of Energy” in to Science Notebook

Tuesday 01/17

**WCS District – No School
Snow Day**

Monday 01/16

**WCS District – No School
MLK Day**

Friday 01/13

Objectives:

- o Students will explain how cells capture & release energy.
- o Students will understand the flow of energy & the cycles of matter in ecosystems.
- o Students will study how abiotic & biotic factors affect the growth & development of living organisms.

White Space Question:

What are the starting materials for photosynthesis?

Agenda:

- o Finish work on SF Project:
 - o Update Logbook, Conduct additional Background/Online research, Do Data Analysis, Edit Abstract, Write Conclusion, Work on Display Board components & putting it together
 - o Whatever you do not finish by today including Display Board must be completed by **Wednesday 01/18**

Thursday 01/12

Objectives:

- o Students will explain how cells capture and release energy.
- o Students will understand the flow of energy and the cycles of matter in ecosystems.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

What do you think a plant uses energy for?

Agenda:

- o Continue work on SF Project:
 - o Update Logbook, Conduct additional Background/Online research, Do Data Analysis, Edit Abstract, Write Conclusion, Work on Display Board components & putting it together
 - o Display Boards must be completed beginning of class

Wednesday 01/18

Wednesday 01/11

Objectives:

- o Students will explain how cells capture and release energy.
- o Students will understand the flow of energy and the cycles of matter in ecosystems.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

What is a source of energy for plants?

Agenda:

- o Review corrected Abstract for SF Project & rewrite/edit if needed
- o Continue work on SF Project:
 - o Update Logbook, Conduct additional Background research, Do Data Analysis and Conclusion, Work on Display Board components & putting it together
 - o Display Boards must be completed beginning of class **Wednesday 01/18**

Tuesday 01/10

Objectives:

- o Students will explain how cells capture and release energy.
- o Students will understand the flow of energy and the cycles of matter in ecosystems.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

How do animals get food?

Agenda:

- o Review corrected Abstract and rewrite/edit if necessary
- o Continue work on SF Project:
 - o Update Logbook, Conduct additional Background research, Do Data Analysis and Conclusion, Work on Display Board components & putting it together

Monday 01/09

Objectives:

- Students will explain how cells capture and release energy.
- Students will understand the flow of energy and the cycles of matter in ecosystems.
- Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

How do plants get food?

Agenda:

- Copy Activity 11 “Photosynthesis and Cellular Respiration” set up in to Science notebook
- Work on Activity 11 assigned book reading and questions:
 - Read pages 66 – 75 in *Cells and Heredity* book
 - Do questions 1, 2, and 5 - 15

Friday 01/06

Objectives:

- o Students will understand the flow of energy and the cycles of matter in ecosystems.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

Are producers making new matter and energy?

Agenda:

- o Begin SF Project Abstract writing lesson
- o Write Abstract & turn in to Mrs. Duddles for a grade
- o Continue work on SF Project:
 - o Logbook, Background research, Data Analysis, Display Board

Thursday 01/05

Objectives:

- o Students will understand the flow of energy and the cycles of matter in ecosystems.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

What are two things food provides to an organism?

Agenda:

- o Finish discussion and review of Activity 10 “Matter and Energy in Ecosystems” book reading & questions
- o Write Conclusion for Activity 10
- o Turn in Activity 10 handout with written Conclusion for grading
- o Start SF Project Abstract writing lesson (if time permits)

Wednesday 01/04

Objectives:

- Students will understand the flow of energy and the cycles of matter in ecosystems.
- Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

How does energy flow from the sun through a food web?

Agenda:

- Work on SF Logbook; discuss data collected over break with your groups (10 mins)
- Return SF Logbook to class basket
- Discuss and Review Activity 10 “Matter and Energy in Ecosystems” book reading & questions

Wednesday 12/21 – Tuesday 01/03

**WCS District Closed for
Winter Break
Have a Safe &
Happy Holiday!**

Tuesday 12/20 – ½ Day AM Only

Objectives:

- o Students will understand the flow of energy and the cycles of matter in ecosystems.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

Name two things that you are excited to do during winter break.

