

Photosynthesis

Directions: Choose two activities from the menu below. The activities must total 100 points. Place a checkmark next to each box to show which activities you will complete. All activities must be completed by _____.

20 Points

- Make a poster that shows how photosynthesis takes place in an organism.
- Create a set of trading cards for all of the key players in the photosynthesis process.

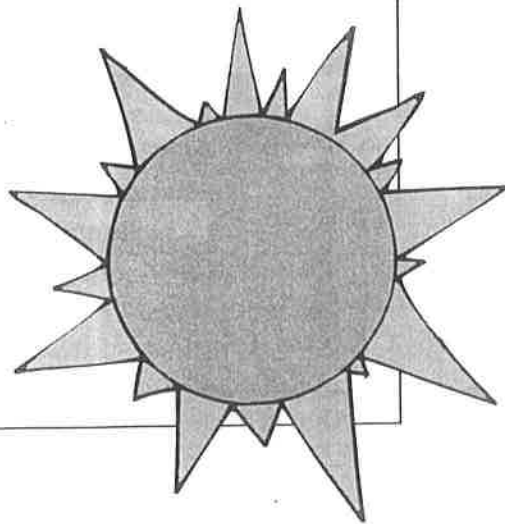
50 Points

- Using PowerPoint, create a presentation that traces the energy conversions in photosynthesis that take place, from the sun's energy to growth in a plant.
- Create a commercial about humans' impact on the process of photosynthesis.
- Green, leafy plants are not the only organisms that use photosynthesis to create food. Create a scrapbook for the different types of organisms that use photosynthesis and what structures conduct the photosynthesis

~~The choice to prepare a proposal to the United States for the approval~~

80 Points

- Write and perform a play about people who have to conduct photosynthesis in order to produce food. Be creative in how their life would be different from ours.
- Create an experiment that demonstrates how each component is necessary for photosynthesis to take place.



All-Purpose Product Rubric

Name: _____

5 pts.

3 pts.

0 pts.

Criteria	Excellent (Full Credit)	Good (Half Credit)	Poor (No Credit)	Self
Content: Is the content of the product well chosen?	Content chosen represents the best choice for the product. Graphics are well chosen and related to content.	Information or graphics are related to content, but are not the best choice for the product.	Information or graphics presented do not appear to be related to topic or task.	
Completeness: Is everything included in the product?	All information needed is included. Product meets the product criteria and the criteria of the task as stated.	Some important information is missing. Product meets the product criteria and the criteria of the task as stated.	Most important information is missing. The product does not meet the task or does not meet the product criteria.	
Creativity: Is the product original?	Presentation of information is from a new perspective. Graphics are original. Product includes an element of fun and interest.	Presentation of information is from a new perspective. Graphics are not original. Product has elements of fun and interest.	There is no evidence of new thoughts or perspectives in the product.	
Correctness: Is all of the information included correct?	All information presented in the product is correct and accurate.	N/A	Any portion of the information presented in the product is incorrect.	
Communication: Is the information in the product well communicated?	All information is neat and easy to read. Product is in appropriate format and shows significant effort. Oral presentations are easy to understand and presented with fluency.	Most of the product is neat and easy to read. Product is in appropriate format and shows significant effort. Oral presentations are easy to understand, with some fluency.	The product is not neat and easy to read or the product is not in the appropriate format. It does not show significant effort. Oral presentation was not fluent or easy to understand.	
			Total Grade:	

Figure 4.1. All-purpose product rubric.

