Biology 11 Name:

For the upcoming exploration of invertebrate phyla, you will creating a series of mini-projects. The mini-projects are each scored out of 10 and you cannot repeat the same type of project for subsequent phyla. Use the table below to keep track of your options (there will be some "styles" that you will not use at all).

Unless specified, the content for the projects should focus on the **characteristics/attributes** used to compare across phyla (The big invertebrate comparison grid sheet you've been filling out).

Phylum	Poster: Interactive Flip / Informational	Diary/Journal	Craigslist Ad: Personals + BST	Worksheet + Answer Key	MIA/Wanted: Dead or Alive	Photo collage	Interview: Dialogue, Script	Childrens Story/Cartoon	Facebook Page	Magazine Cover and Feature Article	Disecction
Porifera											
Cnidaria/Ctenophora											
Platyhelminthes											
Nematoda											
Annelida											
Mollusca											
Echinodermata											
Arthropoda											

Poster:

You will construct a large poster (at least 11"x17" Tabloid/Ledger size paper), or a smaller interactive informational poster (ie, flip layers to reveal layers, at least 8.5"x14 Legal sized paper).

Your poster should show the external and internal anatomy of your organism, as well as describe the functions of each. Each significant structure must be clearly labelled and well as described in terms of its function.

Criteria	3	2	1	0
Structures	All major structures	Many major	Several major structures	Many major
Depicted	shown	structures shown	are missing	structures are missing
		All items are labelled	Many items are labelled	Few items are
Labelled		clearly	clearly	labelled, or are
				unclear/too small
Function of	All major functions	Many major	Several major structures	Many major
Structures	of structures are	structures are	are not described	structures are not
Structures	described	described		described
		The poster is	The posters is acceptable,	The poster is
Attractiveness		attractive in design,	but lacks the polish/care	distractingly messy
		layout and neatness	in execution	

Diary/Journal:

You will write from the perspective of an organism that belong to the phylum. The timespan covered will be your choosing (a week, month, year, life etc), but should detail activities, encounters, and events that the organism may experience. The written entry should be a page in length (2 if double spaced)

Your first "person" perspective prose should include aspects of the organism's uniqueness, such as, but not limited to: life functions, characteristics, abilities, structures, habits, behaviours. You will need to encompass these distinct through creative means.

Criteria	1	0
Feature 1:	Present	Absent
Feature 2:	Present	Absent
Feature 3:	Present	Absent
Feature 4:	Present	Absent
Feature 5:	Present	Absent
Feature 6:	Present	Absent
Overall presentation/cohesiveness/believability X4		

Craigslist Ad: Personals and Buy Sell Trade (BST): Niche

You will produce a collection of Craigslist/classified style ads (perhaps an excerpt from a newspaper or Craigslist page). Each ad individually is looking to buy/sell or trade for a particular niche component that your organism requires. Additionally you are to generate 1 personals ads (looking for love, long walks on beaches, etc.) to go alongside the BST ads. Again 5 smaller ads, and 1 personal ad.

Each ad needs some creative reasoning to go along with it (why the organism is wanting it, selling it, trading for it). Similarly the personal ad should include details of what the organism is seeking, what the organism has to offer (accomplishments, special talents) and a selfie picture.

BST Criteria	BST ad 1	BST ad 2	BST ad 3	BST ad 4	BST ad 5	
Included with reasoning	1	1	1	1	1	
Absent	0	0	0	0	0	
Personal Ad Criteria	3	2		1	0	
Descriptive and accurate highlights	Includes 4-3	Includes 2	Includes less than 2		Facts are	absent
Selfie			Selfie is present		Selfie is a	absent
Cohesiveness			The entire page/collection is/are believable		The entire pag is disjoi	

Worksheet:

You will create a worksheet that can be used in class along with a marking guide and/or key with the appropriate answers. The assignment when used needs to be scored out of 15-20. The style of the worksheet is of your choosing (crossword, fact or fiction questionnaire, mindmap template), but clearly indicates how the marks are being assigned. The worksheet requires a mixture of basic content and deeper content to provide a balance of challenge. Finally try to be creative to make the worksheet "fun" (de facto word searches and crosswords need to have questions rather than simply a word bank and even then will not be given full fun marks). The answer key must identical to the worksheet, but completed.

