

7<sup>th</sup> Grade Cell Project – 2<sup>nd</sup> Quarter 2013

**Overview:** You and your group will be researching the parts of a cell using appropriate internet sources. Using the information from these sources, you and your group will create a set of trading cards for the parts of the cell. You will be graded individually on your contribution to the research. You will be graded as a group for the set of trading cards.

**Required Parts of the Cell:** There are nine required parts of the cell to be included in your research and in your set of trading cards. They are listed below.

<b>Nucleus</b>	<b>Cell membrane</b>	<b>Cytoplasm</b>
<b>Vacuoles</b>	<b>Mitochondria</b>	<b>Ribosomes</b>
<b>Endoplasmic Reticulum</b>	<b>Golgi Bodies</b>	<b>Lysosomes</b>

**PART 1: RESEARCH (20 points; Individual Grade)**

Your group will compile all of its research in a Google Doc that is shared with each group member and your teacher. Your group leader is in charge of creating and setting up the Google Doc.

**Setup:** Create a new Google Doc and give it the title “Group Research – LastNames”. Share the document with each group member and with the teacher. Type each group member’s name at the top of the document in a different color. This is the color that each person needs to type in. . Add a heading for each part of the cell and a heading called “Sources” at the bottom of the list of headings.

**Process:** Use appropriate internet sources to find information on each part of the cell. You should look for information on the structure, function, and nickname for each cell part. Each person will add information they find for the different parts of the cell in the appropriate section. Copy the web address that you got any information from and paste it in the sources section. Each person is required to contribute 2 entries for each cell part.

DO NOT CHANGE YOUR FONT TYPE OR SIZE. ONCE YOU DECIDE ON A COLOR, IT MUST STAY THAT COLOR. TIME SPENT CHANGING COLORS IS TIME THAT COULD BE SPENT ON RESEARCH. DO NOT UNDER ANY CIRCUMSTANCES DELETE OR EDIT ANYONE ELSE’S CONTRIBUTIONS. NOT FOLLOWING THESE GUIDELINES COULD RESULT IN DISCIPLINARY ACTION.

## **PART 2: TRADING CARDS (20 points, Group Grade)**

**Setup:** You will create one trading card for each part of the cell. The different parts should be divided up between the group members so that the workload is fair. We will use a website to create our trading cards. Use the link posted in Schoology to access the website. Type your name into the website. Follow the steps below to set up each trading card.

1. The first time you access the site, you will need to type in your name. Click START. If you are returning, click the OPEN tab at the top. Click FIND MY FILE and choose the file from your U drive.
2. In the topic line, type the name of the cell part the card is about. Click CREATE YOUR OWN.
3. For section 1, type "Structure". In the boxes below, type information from your research on the structure of this cell part. Click the RIGHT ARROW >.
4. For section 2, type "Function". In the boxes below, type information from your research on what this cell part does. What is its job? Click the RIGHT ARROW >.
5. For section 3, type "Nickname". In the boxes below, type information from your research on the nickname of this cell part. What other names does it go by? Why do these names fit? Click the RIGHT ARROW >.
6. For section 4, type "Compare to Everyday Object". In the boxes below, compare this cell part to a familiar object. What is the cell part similar to that would help somebody understand more about cells? Click the RIGHT ARROW >.
7. We are not adding information in section 5. Click the RIGHT ARROW >.
8. To add a picture, you need to save an image on your U drive. Click CHOOSE IMAGE, then upload the file. Click FINISH EDITING.
9. Click the SAVE tab at the top. Name your file using your first and last name. Click SAVE. Choose a place you will remember on your U drive. Click SAVE.
10. Click ADD A NEW CARD to start a new card about a different cell part. Follow the process starting with step 2.

**\*\*\*THIS WEBSITE DOES NOT AUTO-SAVE. YOU MUST SAVE AFTER EACH USE\*\*\***

**Final Copy:** Your group leader will be responsible for emailing your teacher the set of trading cards for your entire group. Follow the directions below for turning in your group's trading cards.

1. Once you have completed your trading cards, click FINISH.
2. Click SHARE FINAL. Name your file using your first and last name. In the "send to" box, type your group leader's email address. In the "from" box, type your email address. Click SEND.
3. The group leader should download all the trading cards to their U drive. The group leader should then send email all the trading card files to the teacher IN ONE EMAIL.

### **VISUAL REPRESENTATION EXTRA CREDIT (8 points; Individual grade)**

You may earn up to 8 points of extra credit by creating a visual representation of a cell. This must be made using time outside of class. The requirements are listed below:

1. Your visual representation must be **CREATED BY YOURSELF**. You may not work with another student. You may not print an image from the computer.
2. Your visual representation needs to have the nine cell parts from the group project labeled in some way. This can be on the visual representation or using separate key.
3. You must include a brief description of the **FUNCTION** of each part of the cell. (You may use your research Google Doc)
4. Think outside the box and be creative! Have fun! You may create a poster, sculpture, powerpoint, video, music video, interpretive dance, etc. as long as the requirements are met.

## CELL PROJECT TIMELINE

**Day 1:** Research at least 5 parts of the cell. Contribute at least 2 pieces of information about each part to Google Doc. Information should be about the structure, function, nickname, or comparisons to other objects.

**Day 2:** Research remaining parts of the cell. Contribute at least 2 pieces of information about each part to Google Doc. Information should be about the structure, function, nickname, or comparisons to other objects. Decide as a group who which parts of the cell each person will make trading cards for.

**Day 3:** Finish research if not done already. Make first trading card. Use information from the Google doc to fill out the sections. Find a picture to upload to the trading card. Save your trading card to your U-drive.

**Day 4:** Make second trading card. Use information from the Google doc to fill out the sections. Find a picture to upload to the trading card. Save your trading cards to your U-drive.

**Day 5:** Make third trading card. Use information from the Google doc to fill out the sections. Find a picture to upload to the trading card. Email your finished trading cards to your group leader.

## CELL PROJECT CHECKLIST

### Research

- 2 pieces of information about the **nucleus**
- 2 pieces of information about the **cell membrane**
- 2 pieces of information about the **cytoplasm**
- 2 pieces of information about the **vacuoles**
- 2 pieces of information about the **mitochondria**
- 2 pieces of information about the **ribosomes**
- 2 pieces of information about the **endoplasmic reticulum**
- 2 pieces of information about the **golgi bodies (apparatus)**
- 2 pieces of information about the **lysosomes**

### Trading Card 1

- Structure
- Function
- Nickname
- Comparison to Object
- Picture

### Trading Card 2

- Structure
- Function
- Nickname
- Comparison to Object
- Picture

### Trading Card 3

- Structure
- Function
- Nickname
- Comparison to Object
- Picture

### Extra Credit

- Includes all nine parts
- All parts labeled/key
- Functions of all parts