

# WEEKLY PLANNER: ALL SCIENCE WEEK

OF 1.128.19



**Objectives for the week:** Bio.1.1 Understand the relationship between the structures and functions of cells and their organelles. Bio.1.2 Analyze the cell as a living system. Bio.4.2 Analyze the relationships between biochemical processes and energy use in the cell.

Chm.1.1.2 Analyze an atom in terms of the location of electrons. Chm.1.1.3 Explain the emission of electromagnetic radiation in spectral form in terms of the Bohr model.

Day	Honors Biology	Honors Chemistry
Mon 1.28.19	<p><b>-Collect review from last week</b> <a href="https://www.youtube.com/watch?v=URUJD5NEXC8">https://www.youtube.com/watch?v=URUJD5NEXC8</a> <b>-NOTES: Cell structure</b> <b>-Practice: Cell structure</b> <b>*HW= pgs 6-8 on that page... no need to write out</b></p>	<p><b>-Warm up quiz (T/F) basics from HW assigned 1.25</b> <a href="https://www.youtube.com/watch?v=8ROHpZ0A70I">https://www.youtube.com/watch?v=8ROHpZ0A70I</a> <b>-NOTES: Electrons in atoms</b> <b>-Team practice: electrons in atoms</b> <b>*HW= Finish team practice #1-10 write out or diagram to explain. Video: Quantum leap</b></p>

<p>Tues 1.29</p> <p><b>STUDY BUDDIES!</b></p>	<p><b>-Finish notes: Cell structure</b></p> <p><b>-Team assignment: Cell structure analogy</b></p> <p><b>*HW=PROGRESS REPORTS, colorings, quiz corrections, test corrections</b></p>	<p><b>-Finish notes: Electron configurations</b></p> <p><b>-Team activity: electron configurations</b></p> <p><b>*HW=PROGRESS REPORTS, first 4 on each page (on that page is ok....pg 29-33)</b></p>
<p>Wed 1.30</p> <p><b>STUDY BUDDIES!</b></p>	<p><b>-Finish notes (10 slides)</b></p> <p><b>TEAM PROJECT: Cell structure and function</b></p> <p><b>*HW= call your team and work on project, STUDY NOTES FOR 35 minutes!!!!</b></p>	<p><b>Irregular configurations</b></p> <p><b>Atomic spectra</b></p> <p><b>Virtual lab: Quantum leaps of electrons in atoms</b></p> <p><a href="http://www.mrpalermo.com/virtual-lab-spectroscopy.html">http://www.mrpalermo.com/virtual-lab-spectroscopy.html</a></p> <p><a href="http://www.bigrocketproductions.com/anim-spectroscopy/spectroscopy.html">http://www.bigrocketproductions.com/anim-spectroscopy/spectroscopy.html</a></p> <p><a href="http://www.trschools.com/staff/g/cgirtain/web/bs/spectrolab.htm">http://www.trschools.com/staff/g/cgirtain/web/bs/spectrolab.htm</a></p> <p><b>*HW= finish lab, study all notes for 35 minutes!!</b></p>
<p>Thurs 1.31</p>	<p><b>-KahOOOOOOT!</b></p> <p><b>-TEAM time to work on presentations.</b></p> <p><b>*HW= study for test!</b></p> <p><a href="https://create.kahoot.it/k/a79b0413-830f-4d9b-9df7-6375187027b6">https://create.kahoot.it/k/a79b0413-830f-4d9b-9df7-6375187027b6</a></p>	<p><b>-Noble gas and ion configurations.</b></p> <p><b>-Shielding effect.</b></p> <p><b>-Review Kahoot</b></p> <p><b>*HW= study for test, finish the 10 problems</b></p> <p><a href="https://create.kahoot.it/k/f92003ad-4e7c-420c-8d65-a96731aa677f">https://create.kahoot.it/k/f92003ad-4e7c-420c-8d65-a96731aa677f</a></p>
<p>Friday 2.1</p>	<p><b>-turn in w/up and any make up work.</b></p> <p><b>TEST</b> (on everything covered this week)</p> <p><b>HW= conceptual model inventory #1-24</b></p>	<p><b>-turn in w/up and homework, any make up work.</b></p> <p><b>TEST</b> (on everything covered this week)</p>

Warm up activities!