Criteria	2	1	0
Instructions and Polish		Instructions are clear and worksheet is markable	Absent/unclear/errors
POIISII			
Basic content	Many basic content are	Few basic content are	Absent
	addressed	addressed	
In depth	Many in depth content are	Few in depth content are	Absent
content	addressed	addressed	Absent
Answer		Provided	Not provided
Key/Guide		Flovided	Not provided
Accurate	Error-free	Mostly correct, but an error	Absent/incorrect answers impact its
Accurate	Enoi-nee	is present	usefulness
"Fun" creativity	I know it's work, but I want	Some entertaining aspects	The worksheet is plain (questions and
run creativity	to do this worksheet!	were employed	spaces/fill in the blank)

Wanted: Dead or Alive or Missing in Action

You are to create a Wanted/MIA poster for a representative organism from your phylum. This can be a "good" or "bad" themed poster (ie: Missing/Alive or Dead). The name (common and scientific), physical stats (size, description) and a hand drawn sketch need to be provided. The poster needs to clearly indicate the reasons for the wanted status. A mark will be given for the organization/layout and cohesiveness of the overall poster.

Criteria	2	1	0
Name	Both common and scientific names present	Either common or scientific name present	Absent
Stats for ID/recognition	Includes many stats to ID	Includes some useful stats, and/or other features that are useless for recognition	Absent
Sketch	Hand drawn, well executed	Printed photograph/poorly executed	Absent
Reason for status	Clearly indicates significant reason for wanted poster	Simple reason for wanted poster and/or unclear	Absent
Creativity/Additional relevant info		Other creative/helpful info to help catch organism	Absent
Overall layout/cohesiveness		Well organized and harmonious	Scattered

Photo Collage

You are to produce a photo collage of representative organisms from your phylum. It is recommended that this be done digitally to ease layout construction and gain access to more images. The collage needs a title that clearly indicates the phylum being examined. The collage in the end needs to cover the entirety of a 8.5" x 11" sheet (letter size), with no white space apart from the margins and perhaps to border the title. The images used should be organized somewhat according to the class (Taxonomy) and images should be no larger than 5cm in any dimension. Any resized images should retain the original proportions. Finally a bibliography needs to be provided for the images gathered (just the source image address and date accessed, no google in the http).

Criteria	2	1	0	
Title	Appropriately balanced with	Lost amongst or	Absent	
Title	images	overwhelms the images	Absent	
Variety	Organisms sampled cover the	Images dwell on a select	Images seemingly of the same	
variety	spectrum of the phylum	grouping within phlyum	organisms/repetition	
Accuracy	All organisms from the	One organism not from	Few organisms from other phlya	
Accuracy	indicated	this phylum	Tew organisms nom other pmya	
White space		Absent	Visible	
Image size		Appropriate size	Images larger than 5cm	
Organization/Layout		Organization detectable	Organization undetectable	
Bibliography		Present	Absent	

Job Interview:

Choose an organism from your phylum and conduct a job interview. The organism is applying to work in the ecosystem, ideally its natural niche. You will format the project with proper dialogue/script such that the final outcome can easily be picked up and used for a play/skit that encompasses the interview from beginning to end. Interviewer dialogue should incorporate pertinent questions to the ecological "role" needed to be filled. The organism's dialogue to the interview questions need to address its suitability for the job in terms of its life functions (feeding, respiration, transport, excretion, etc.).

Criteria	2	1	0
Life function 1		Present	Absent
Life function 2		Present	Absent
Life function 3		Present	Absent
Life function 4		Present	Absent
Life function 5		Present	Absent
Life function 6		Present	Absent
Life functions accuracy	Information is entirely accurate	Information is mostly correct; contains a few errors	Information is mostly incorrect
Organization/Layout		Done in script format	Not done in script format
Creativity		The script is a believable transcript of an interview	The script follows too closely to a generic worksheet question/answers

Children's Story

You will create a children's story where your organism is the central character. The story will address the life functions of your organism with the aid of visuals appropriate for a younger audience. It should be presented in a book format (folded 8.5" x 11" sheets of letter paper) with a cover and title.