Agenda:

- o Discuss & review SF Project Display Board guidelines & grading rubric

Monday 12/19

Objectives:

- Students will understand the flow of energy and the cycles of matter in ecosystems.
- Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

What do the arrows in a food web represent?

Agenda:

- Last data collection day in class for SF Project (55 mins):
 - Make final observations of your experiment, measure data, record data.
 - Determine if you need to continue your experiment at home during break or if you are done collecting data. Either way, you can take your plants home with you. All groups must clean up today!
 - Update log book; complete background research on your specific species of plant/seed, soil, photosynthesis, how do plants make their own food

Friday 12/16

Objectives:

- Students will understand the flow of energy and the cycles of matter in ecosystems.
- Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

How does energy flow from the sun through a food web?

Agenda:

- Work on SF Project (40 mins):
 - Make observations of your experiment, measure data, record data.
 - Apply the necessary treatments to your plants for weekend.
 - Update log book; complete background research on your specific species of plant/seed, soil, photosynthesis, how do plants make their own food

Thursday 12/15

Objectives:

- o Students will understand the flow of energy and the cycles of matter in ecosystems.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

How does energy flow from the sun through a food web?

Agenda:

- o Work on SF Project (15 mins):
 - o Make observations of your experiment, measure data & apply the necessary treatments to your plants. Update log book. Log book check #2 is today.
- o “Interactions of Living Things” unit test make-up is today.
- o Finish Activity 10 “Matter and Energy in Ecosystems” work today including Vocabulary. Do not write Conclusion yet.

Wednesday 12/14

Objectives:

- Students will understand the flow of energy and the cycles of matter in ecosystems.
- Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

Explain the relationship between a biome and an ecosystem.

Agenda:

- Work on SF Project (15 mins):
 - Make observations of your experiment, measure data & apply the necessary treatments to your plants. Update log book.
 - Log book check #2 has been changed to Thursday 12/15.
- “Interactions of Living Things” unit test make-up is Thursday 12/15.
- Work on Activity 10 “Matter and Energy in Ecosystems” book reading & questions. Read pages 88 – 97. Do questions 5 – 17; write answers in Science Notebook.

Tuesday 12/13

Objectives:

- o Students will understand how population size changes in response to environmental factors and interactions between organisms.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

Give an example of an abiotic limiting factor for a population.

Agenda:

- o Work on SF Project (10 mins):
 - o Make observations of your experiment, measure data & apply the necessary treatments to your plants. Update log book.
- o Take “Interactions of Living Things” unit test.
- o When done, staple note sheet to your test and turn in both to Mrs. Duddles.
- o Read silently for remainder of hour.

Monday 12/12

**WCS District – No School due to
inclement weather.**

Friday 12/09

Objectives:

- Students will understand how population size changes in response to environmental factors and interactions between organisms.
- Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

Do organisms compete for abiotic resources? Explain your answer.

Agenda:

- Work on SF Project (15 mins):
 - Make observations of your experiment, measure data & apply the necessary treatments to your plants (extra water for the weekend hours 1 & 4). Update log book.
- Study for “Interactions of Living Things” unit test or read silently until dismissed to attend MSVPA performance of “1776” play at 8:00 am & 12:30 pm

HW: Study for “Interactions of Living Things” unit test Monday 12/12.

Thursday 12/08

Objectives:

- o Students will understand how population size changes in response to environmental factors and interactions between organisms.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

What are some ways that you compete or cooperate with others?

Agenda:

- o Work on SF Project (15 mins):
 - o Make observations of your experiment, measure data & apply the necessary treatments to your plants (extra water for the weekend for hours 2,3,5, & 6). Update log book.
- o Work on “Interactions of Living Things” study guide:
 - o Check Unit Review on pages 55 – 58; Discuss Study Guide
 - o **HW: Create a double-sided 8” x 10.5” sheet of notes for “Interactions of Living Things” unit test. The sheet of notes will be collected for a grade on test day Monday, 12/12.**

Wednesday 12/07

Objectives:

- Students will understand how population size changes in response to environmental factors and interactions between organisms.
- Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

How are animals interacting when they hunt in packs?