## **Monday 1.28.19-**

<https://evansccca.weebly.com/>

**BIO Warm up:**  
**Turn OFF your cell phone and  
put in bin 😊**

<https://www.youtube.com/watch?v=8PmM6SUn7Es>

Name FOUR things that ALL cells  
have in common.

**CHEM warm up**  
**Turn OFF your cell phone and  
put in bin 😊**

**1) quiz corrections in this  
space**

## **TUESday 1.29.19-**

<https://evansccca.weebly.com/>

**BIO Warm up:**  
**Turn OFF your cell phone  
and put in bin 😊**

<https://www.youtube.com/watch?v=L-osEc07vMs>

**QUIZ CORRECTIONS  
HERE AND ON BACK.**

**CHEM warm up**  
**Turn OFF your cell phone  
and put in bin 😊**

<https://www.youtube.com/watch?v=xazQRcSCRaY>

**\* Democritus-**  
**\* Aristotle-**  
**\* 1808- DALTON's 5**  
**postulates**  
**\* 1897- JJ Thompson's**  
**cathode ray tube**

Name	Key		
Date	1/29	Period	1

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2	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
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ASE SC 1 Animal & Plant Cell Coloring.docx [Compatibility Mode] - Word

File Home Insert Design Layout References Mailings Review View Tell me what you want to do... Sign in Share

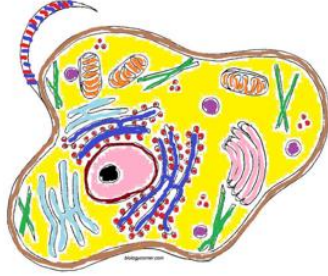
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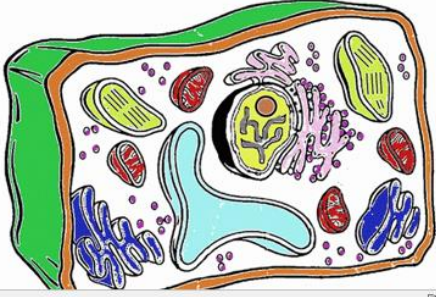
### Animal Cell Coloring KEY



II. Briefly describe the function of the cell parts.

1. Cell membrane: barrier between cell and outside
2. Endoplasmic Reticulum: cell transport
3. Ribosome: makes proteins
4. Golgi Apparatus: packaging, processing, secreting vesicles
5. Lysosome: breaks down substances
6. Microtubule: cytoskeleton, cell support
7. Mitochondria: produces energy for cell; cell respiration
8. Nucleus: control center, contains DNA

### Animal Cell Coloring KEY



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10:49 AM 1/29/2019







## Lanthanoids:

57 <b>La</b> lanthanum (138.905 47(7))	58 <b>Ce</b> cerium (140.116(1))	59 <b>Pr</b> praseodymium (140.907 68(2))	60 <b>Nd</b> neodymium (144.242(3))	61 <b>Pm</b> promethium (145)	62 <b>Sm</b> samarium (150.36(2))	63 <b>Eu</b> europium (151.964(1))	
64 <b>Gd</b> gadolinium (157.25(1))	65 <b>Tb</b> terbium (158.925 38(2))	66 <b>Dy</b> dysprosium (162.50(1))	67 <b>Ho</b> holmium (164.930 32(2))	68 <b>Er</b> erbium (167.259(2))	69 <b>Tm</b> thulium (168.934 21(2))	70 <b>Yb</b> ytterbium (173.04(3))	71 <b>Lu</b> lutetium (174.967(1))

**Electronic Configuration:** All Lanthanoids have an electronic configuration of the form  $4f^n 5d^{0-1} 6s^2$  ( $n=1$  to 14).