Criteria	2	1	0
Cover and Title		Present	Absent
Life function 1		Present and accurate	Absent
Life function 2		Present and accurate	Absent
Life function 3		Present and accurate	Absent
Life function 4		Present and accurate	Absent
Life function 5		Present and accurate	Absent
Life function 6		Present and accurate	Absent
Visuals	Colourful and contribute to the work	Included, but not coloured or do not add to the story	Absent
Presentation		The work overall resembles a children's book	It does not

Facebook Page

You will create a Facebook page for a representative organism from your phylum. The page visually needs to be recognizable with a banner and profile picture, but tuned towards the organism. The feeds, groups, sidebar need to include social interactions that highlight the organism's life functions and characteristics. It can be done digitally, (otherwise 8.5" x 11" sheets of letter paper) and extend as necessary to accommodate the criteria.

Criteria	2	1	
Basic content	Many basic content are addressed	Few basic content are addressed	Absent
In depth content	Many in depth content are addressed	Few in depth content are addressed	Absent
Accurate		Error-Free	Absent
Creativity		Creative use of Facebook elements	Absent
Visuals	Colourful and contribute to the work	Included, but not coloured or do not add to the work	Absent
Presentation	The work overall resembles a Facebook page and is tuned for the organism	The work overall resembles a Facebook page and tuned for the organism	It is neither

Magazine Cover and Feature Article(s)

You will create a pieces of a magazine that is marketed towards your chosen phylum. This comprises of two parts, the splashy cover page and the written article(s) found inside. It is done completely digitally to improve the visual quality to resemble that of a glossy magazine with 8.5" x 11" sized pages. The cover page requires a title, a single high quality picture and catchy blurbs that would entice a member of your phylum to want to pick up the magazine. Use the blurb as the starting point to write an informative article pertaining to the phylum's life function/charateristics. If using just a single blurb, ensure that the article is in depth; if using many of the cover blurbs, each can be written in a more general way (aim for a page single space double column of normal size 12 text). In either case, format the article to resemble the style (columns, images) found in human magazines.

Criteria	4	3	2	1	0
Magazine Title				Present	Absent
Cover Picture				Present	Absent
Cover Blurbs			Numerous and Catchy/attention grabbing	Few and/or some catchy/attention grabbing	Absent
Article(s) Quality: Expected balance between # and depth	Exceeds	Mostly meeting	Mostly not meeting	Not meeting	Absent
Article(s) relevance				Related	Not related
Overall Layout Attractiveness				Resembles the cover and inside of a magazine	Does not resembles

Dissections

As a class we will be completing 4 days of dissections for 5 of the phyla we have covered. If you are present **ALL days** of dissections, you can count the dissection days as one of your mini projects. To qualify to replace a mini-project of your choice, sketches/diagrams for one of the four days of dissections must be completed. The collection is to be done on unlined 8.5"x11" sized paper, with a single organism featured on a single sheet. You will be required to complete the sketch of an organism from a chosen phyla. Remember, you will need a different mini project for each phyla and this will count for the phyla of your choice. You may take photos to sketch at a later date.

Circle the appropriate dissection days in this collection:

Nematodes Annelids Arthropods Echinoderms Molluscs

	Criteria	3	2	1	0
n and :lled	External Features	All major structures are present	Many major structures are present	Several major structures are missing	Many major structures are missing
Shown an Labelled	Internal Features	All major structures are present	Many major structures are present	Several major structures are missing	Many major structures are missing
ability guide	Presentation		All diagrams include titles, and anatomical directions	Some titles or anatomical directions are missing	Many titles, scale bars, anatomical directions are missing
Suitability as a guide	Clarity		Outlines of structures are clearly defined, label lines are clear	Outlines of structures are mostly defined, label lines are present	Outlines of structures are lost, label lines are messy or do not clearly identify