Agenda:

- Work on SF Project (10 mins):
 - Make observations of your experiment, measure data & apply the necessary treatments to your plants. Update log book.
- Work on “Interactions of Living Things” study guide:
 - Do Unit Review on pages 55 – 58; answer questions 1 - 16.; understand all concepts in Study Guide
 - Finish Study Guide for HW if not done in class.

Reminder: “Interactions of Living Things” unit test on Monday 12/12.

Tuesday 12/06

Objectives:

- o Students will understand how population size changes in response to environmental factors and interactions between organisms.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

Can a plant be a parasite of another plant? How?

Agenda:

- o Work on SF Project (10 mins):
 - o Make observations of your experiment, measure data & apply the necessary treatments to your plants. Update log book.
- o Discuss and Review Activity 9 Lab Activity “Identify Predator and Prey”; turn in lab sheet for a grade.

Reminder: Expect “Interactions of Living Things” unit test on Monday 12/12.

Monday 12/05

Objectives:

- Students will understand how population size changes in response to environmental factors and interactions between organisms.
- Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

What are some adaptations of predators?

Agenda:

- Work on SF Project (10 mins):
 - Make observations of your experiment, measure data & apply the necessary treatments to your plants. Update log book.
- Finish Activity 9 “Interactions in Communities” review (AM classes)
- Do Activity 9 Lab Activity “Identify Predator and Prey” (All)

Reminder: Expect “Interactions of Living Things” unit test on Monday 12/12.

Friday 12/02

Objectives:

- o Students will understand how population size changes in response to environmental factors and interactions between organisms.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

Name the types of symbiotic relationships.

Agenda:

- o Work on SF Project (10 mins):
 - o Make observations of your experiment, measure data & apply the necessary treatments to your plants (extra water for the weekend). Update log book.
- o Discuss & review Activity 8 “Population Dynamics” (AM classes)
- o Discuss & review Activity 9 “Interactions in Communities” (PM classes)
- o Do Activity 9 Lab Activity “Identify Predator and Prey” if time

Thursday 12/01

Objectives:

- Students will understand how population size changes in response to environmental factors and interactions between organisms.
- Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

What predators can you think of that are also prey?

Agenda:

- Work on SF Project (10 mins):
 - Make observations of your experiment, measure data & apply the necessary treatments to your plants. Update log book.
- Finish Activity 9 “Interactions in Communities”:
 - Do Lesson Review on page 51; questions 1 – 10
 - Do Vocabulary; Answer Analysis Questions; Write Conclusion

Wednesday 11/30

Objectives:

- Students will understand how population size changes in response to environmental factors and interactions between organisms.
- Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

Explain the concept of competition.

Agenda:

- Work on SF Project (10 mins):
 - Make observations of your experiment, measure data & apply the necessary treatments to your plants. Update log book.
 - Log book check #1 today
- Work Activity 9 “Interactions in Communities”:
 - Read pgs 42 – 49 in Ecology book; Do questions 5, 6, 8 – 11, & 13 – 14.
 - Do Lesson Review on page 51; questions 1 – 10; Answer Analysis Questions.

Tuesday 11/29

Objectives:

- o Students will understand how population size changes in response to environmental factors and interactions between organisms.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

Explain the concept of cooperation.

Agenda:

- o Work on SF Project (25 mins):
 - o Set up your experiment following the procedures you wrote Monday
 - o If your experiment is set up, start collecting data & apply the necessary treatments to your plants, take pictures of set up, record in log book
- o Work Activity 9 “Interactions in Communities”:
 - o Read pgs 42 – 49 in Ecology book; Do questions 5, 6, 8 – 11, & 13 – 14.

Monday 11/28

Objectives:

- Students will understand how population size changes in response to environmental factors and interactions between organisms.
- Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

What interactions between organisms can influence population size?