Aerosolic	Advertisement	Book Cover
<ul style="list-style-type: none"> • At least 8.5" by 11" • Neatly written or typed • Target word will be written down the left side of the paper • Each descriptive phrase chosen must begin with one of the letters from the target word • Each descriptive phrase chosen must be related to the target word 	<ul style="list-style-type: none"> • At least 8.5" by 11" • A slogan should be included • Color picture of item or service • Include price, if appropriate • Can be developed on the computer 	<ul style="list-style-type: none"> • Front cover—title, author, image • Cover inside flap—paragraph summary of the book • Back inside flap—brief biography of author with at least five details about the book • Back cover—editorial comments about the book • Spine—title and author
Brochure/Pamphlet <ul style="list-style-type: none"> • At least 8.5" by 11" • Must be in three-fold format; front fold has the title and picture • Must have both pictures and written text • Information should be in paragraph form with at least five facts included • Bibliography should be provided as needed • Can be created on computer • Any pictures from Internet must have proper credit 	Bulletin Board Display <ul style="list-style-type: none"> • Must fit within assigned space on bulletin board or wall • Must include at least 10 details • Must have a title • Must have at least five different elements (posters, papers, questions, etc.) • Must have at least one interactive element that engages the reader 	Cartoon/Comic Strip <ul style="list-style-type: none"> • At least 8.5" by 11" • At least six cells • Must have meaningful dialogue • Must include color
Children's Book <ul style="list-style-type: none"> • Must have a cover with book's title and student's name as author • Must have at least 10 pages • Each page should have an illustration to accompany the story • Should be neatly written or typed • Can be developed on the computer 	Class Game <ul style="list-style-type: none"> • Game will allow all class members to participate • Must have only a few, easy-to-understand rules • Should be inventive or a new variation on a current game • Must have multiple question opportunities • Must provide answer key before the game is played • The game must be approved by the teacher before being scheduled for play 	Collage <ul style="list-style-type: none"> • At least 8.5" by 11" • Pictures must be cut neatly from magazines or newspapers (no clip art) • Label items as required in task
Commercial/Infomercial <ul style="list-style-type: none"> • Must be 2–4 minutes in length • Script must be turned in before commercial is presented • Can be presented live to an audience or recorded on a VHS tape or DVD • Should have props or some form of costumes(s) • Can include more than one person 	Concentration Cards <ul style="list-style-type: none"> • At least 20 index cards (10 matching sets) must be made • Both pictures and words can be used • Information should be placed on just one side of each card • Include an answer key that shows the matches • All cards must be submitted in a carrying bag 	Cross-Cut Model/Diagram <ul style="list-style-type: none"> • Must include a scale to show the relationship between the product and the actual item • Must include details about each layer • If creating a model, also must meet the criteria of a model • If creating a diagram, also must meet the criteria of a poster

Figure 3.2. Product guidelines.

Crossword Puzzle <ul style="list-style-type: none"> • At least 20 significant words or phrases should be included • Develop appropriate clues • Include puzzle and answer key • Can be created on the computer 	Diary/Journal <ul style="list-style-type: none"> • Neatly written or typed • Should include the appropriate number of entries • Should include a date, if appropriate • Should be written in first person 	Diorama <ul style="list-style-type: none"> • At least 4" by 5" by 8" • Must be self-standing • All interior space must be covered with relevant pictures and information • Name written on the back in permanent ink • Information/title card attached to diorama • \$1 contract signed
Drawing <ul style="list-style-type: none"> • Must be at least 8.5" by 11" • Must show what is requested in the task statement • Must include color • Must be neatly drawn by hand • Must have title • Name should be written on the back 	Essay <ul style="list-style-type: none"> • Neatly written or typed • Must cover the specific topic in detail • Must be at least three paragraphs • Must include resources or bibliography, if appropriate 	Flipbook <ul style="list-style-type: none"> • At least 8.5" by 11" folded in half • All information or opinions are supported by facts • Created with the correct number of flaps cut into the top • Color is optional • Name must be written on the back
Folded Quiz Book <ul style="list-style-type: none"> • At least 8.5" by 11" folded in half • At least 10 questions • Created with the correct number of flaps cut into the top • Questions written or typed neatly on upper flaps • Answers written or typed neatly inside each flap • Color is optional • Name written on the back 	Game <ul style="list-style-type: none"> • At least four thematic game pieces • At least 25 colored/thematic squares • At least 20 question/activity cards • Include a thematic title on the board • Include a complete set of rules for playing the game • At least the size of an open file folder 	Game Show <ul style="list-style-type: none"> • Needs an emcee or host • Must have at least two contestants • There must be at least one regular round and a bonus round • Questions will be content specific • Props can be used, but are not mandatory
Greeting Card <ul style="list-style-type: none"> • Front—colored pictures, words optional • Front inside—personal note related to topic • Back inside—greeting or saying; must meet product criteria • Back outside—logo, publisher, and price for card 	Instruction Card <ul style="list-style-type: none"> • No larger than 5" by 8" • Created on heavy paper or card • Neatly written or typed • Uses color drawings • Provides instructions stated in the task 	Interview <ul style="list-style-type: none"> • Must have at least eight questions relevant to the topic being studied • Person chosen for interview must be an "expert" and qualified to provide answers based on product criteria • Questions and answers must be neatly written or typed

Figure 3.2. Product guidelines, continued.

