



Portland Public Schools
Middle Level
Syllabus Template

School Year 2011-2012

Teacher: GROOM		School: Mt Tabor	
Subject: Science	Course Title: Biology	Grade Level: 6	
Course description: <ul style="list-style-type: none">• Students will learn about the interconnectedness of life and the earth. Focus will begin with populations and ecosystems, cycles, and transfer of energy. Reproduction, heredity, variation, adaptation, and evolution will be embedded in how ecosystems function.• We will look at different kingdoms of life from single-celled organisms to complex animals and plants.• We'll see how structure and function are interconnected, from cells to body systems.• We'll learn about resource management, human influences, climate and climate change, and recycling. <p>See also attached State Standards for Content and for Inquiry</p>			
Course outline: 1st quarter – Observation Skills Classification Characteristics of Life Greek/Latin vocabulary Outdoor School Populations and Ecosystems 2nd quarter – Cells Scientific Inquiry Work Sample 3rd quarter – Classification (more in depth) Kingdoms of Life			

4th quarter -

Structure and Function:

Cells, Tissues, Organs, Organ Systems

Pollution/Recycling

Introduction to factors affecting climate

Academic Vocabulary:

List includes, but is not limited to:

Growth	reproduction	excretion	cell wall
Organelle	mitochondria	ribosomes	
Energy	response	chemicals	chloroplast
Cells	nucleus	membrane	photosynthesis
Carbohydrate	water	carbon dioxide	oxygen
Molecules	light energy	chemical energy	respiration
Digestion	excretion	system	circulation
Immune	reproduction	nervous	musculo-skeleton
Organ	structure	function	DNA
Genes	environment	producers	consumers
Decomposers	interdependence	matter	trophic level
Food web	predator/prey	producer/consumer	parasite/host
Symbiosis	competition	resources	abiotic
Biotic	species	population	community
Genetic diversity	variation	adaptation	natural selection
Kingdoms	bacteria	protist	fungi
Plant	animal	dichotomous key	pollution
Recycling	resource management	climate	

District adopted materials:

Prentice Hall Textbooks

Supplemental resources:

Lab materials, field trips, speakers, inquiry activities, computer programs and websites, videos

Differentiation/ accessibility strategies and support (TAG, ELL, SpEd):

- Tiered assignments are designed to instruct students on essential skills that are provided at different levels of complexity, abstractness, and open-endedness. The curricular content and objective(s) are the same, but the process and/or product are varied according to the student's level of readiness.
- Students work as part of many different groups depending on the task and/or content.
- Use of multiple texts and supplementary materials.
- TAG students to test more levels of independent variable during inquiries.
- Use of computer programs.
- Use of rubrics that outline the steps needed to meet and exceed benchmark expectations.
- Use of several instructional formats: whole class, small group, partners, individuals
- Emphasize the use of critical and creative thinking and the application of learning.
- Use of a variety of instructional strategies: lectures, manipulatives, role play or simulations, labs, inquiries, and readings.
- Extensive use of formative assessment to direct instruction.
- High use of visuals and demonstrations
- Tiered levels of concepts to be used in large-scale assessment projects
- Multiple versions of tests to reach different abilities of learners
- Revisions/retakes of assessments
- Due dates flexible and extendable
- Use of previous student examples for guidance on projects
- Student involved classroom assessment and rubric creation

Final proficiencies:

Students will recognize how all life is connected, and cycles interact continuously with the cycles of the Earth. They will see how life is organized from cells all the way to the organism, and then to populations, and then to ecosystems.

Students will do at least on Inquiry Work Sample to be scored on State Inquiry Scoring Guide: <http://www.ode.state.or.us/search/page/?id=1414>

Behavioral expectations:

Students follow my six main rules:

- Be respectful, be responsible, be safe, be positive, be honest, be your best. Safety in

laboratory exercises is of utmost importance – all students and parents/guardians sign a PPS Science Safety Agreement.

- Also emphasized are for students to be in class on time, ready to learn, with supplies. Students should honor differences, and be willing to compromise often, especially in groupwork tasks.

For more specific policies, please see attached JMP Policies concerning the following:

ATTENDANCE:

TARDINESS:

RULES:

CONSEQUENCES:

CONTACT INFORMATION: If you need to contact me my email address is rgroom@pps.net. You can contact me by phone at 503-916-5646 during school hours.