

The Western Red Lily: A Teaching Module for the Middle Years Science Curriculum



DAY	OBJECTIVES	TEACHING METHOD & ASSESSMENT	PROCEDURE	MATERIALS	CELS /DSL
1	<p>SWBA to:</p> <ul style="list-style-type: none"> -identify historical, ecological, & cultural aspects of the WRL -gain an understanding of the present and past role of the WRL on the prairies 	<p>Lesson 1:History, Culture, & Ecology of the WRL</p> <p>Method:brainstorming, cooperative learning, computer assisted learning</p> <p>Assessment:</p> <p>Formative-anecdotal observations in groups and class discussion, worksheet</p> <p>Summative-crossword puzzle</p>	<ol style="list-style-type: none"> 1)Brainstorm prior knowledge re: WRL 2)Divide class into pairs or small groups. 3)Assign resource material (print or websites) - goal to complete WRL Work Sheet 4)Debrief worksheet as a class 5)Close - The WRL Crossword Puzzle (60 min) 	<ul style="list-style-type: none"> ▪ Pictures of WRLs ▪ Lily plants (alternate varieties are fine) ▪ WRL work sheets ▪ Reading resources ▪ Internet sites ▪ computers 	<p>CCT, COMM, PSVS, TL</p> <p>A9,B12, C2,C14, D5,D9, E4,F1, F4,F6</p>
2/3	<p>SWBA to:</p> <ul style="list-style-type: none"> -identify parts of the flower (stamen, anther, stigma, pistil, ovary, petal, sepal) -describe the role and function of each flower part (sexual reproduction of plants) <p>*optional-recommended for Grade 8</p>	<p>Lesson 2:Exploring the WRL</p> <p>Method: Guided inquiry lab, brainstorming, cooperative learning</p> <p>Assessment:</p> <p>Formative-anecdotal observations</p> <p>Summative-lab worksheet</p>	<ol style="list-style-type: none"> 1)Put students in groups of 2 or 3, each with required materials 2)Students write 3 descriptive sentences based on personal observation of their flower specimen 3)Guide students through the lab worksheet instructions. (60 min) <p>*Depending on the class, more time may be required</p>	<ul style="list-style-type: none"> ▪ lily flowers (1 per group) ▪ magnifying glass ▪ drawing pencils ▪ medicine dropper ▪ sugar water solution ▪ single-edged razor blade ▪ foreceps ▪ microscope slide ▪ cover slip 	<p>CCT, COMM, PSVS, TL</p> <p>B4, C3, E1, F1</p>

			<p>Part 2</p> <p>1) Reinforce naming of flower parts using demo flower or overhead</p> <p>2) Have students read resource material "Sexual Reproduction in Plants" and complete Part 2- "Read to Learn Activity" worksheet</p> <p>3) Debrief- Mini-lecture may be required re: sexual reproduction in plants (60 min)</p>	<ul style="list-style-type: none"> ▪ stirring rod ▪ dissecting microscopes ▪ "Parts of a Flower Lab" worksheet 	
4	<p>SWBA to:</p> <ul style="list-style-type: none"> - appreciate the importance of food webs in conveying information about interrelationships in the local community - illustrate ways that change cascades through an ecosystem 	<p>Lesson 3: The WRL and the Food Web</p> <p>Method: group activity, independent learning, discussion</p> <p>Assessment:</p> <p>Formative- anecdotal observations</p> <p>Summative- Food Web Definitions worksheet, Quick Write paragraphs</p>	<p>1) Conduct Ball of Wool Food Web Game as outlined at http://www.britishecologicalsociety.org/articles/education/resources/curriculum/foodchains/game/ (May be conducted indoors or outdoors)</p> <p>2) Debrief asking students their observations re: food web construction, structure, and fragility</p> <p>3) Instruct students to read "The Western Red Lily" handout and complete "Food Web Definitions Worksheet"</p> <p>4) Close-vocabulary and students' created food webs (60 min)</p>	<ul style="list-style-type: none"> ▪ animal/plant cards ▪ balls of colored wool ▪ "The WRL" handout ▪ "Food Web Definitions" worksheet 	<p>CCT, COMM, PSVS, IL</p> <p>A3, A9, B1, B2, B10, D9, F4, F6</p>
5/6/7	<p>SWBA to:</p> <ul style="list-style-type: none"> - demonstrate knowledge of the WRL - demonstrate knowledge of ecological factors affecting the WRL - value the environment - recognize the role 	<p>Lesson 4: Campaign for the Western Red Lily</p> <p>Method: brainstorming, concept web construction, synectics, cooperative learning</p> <p>Assessment:</p> <p>Formative- anecdotal observation, participation in</p>	<p>1) As a class construct a concept web of knowledge re: WRL</p> <p>2) Demonstrate opportunities to convey informative or persuasive messages through cartoons, posters, etc. Discuss consideration for message, audience, and creative elements Ex. Have students identify what effect attaching human characteristics and emotions to non-human</p>	<ul style="list-style-type: none"> ▪ "Campaign of the WRL Assignment handout ▪ assignment rubrics ▪ campaign examples - cartoons, 	<p>CCT, COMM, PSVS, TL</p> <p>A3, A9, B1, B10, B12, C2, D5, D9,</p>

	<p>that humans play in protecting or destroying ecosystems -recognize the role that humans play to promote conservation efforts</p>	<p>group concept web construction Summative-Campaign assignment</p>	<p>elements has on conveying a message 3)Handout "Campaign of the WRL Assignment" *can be assigned individually or in groups 4)Clarify expectations on rubrics 5)Allow time to work on project 6)Presentation to class - optional (120-180 min) *Optional Gr. 8 Activity - Human Activity and Our Environment will take an additional 60-120 min</p>	<p>brochures, posters</p> <ul style="list-style-type: none"> ▪ art materials ▪ video camera and editing equipment ▪ computers 	<p>E4, F4, F6</p>
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