Agenda:

- Work on SF Project:
 - With your group, write experimental procedures for setting up your experiment
 - Create data tables for your experiment
 - If you have your materials, start setting up experiment today

Wednesday 11/23 – Friday 11/25

**WCS District Closed for
Thanksgiving Break**

**Have a Safe &
Happy Thanksgiving!**

Tuesday 11/22 – ½ Day PM Only

Objectives:

- o Students will understand how population size changes in response to environmental factors and interactions between organisms.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

What conditions might affect a butterfly population?

Agenda:

- o Discuss and Review Activity 8 “Population Dynamics”
- o **Reminder: Did you copy Activity 9 “Interactions in Communities” set up in to your Science Notebook? If not, do so before next Monday.**

Monday 11/21

Objectives:

- o Students will understand how population size changes in response to environmental factors and interactions between organisms.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

Do you think an arctic environment or a tropical environment can support a larger population of butterflies? Why?

Agenda:

- o Continue work on Science Fair Project: (40 minutes)
 - o Start SF Project Log Book set up
 - o Make Materials List
 - o Determine who will bring in what materials. You must have your materials & be ready to set up your experiment the week after Thanksgiving Break
- o Discuss and Review Activity 8 "Population Dynamics" if time

Friday 11/18

Objectives:

- o Students will understand how population size changes in response to environmental factors and interactions between organisms.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

What abiotic and biotic factors might affect the growth of a plant?

Agenda:

- o Continue work Science Fair Project :
 - o Turn in Parent Acknowledgement signature quarter sheet
 - o Work on & submit Final Draft to Mrs. Duddles
 - o Discuss SF Project log book guidelines & rubric

HW: Copy Activity 9 “Interactions in Communities” set up in to Science Notebook

Thursday 11/17

Objectives:

- Students will understand how population size changes in response to environmental factors and interactions between organisms.
- Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

Would the immigration or emigration of frogs to an area cause the frog population size to increase? Why?

Agenda:

- Share & Discuss Science Fair Project experiment ideas with your group: (45 mins)
- Turn in Parent Acknowledgement signature quarter sheet
- Decide on an experiment & submit Initial Draft to Mrs. Duddles; this is the time for questions

Wednesday 11/16

Objectives:

- o Students will understand how population size changes in response to environmental factors and interactions between organisms.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

How might urban sprawl like parking lots, paved roads & streets affect the land?

Agenda:

- o Finish Activity 8 “Population Dynamics” work
- o Discuss Science Fair Project handout
- o HW – Each student must come up with & research 3 possible experiment ideas for your group

Tuesday 11/15

Objectives:

- o Students will understand how population size changes in response to environmental factors and interactions between organisms.
- o Students will study how abiotic & biotic factors affect the growth and development of living organisms.

White Space Question:

What is the relationship between ecosystems and biomes?

Agenda:

- o Work on Activity 8 “Population Dynamics”:
 - o Read pages 30 – 39 in Ecology book
 - o Answer questions 5 – 9; 11, 12, & 16 – 18
 - o Define Vocabulary terms
 - o Answer Analysis Questions 1 - 5

Monday 11/14

Objectives:

- o Students will observe and describe soil scientifically using the characteristics of color, texture, consistence
- o Students will test the pH content & macronutrients found in soil sample collected from school yard

White Space Question:

Why is soil important to the planet?

Agenda:

- o Discuss & review Activity 7 “Soil Sample Test Lab”
- o Discuss “How Wolves Change Rivers” video & NYT opinion piece “Is the Wolf a Real American Hero?” Find three statements from the article that contradicts the claims made in the video
- o Copy Activity 8 “Population Dynamics” set up in to Science Notebook

Friday 11/11 – 1/2 Day AM Only

Objectives:

- Students will observe and describe soil scientifically using the characteristics of color, texture, consistence
- Students will test the pH content & macronutrients found in soil sample collected from school yard

White Space Question:

If grasslands are turned into farmlands or commercial land, what happens to the plants and animals that live in the grasslands?

