

# The Organelle Trail

**This project is worth a Summative grade!!! Do your absolute best on it!!!**

**Standard: SB1a: Explain the role of cell organelles for both prokaryotic and eukaryotic cells, including the cell membrane, in maintaining homeostasis and cell reproduction.**

**E.Q.** While outlaws are typically thought of in a negative light, they sometimes have redeeming qualities that provide balance. Robin Hood is a fictitious outlaw who sought to restore balance. Balance within a cell is referred to as homeostasis. While the organelle you have been assigned may be the most ruthless outlaw on Organelle Trail, what redeeming quality does your organelle have that provides balance to the cell?

*Grab yer hat and saddle the broncs! It's time to head down the Organelle Trail!  
You've just been made a U.S. Marshall!*



Now that you are a U.S. Marshall, your job is to gather all of the information you can about a **WANTED** organelle. At the end of this “cyber trail”, you will need to whip up a **WANTED** poster to show to the other U.S. Marshalls in your camp so that they will know how to look for your wanted organelle too! For this project I want you to think *America's Most Wanted* – Wild West style!

## **Part 1: First Duties**

1. Receive your assigned organelle/structure. This will be provided in your briefing from the president (Mr/Mrs. \_\_\_\_\_).

**Organelle name** \_\_\_\_\_

## **Part 2: Gather Your Facts**

*To complete your poster (and find your suspect), you will need to gather facts along the trail! As you gather facts, record the information on your **FACT SHEET**. You will need to know the following:*

1. **CRIME: What has this organelle done?**
  - ✓ **Why is this organelle "wanted"? In other words, what does it do for the cell? Or, what is the organelle's function?**
2. **PHYSICAL DESCRIPTION: What does the organelle look like? How would you know if you found the organelle?**
  - ✓ **Provide a description and an actual picture. The picture must be a sketch from a sketch artist (hand drawn by you). Remember the more details you have, the easier it will be for others to identify!**
3. **LOCATION: Where should we look for the organelle?**
  - ✓ **Which of the following types of cells is this organelle found in? Make sure that you have explored, bacteria (Archaeobacteria and Eubacteria), Protists, Fungi,**

## **Plants, and Animals.**

### **4. ACCOMPLICES: Who helps your organelle?**

- ❖ **In other words, what other organelles/structures in the cell help your organelle do it's job?**

### **Part 3: The Roundup**

*Share the information you have discovered by completing a "WANTED" poster for your organelle/structure. **The poster should include, but is not limited to:***

1. A large "WANTED" displayed along with the name of your organelle (large, easy to read letters) ... don't forget to add the reward amount!
2. A hand drawn picture of your organelle/structure (personification in your drawing is encouraged)
3. Descriptive answers (in your own words!) to all 4 questions in Part 2. Please have this typed in an appropriate "Old West Wanted" language and font and glued to your poster.
4. Add a note about close relationships. Compare your organelle to an everyday object or a job that a person might have.
5. Add a Tellagami Presentor to your poster with a QR code. (As we learned how to do with Ms. Barton last week. Your Presentor should talk like they are a sheriff in the "Old West", and are searching for the organelle. You should cover all of the information on the poster with this Tellagami Presentor. If you run out of time, make multiple Tellagamis linked to multiple QR scan codes. Just paste the correct QR code by each item of information the Tellagami is talking about.
6. Alternate to the Tellagami – if you cannot make a Tellagami and QR code to link it to your poster, you will have to present your poster orally to the class. You will have to dress up like an Old West sheriff for full credit for this presentation portion of the grade.

**For ideas or help in making your wanted poster, visit the following website (<http://www.glassgiant.com/wanted/>). Remember the more effort and creative your poster is the better chance of getting full credit.**

# GRADING RUBRIC

<b>COMPONENT</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b><i>Creativity</i></b>	Poster shows excellent effort on creativity and a clear connection to the "WANTED" theme	Poster shows good effort on creativity but lacks a clear connection to the "WANTED" theme	Poster shows little effort on creativity but shows a clear connection to the "WANTED" theme	Poster shows no effort on creativity and no clear connection to the "WANTED" theme
<b><i>Use of Student's Own Words</i></b>	Student took the information and transformed it with their own words	Student transformed most of the information into their own words	Student used some of their own words but much of the information was copied	Student used words directly from the book or the websites
<b><i>Accuracy and Thoroughness of Poster (Part 1)</i></b>	All 4 of the questions from Part 2 were answered accurately	3 of the 4 questions from Part 2 were answered accurately	2 of the 4 questions from Part 2 were answered accurately	Only 1 of the 4 questions from Part 2 was answered accurately
<b><i>Mechanics</i></b>	The poster contains no errors in spelling, the grammar is correct	The poster contained 1-2 errors in spelling with correct grammar	The poster contained 3 or more spelling errors as well as grammatical errors	The poster contained more than 3 spelling errors as well as multiple grammatical errors
<b><i>Visual (drawing of the organelle)</i></b>	The drawing of the organelle was well done and personification was used well	The drawing of the organelle was well done, but personification was not used	The drawing of the organelle was messy and no personification was minimally used	The drawing of the organelle was messy and no personification was used
<b><i>Tellagami Information</i></b> <b><i>(If you present the poster yourself, you must follow these points, too.)</i></b>	Completely explains the organelle; covers all the information in the poster.	Explains 2/3's of the information required about the organelle; covers 2/3 of the information in the poster.	Explains about 1/2 of the information required about the organelle; covers 1/2 of the information in the poster.	Explains less than 1/2 of the information required about the organelle; covers less than 1/2 of the information.
<b><i>Tellagami Creativity</i></b> <b><i>(If you present the poster yourself, you must follow these points, too.)</i></b>	The Tellagami speaks like a sheriff in the Old West, using appropriate phrases and terms to make it sound like the Organelle is a wanted criminal. The background is appropriate for either the organelle or the Old West, or both.	The Tellagami speaks partially like a sheriff in the Old West, using appropriate phrases and terms to make it sound like the Organelle is a wanted criminal. And, the background is correct for the organelle or Old West Theme.	The Tellagami speaks a little like a sheriff in the Old West, using appropriate phrases and terms to make it sound like the Organelle is a wanted criminal. The background is not appropriate.	The Tellagami does not sound anything like a sheriff in the Old West, and does not use any phrases and terms to make it sound like the Organelle is a wanted Old West criminal. The background is not appropriate, either.

<p><b>QR Code</b> <b><i>(If you present the poster yourself, these points are</i></b></p>	<p>The QR code (or codes) are present, and open when scanned to the appropriate Tellagami for the poster.</p>		<p>The QR code (or codes) do not open when scanned, or are missing entirely from the poster.</p>
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# ORGANELLE FACT SHEET

\* This fact sheet is to be used for planning purposes only. You will need to type up each section and glue it to your Wanted Poster. Use font and language that would be appropriate for a wanted poster.

<p><b><u>CRIME</u></b> <b><i>Organelle's Function</i></b> Describe the function (job) of the organelle. What does it do for the cell?</p>	<p><b><u>PHYSICAL DESCRIPTION</u></b> <b><i>Organelle's Appearance</i></b> Describe what the organelle looks like.</p>
<p><b><u>LOCATION</u></b> <b><i>Where is it?</i></b> In what type of cells can the organelle be found? Does it have a specific location in the cell?</p>	<p><b><u>ACCOMPLICES</u></b> <b><i>Organelle's Help</i></b> What other organelles/structures in the cell help your organelle do its job?</p>

**Any other helpful information**