<p>Letter</p> <ul style="list-style-type: none"> Nearly written or typed Uses proper letter format At least three paragraphs in length Must follow type of letter stated in the menu (e.g., friendly, persuasive, informational) 	<p>Map</p> <ul style="list-style-type: none"> At least 8.5" by 11" Accurate information is included Includes at least 10 relevant locations Includes compass rose, legend, scale, and key 	<p>Mind Map</p> <ul style="list-style-type: none"> At least 8.5" by 11" Uses unlined paper Must have one central idea Follows the "no more than four" rule—no more than four words coming from any one word Should be neatly written or developed using Inspiration
<p>Mobile</p> <ul style="list-style-type: none"> At least 10 pieces of related information Includes color and pictures At least three layers of hanging information Hangs in a balanced way 	<p>Model</p> <ul style="list-style-type: none"> At least 8" by 8" by 12" Parts of model must be labeled Should be in scale when appropriate Must include a title card Name should be permanently written on model 	<p>Mural</p> <ul style="list-style-type: none"> At least 22" x 54" Must contain at least five pieces of important information Must have colored pictures Words are optional, but a title should be included Name should be written on the back in a permanent way
<p>News Report</p> <ul style="list-style-type: none"> Must address the who, what, where, when, why, and how of the topic Script of report turned in with project, or before if performance will be "live" Must be either performed live or recorded on a VHS tape or DVD 	<p>Newspaper Article</p> <ul style="list-style-type: none"> Must be informational in nature Must follow standard newspaper format Must include picture with caption that supports article At least three paragraphs in length Nearly written or typed 	<p>Paragraph</p> <ul style="list-style-type: none"> Nearly written or typed Must have topic sentence, at least 3 supporting sentences or details and a concluding sentence Must use appropriate vocabulary and follow grammar rules
<p>Pie Graph</p> <ul style="list-style-type: none"> Can be created neatly by hand or using computer software Must have a title Must have a label for each area or be color-coded with a key Must include the percentages for each area of the graph Calculations must be provided if needed to create the pie graph 	<p>Play/Skit</p> <ul style="list-style-type: none"> Must be between 3-5 minutes long Script must be turned in before play is presented May be presented to an audience or recorded for future showing Should have props or some form of costume Can include more than one person 	<p>Poster</p> <ul style="list-style-type: none"> Should be the size of a standard poster board Includes at least five pieces of important information Must have title Must contain both words and pictures Name should be written on the back Bibliography should be included as needed

Figure 3.2. Product guidelines, continued.

<p>PowerPoint—Speaker</p> <ul style="list-style-type: none"> At least 10 informational slides and one title slide with student's name No more than two words per page Slides must have color and no more than one graphic per page Animations are optional but should not distract from information being presented Presentation should be timed and flow with the speech being given 	<p>PowerPoint—Stand Alone</p> <ul style="list-style-type: none"> At least 10 informational slides and one title slide with student's name No more than 10 words per page Slides must have color and no more than one graphic per page Animation is optional, and must not distract from information being presented 	<p>Product Cube</p> <ul style="list-style-type: none"> All six sides of the cube must be filled with information Should be neatly written or typed Name must be printed neatly on the bottom of one of the sides Should be submitted flat for grading
<p>Puppet</p> <ul style="list-style-type: none"> Puppet should be handmade and must have a moveable mouth A list of supplies used to make the puppet will be turned in with the puppet \$1 contract signed If used in a play all play criteria must be met as well 	<p>Questionnaire</p> <ul style="list-style-type: none"> Nearly written or typed At least 10 questions with possible answers, and at least one answer that requires a written response Questions must be helpful to gathering information on the topic being studied At least 15 people must provide answers to questionnaire 	<p>Quiz</p> <ul style="list-style-type: none"> Must be at least half sheet of paper Nearly written or typed Must cover the specific topic in detail Must include at least five questions including a short answer question Must have at least one graphic An answer key will be turned in with the quiz
<p>Quiz Board</p> <ul style="list-style-type: none"> At least five questions Must have at least five answers Should use a system with lights to facilitate self-checking Should be no larger than a poster board Holiday lights can be used \$1 contract signed 	<p>Recipe/Recipe Card</p> <ul style="list-style-type: none"> Must be written neatly or typed on a piece of paper or an index card Must have a list of ingredients with measurement for each Must have numbered steps that explain how to make the recipe 	<p>Scrapbook</p> <ul style="list-style-type: none"> Cover of scrapbook must have a meaningful title and student's name Must have at least five themed pages Each page will have at least one meaningful picture All photos must have captions
<p>Song/Kap</p> <ul style="list-style-type: none"> Words must make sense Can be presented to an audience or taped Written words will be turned in before performance or with taped song Should be at least 2 minutes in length 	<p>Speech</p> <ul style="list-style-type: none"> Must be at least 2 minutes in length Should not be read from written paper Note cards can be used Written speech must be turned in before speech is presented Voice must be clear, loud, and easy to understand 	<p>Story</p> <ul style="list-style-type: none"> Must have all of the elements of a well-written story (setting, characters, conflict, rising action, and resolution) Must be appropriate length to allow for story elements Should be neatly written or typed