Agenda:

- Finish Activity 7 “Soil Sample Test Lab”:
 - Read pgs. 222 – 229 in *Ecology and the Environment* book. Create Cornell Notes for this reading.
 - Define Vocabulary terms
 - Answer Analysis Questions 1 – 3
 - Write Conclusion
- Finish Activity 7 for HW if not done in class

Thursday 11/10

Objectives:

- Students will observe and describe soil scientifically using the characteristics of color, texture, consistence
- Students will test the pH content & macronutrients found in soil sample collected from school yard

White Space Question:

What are the levels of organization in the environment? How is a community different from an ecosystem?

Agenda:

- Finish Activity 7 “Soil Sample Test Lab”:
 - Use rapitest® Soil Test Kit to complete N, P, & K Tests
 - Read & follow directions in rapitest® test kit to complete N, P, & K Tests. Record data in Activity 7 Table 2
 - Read pgs. 222 – 229 in *Ecology and the Environment* book. Create Cornell Notes for this reading
- **PM Classes: Finish Activity 7 for HW**

Wednesday 11/09

Objectives:

- o Students will observe and describe soil scientifically using the characteristics of color, texture, consistence
- o Students will test the pH content & macronutrients found in soil sample collected from school yard

White Space Question:

If the top predator in a food web is never eaten, what might eventually happen to the energy stored in its body?

Agenda:

- o Start Activity 7 “Soil Sample Test Lab” to collect data on your soil sample from the school yard to help you design a Science Fair experiment using the soil
- o Complete Act. 7 Procedure Step 2 & pH test from rapitest® Soil Test Kit; Read & follow directions in rapitest® test kit to complete pH test
- o Read pgs. 222 – 229 in *Ecology and the Environment* book. Create Cornell Notes for this reading.

Tuesday 11/08

WCS – No School for Students

**Election Day/ Professional Development
Day for Teachers**

Monday 11/07

Objectives:

- o Students will analyze the parts of an environment
- o Students will relate the roles of organisms to the transfer of energy in food chains & food webs

White Space Question:

What is the lowest possible feeding level that can be occupied by a carnivore in a food chain?

Agenda:

- o New Q2 seating assignment
- o Analyze & Review Stream Leaders October 27 monitoring data
- o Work on and turn in Activity 6 Analysis Questions #1, 3 & 4 for assessment grade

Friday 11/04

Objectives:

- o Students will analyze the parts of an environment
- o Students will relate the roles of organisms to the transfer of energy in food chains & food webs

White Space Question:

How are decomposers part of a food web in ecosystems?

Agenda:

- o Finish discussion & review of Activity 6 “Introduction to Ecology/ Roles in Energy Transfer” work; check your work please!
- o Review Stream Leaders October 27 monitoring data if time
- o Discuss Q2 seating assignment & Science Fair Project grouping

Thursday 11/03

Objectives:

- o Students will analyze the parts of an environment
- o Students will relate the roles of organisms to the transfer of energy in food chains & food webs

White Space Question:

What do the arrows in a food chain show?

Agenda:

- o Discuss & Review Activity 6 “Introduction to Ecology/ Roles in Energy Transfer” work; check your work please!
- o Review Stream Leaders October 27 monitoring data if time

Wednesday 11/02 – AM Classes Only

Objectives:

- o Students will analyze the parts of an environment
- o Students will relate the roles of organisms to the transfer of energy in food chains & food webs

White Space Question:

What is the difference between a community and an ecosystem?

Agenda:

- o PM classes attend Cranbrook field trip
- o Watch “Seasonal Forests” video segment from BBC Discovery “Planet Earth” series
- o Take notes on 15 important facts from video segment
- o Read for remainder of class period if there is time

Tuesday 11/01 – PM Classes Only

Objectives:

- o Students will analyze the parts of an environment
- o Students will relate the roles of organisms to the transfer of energy in food chains & food webs

White Space Question:

What is the difference between a community and an ecosystem?

