3D Cell/ Body System Project: Guidelines and Rubrics

DUE DATE: MONDAY, OCTOBER 20, 2014

<u>Purpose:</u> Students will show what they have learned regarding human cells and body systems in a 3-dimensional model and a 1/2-page written summary of the selected cell or body system.

Guidelines:

- Choose only one of the following: animal cell, circulatory system, heart, respiratory system, digestive system, or kidney
- Your project must be 3-dimensional (i.e., front, back, top, sides)
- Your project can be edible or non-edible (if you choose to make it an edible model, please do not use any type of nuts or nut products).
- All parts of your model must be clearly labeled. I suggest using toothpicks and little pieces of paper attached to make little flags as was shown in class.
- Your representation should be similar to what is shown in the book (EX: a nucleus should not be square).
- Be creative and enjoy the process. Use food, yarn, clay, Styrofoam, pipe cleaners, and anything else appropriate you can think of to make your model.
- Please do not make the model any larger than an average-sized shoebox. Your child may have to bring it to school on the bus.
- -Use the attached rubric to see which parts of each cell or body system must be labeled and present in you model. You will turn in your copy of the rubric when you turn in your model.
- Type (12-pt font) or neatly write a 1/2 page, double-spaced summary detailing what you have learned from this project, what you liked most, and what you would change if you could do the project again.

Parent/Guardian and student, please sign and return this portion, indicating that you understand the requirements, deadline (Monday, October 20, 2014), and expectations of this project.

Parent Signature:	Date:		
Student Signature:	Date:		

Animal Cell Rubric

	Points Possible	Points Earned	Comments
Neatness			
(Project is a clear			
resemblance of the	10		
chosen cell or			
system)			
3-dimensional			
(Project has top,	15		
sides, front, and			
back)			
Structures Present:			
(Must have the			
following: cell			
membrane,	25		
vacuoles,			
mitochondria,			
nucleus, and			
cytoplasm)			
Structures Labeled:			
(All of the required	25		
structures are			
labeled correctly)			
Structure Accuracy:			
(Structures are			
similar and	25		
recognizable when			
compared to image			
in textbook)			
½ Page Summary:			
(Typed or neatly			
written; details what			
the student learned,	50		
liked the most, and			
would like to			
change about the			
project)			
Deductions:			
- No name on			
project =			
(- 15 points)			
- Project is late =	N/A		
(- 10 points each			
day up to 5 days;			
project is a 0 after 5			
days)			
	4.50		
Total:	150		

Heart Rubric

	Points Possible	Points Earned	Comments
Neatness			
(Project is a clear			
resemblance of the	10		
chosen cell or			
system)			
3-dimensional			
(Project has top,	15		
sides, front, and			
back)			
Structures Present:			
(Must have the			
following: left	25		
atrium, right atrium,			
left ventricle, right			
ventricle, aorta)			
Structures Labeled:	0.5		
(All of the required	25		
structures are			
labeled correctly)			
Structure Accuracy: (Structures are			
similar and	25		
recognizable when	23		
compared to image			
in textbook)			
½ Page Summary:			
(Typed or neatly			
written; details what			
the student learned,	50		
liked the most, and			
would like to			
change about the			
project)			
Deductions:			
- No name on			
project =			
(- 15 points)			
- Project is late =	N/A		
(- 10 points each			
day up to 5 days;			
project is a 0 after 5			
days)			
Total:	150		
TOTAL.	130		
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Circulatory System Rubric

	Points Possible	Points Earned	Comments
Neatness			
(Project is a clear			
resemblance of the	10		
chosen cell or			
system)			
3-dimensional			
(Project has top,	15		
sides, front, and			
back)			
Structures Present:			
(Must have the			
following: veins,	25		
arteries, capillaries,			
heart, blood cells			
with and without			
oxygen)			
Structures Labeled:			
(All of the required	25		
structures are			
labeled correctly)			
Structure Accuracy:			
(Structures are			
similar and	25		
recognizable when			
compared to image			
in textbook)			
½ Page Summary:			
(Typed or neatly			
written; details what			
the student learned,	50		
liked the most, and			
would like to			
change about the			
project)			
Deductions:			
- No name on			
project =			
(- 15 points)			
- Project is late =	N/A		
(- 10 points each			
day up to 5 days;			
project is a 0 after 5			
days)			
Total	150		
Total:	150		

Respiratory System Rubric

	Points Possible	Points Earned	Comments
Neatness			23
(Project is a clear resemblance of the chosen cell or system)	10		
3-dimensional (Project has top, sides, front, and back)	15		
Structures Present: (Must have the following: mouth or nose, sinus, larynx, trachea, bronchi, bronchioles, lungs)	25		
Structures Labeled: (All of the required structures are labeled correctly)	25		
Structure Accuracy: (Structures are similar and recognizable when compared to image in textbook)	25		
1/2 Page Summary: (Typed or neatly written; details what the student learned, liked the most, and would like to change about the project)	50		
Deductions: - No name on project = (- 15 points) - Project is late = (- 10 points each day up to 5 days; project is a 0 after 5 days)	N/A		
Total:	150		

Digestive System Rubric

	Points Possible	Points Earned	Comments
Neatness			
(Project is a clear			
resemblance of the	10		
chosen cell or			
system)			
3-dimensional			
(Project has top,	15		
sides, front, and			
back)			
Structures Present:			
(Must have the			
following: mouth,	25		
esophagus,			
epiglottis, stomach,			
small intestine)			
Structures Labeled:			
(All of the required	25		
structures are			
labeled correctly)			
Structure Accuracy:			
(Structures are			
similar and	25		
recognizable when			
compared to image			
in textbook)			
½ Page Summary:			
(Typed or neatly			
written; details what	50		
the student learned,	50		
liked the most, and			
would like to			
change about the			
project)			
Deductions:			
- No name on			
project =	N/A		
(- 15 points) - Project is late =	IN/A		
(- 10 points each			
day up to 5 days;			
project is a 0 after 5			
days)			
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Total:	150		
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Kidney Rubric

	Points Possible	Points Earned	Comments
Neatness			
(Project is a clear	10		
resemblance of the			
chosen cell or			
system)			
3-dimensional			
(Project has top,	15		
sides, front, and			
back)			
Structures Present:			
(Must have the			
following: areas where			
blood is cleaned, vein	25		
carrying clean blood,			
artery carrying blood			
to be cleaned, tubes			
carrying waste, tube carrying urine)			
Structures Labeled:			
(All of the required	25		
structures are	25		
labeled correctly)			
Structure Accuracy:			
(Structures are			
similar and			
recognizable when	25		
compared to image	20		
in textbook)			
½ Page Summary:			
(Typed or neatly			
written; details what			
the student learned,	50		
liked the most, and	00		
would like to			
change about the			
project)			
Deductions:			
- No name on			
project =			
(- 15 points)			
- Project is late =	N/A		
(- 10 points each	, .		
day up to 5 days;			
project is a 0 after 5			
days)			
Total:	150		