Figure 3.2. Product guidelines, continued.

<p>Three-Dimensional Timeline</p> <ul style="list-style-type: none"> • Must be no bigger than standard-size poster board • Must be divided into equal time units • Must contain at least 10 important dates and have at least 2 sentences explaining why each date is important • Must have a meaningful, creative object securely attached beside each date to represent that date • Must be able to explain how each object represents each date 	<p>Three Facts and a Fib</p> <ul style="list-style-type: none"> • Can be written, typed, or created using Microsoft PowerPoint • Must include exactly four statements: three true statements and one false statement • False statement should not obvious • Brief paragraph should be included that explains why the fib is false 	<p>Trading Cards</p> <ul style="list-style-type: none"> • Include at least 10 cards • Each card should be at least 3" by 5" • Each should have a colored picture • Includes at least three facts on the subject of the card • Cards must have information on both sides • All cards must be submitted in a carrying bag
<p>Trophy</p> <ul style="list-style-type: none"> • Must be at least 6 inches tall • Must have a base with the name of the recipient and the name of the award written neatly or typed on it • Top of trophy must be appropriate and represent the nature of the award • Name should be written on the bottom of the award • Must be an originally designed trophy (avoid reusing a trophy from home) 	<p>Venn Diagram</p> <ul style="list-style-type: none"> • At least 8.5" by 11" • Shapes should be thematic and neatly drawn • Must have a title for entire diagram and a title for each section • Must have at least six items in each section of the diagram • Name must be written neatly on the back of the paper 	<p>Video</p> <ul style="list-style-type: none"> • Use VHS, DVD, or Flash format • Turn in a written plan or story board with project • Students will need to arrange their own video recorder or allow teacher at least 3 days notice for use of video recorder • Covers pertinent information about the project • Name must be written on video label
<p>Webquest</p> <ul style="list-style-type: none"> • Must quest through at least five high-quality Web sites • Web sites should be linked in the document • Can be submitted in a Word or PowerPoint document • At least three questions for each Web site • Must address the topic 	<p>Windowpane</p> <ul style="list-style-type: none"> • At least 8.5" by 11" unlined paper • At least six squares • Each square must include both a picture and words that should be neatly written or typed • All pictures should be both creative and meaningful • Name should be recorded on the bottom righthand corner of the front of the windowpane 	<p>Worksheet</p> <ul style="list-style-type: none"> • Must be 8.5" by 11" • Neatly written or typed • Must cover the specific topic or question in detail • Must be creative in design • Must have at least one graphic • An answer key will be turned in with the worksheet
<p>You Be the Person Presentation</p> <ul style="list-style-type: none"> • Take on the role of the person • Cover at least five important facts about the life of the person • Should be between 3 and 5 minutes in length • Script must be turned in before information is presented • Should be presented to an audience with the ability to answer questions while in character • Must have props or some form of costume 		

Figure 3.2. Product guidelines, continued.