Agenda:

- o AM classes attend Cranbrook field trip
- o Watch “Seasonal Forests” video segment from BBC Discovery “Planet Earth” series
- o Take notes on 15 important facts from video segment
- o Read for remainder of class period if there is time

Monday 10/31

Objectives:

- o Students will analyze the parts of an environment
- o Students will relate the roles of organisms to the transfer of energy in food chains & food webs
- o Students will learn about macroinvertebrates and how they are used as bio-indicators of stream health
- o Students will understand the process of water quality monitoring

White Space Question:

How does a species differ from a population?

Agenda:

- o Review Stream Leaders Program monitoring data from last week
- o View macroinvertebrates up close using stereoscopes
- o Copy Activity 7 Soil Sample Test Lab set up in to Science Notebook

Friday 10/28 – ½ Day PM Only

Objectives:

- Students will learn about macroinvertebrates and how they are used as bio-indicators of stream health
- Students will understand the process of water quality monitoring

White Space Question:

What are the major components of soil?

Agenda:

- Finish Activity 6 “Introduction to Ecology / Roles in Energy Transfer” work:
 - Answer Analysis Questions, Define Vocabulary, Write Conclusion
 - **Finish Activity 6 for HW; Due Monday 10/31**
- Read silently for remainder of class if all Science work is complete

Thursday 10/27

Objectives:

- o Students will learn about macroinvertebrates and how they are used as bio-indicators of stream health
- o Students will understand the process of water quality monitoring

White Space Question:

How are Group 1 macroinvertebrates different from Group 3 macroinvertebrates?

Agenda:

- o Continue work on Activity 6 or Read silently until dismissed for Stream Leaders Program
- o Stream Leaders Program monitoring today:
 - o Remember your group assignments (Groups 1 – 3 ride Bus 1 & Groups 4 – 6 ride Bus 2)
 - o Remember to bring only what you need for Stream Leaders (water bottle, jacket, bug spray) & leave everything else in lockers

Wednesday 10/26

Objectives:

- o Students will learn about macroinvertebrates and how they are used as bio-indicators of stream health
- o Students will understand the process of water quality monitoring

White Space Question:

Give 3 reasons why macroinvertebrates are indicators of water quality.

Agenda:

- o Continue work on Activity 6 “Introduction to Ecology/Roles in Energy Transfer”
 - o Do assigned book questions, Analysis Questions & Vocabulary (see Act. 6 set up)
 - o Science Notebook check (Activities #1 – 5) if you were absent Tuesday 10/25
- o Continue to prepare for Stream Leaders Program monitoring:
 - o Assign data reader and recorder for groups 1 - 6
 - o Dress appropriately for the weather & working outdoors tomorrow

Tuesday 10/25

Objectives:

- o Students will learn about macroinvertebrates and how they are used as bio-indicators of stream health
- o Students will understand the process of water quality monitoring

White Space Question:

What is a benthic macroinvertebrate?

Agenda:

- o Start work on Activity 6 “Introduction to Ecology/Roles in Energy Transfer”
- o Read pages 4 – 27 in *Ecology and the Environment* book
- o Do assigned book questions (see Act. 6 set up)
- o Science Notebook check (Activities #1 – 5)
- o Continue to prepare for Stream Leaders Program monitoring:
 - o Examine data sheets for the 3 different Stream Leaders monitoring stations
 - o Listen & make note of your group assignment for Thursday

Monday 10/24

Objectives:

- Students will learn about macroinvertebrates and how they are used as bio-indicators of stream health
- Students will understand the process of water quality monitoring

White Space Question:

What is a watershed? What watershed do we live in?

Agenda:

- Copy Activity 6 “Introduction to Ecology/Roles in Energy Transfer” set up in to Science Notebook
- Continue to prepare for Stream Leaders Program monitoring activities:
 - Learn to identify and categorize different groups of macroinvertebrates by reviewing “Macroinvertebrate” pdf file on Mrs. Duddles’ web page; **finish for HW if not done in class**