## Actinoids:

89 <b>Ac</b> actinium (227)	90 <b>Th</b> thorium (232.038 06(2))	91 <b>Pa</b> protactinium (231.036 88(2))	92 <b>U</b> uranium (238.028 91(3))	93 <b>Np</b> neptunium (237)	94 <b>Pu</b> plutonium (244)	95 <b>Am</b> americum (243)	
96 <b>Cm</b> curium (247)	97 <b>Bk</b> berkelium (247)	98 <b>Cf</b> californium (251)	99 <b>Es</b> einsteinium (252)	100 <b>Fm</b> fermium (257)	101 <b>Md</b> mendelevium (258)	102 <b>No</b> nobelium (259)	103 <b>Lr</b> lawrencium (262)

The actinoids are radioactive elements with the latter half of the series being very unstable. Thus the properties of these elements are not as extensively studied as that of the lanthanoids. We will look at some of the basic properties of these elements.

- **Electronic configuration:** The elements of this series have an electronic configuration of the form  $5f^n 6d^{0-1} 7s^2$  ( $n=1$  to 14).

# Thursday 1.31.19-

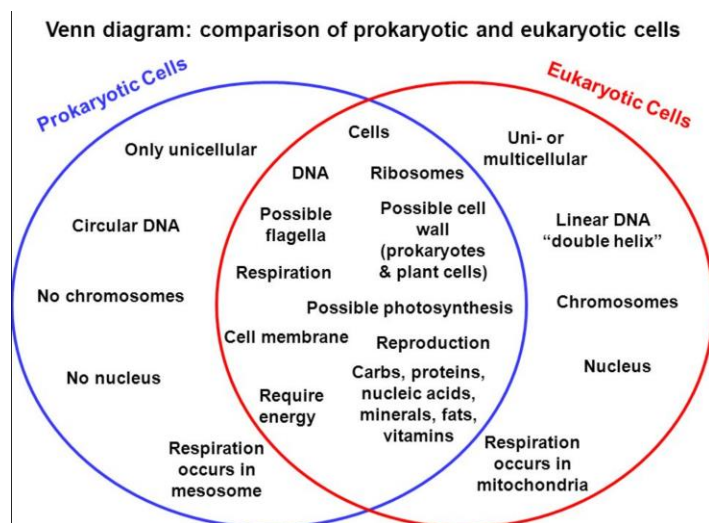
<https://evanscca.weebly.com/>

**BIO Warm up:**  
**Turn OFF your cell phone and put in bin 😊**

Make a VENN diagram  
to compare/contrast  
prokaryotes vs.  
eukaryotes

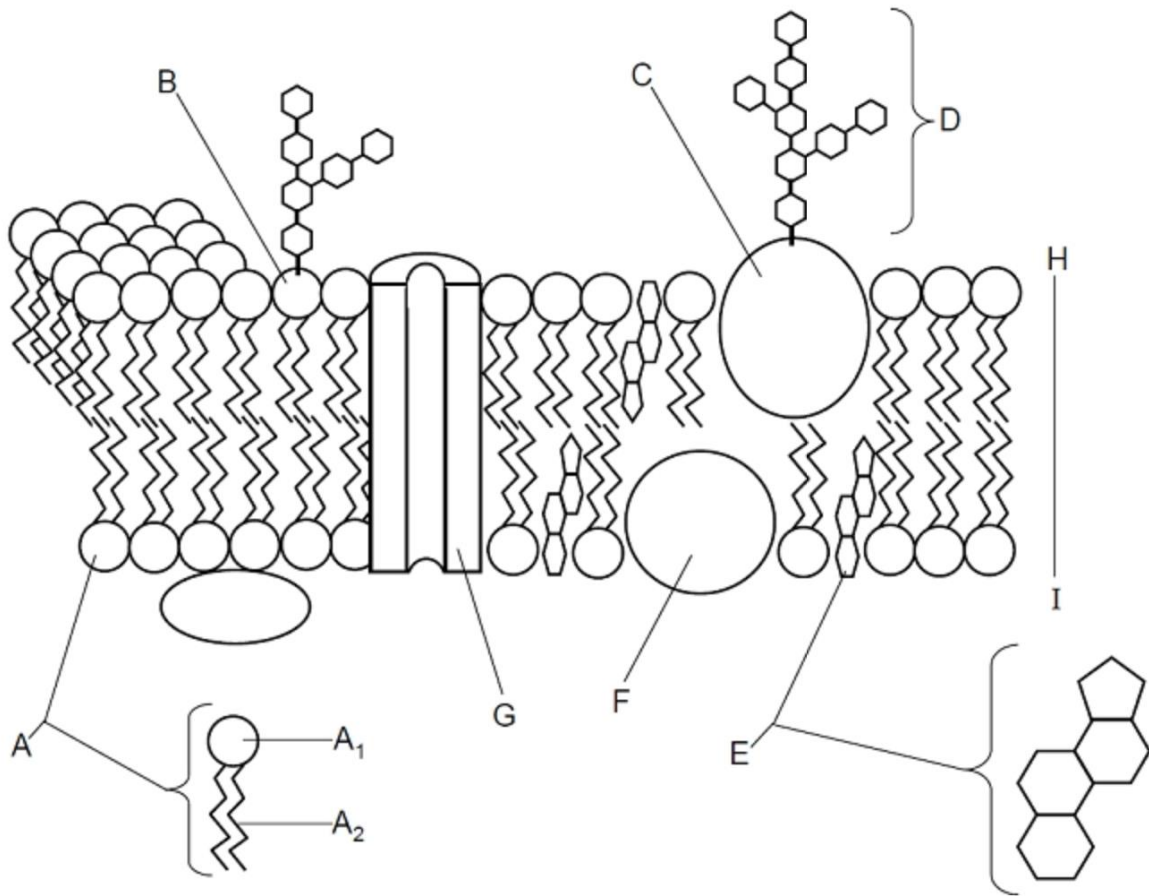
**CHEM warm up**  
**Turn OFF your cell phone and put in bin 😊**

**Explain the following electron configurations:**



For Thursday w/u Bio.1.1.2 Compare prokaryotic and eukaryotic cells in terms of their general structures (plasma membrane and genetic material) and degree of complexity.





**Friday 2.1.19-**

<https://evanscca.weebly.com/>

**BIO Warm up:**  
**Turn OFF your cell phone and  
 put in bin 😊**

My nightly BIO study times:

Mon- \_\_\_\_\_ min

Tues- \_\_\_\_\_ min

Wed- \_\_\_\_\_ min

Thurs- \_\_\_\_\_ min

**CHEM warm up**  
**Turn OFF your cell phone and  
 put in bin 😊**

My nightly CHEM study times:

Mon- \_\_\_\_\_ min

Tues- \_\_\_\_\_ min

Wed- \_\_\_\_\_ min

Thurs- \_\_\_\_\_ min

**Intensive vs. extensive properties**  
**Chemical vs. physical**  
**Dalton's postulates**  
**Plank's constant**  
**The speed of light**  
**Nanometer conversions showing work and units**  
**Wavelength**  
**frequency**

**What does the nucleus do?**  
**What does the nucleolus do?**  
**How does RNA exit the nucleus to get to ribosomes in the cell?**  
**What do ribosomes make?**  
**Why are proteins so important?**

*Cell Analogy*

Have you ever been describing something unfamiliar to someone, and they didn't understand you? When you explained it, you probably tried to compare that thing to something that the person was familiar with. For example:

**The blood vessels in our bodies are like highways because blood cells travel through the vessels like cars travel down highways.**

When you compare one thing that is unfamiliar to something that is familiar and has the same function, this called an **analogy**. We use analogies to help us understand how two things that are unrelated can be related by showing how both of them work in a similar way.

Choose from the following list of objects or chose your own to compare your **cell** parts to: The mall , A school ,A football game ,A basketball game ,A soccer game, A hospital ,Your favorite TV show ,A city ,A restaurant ,A concert , a space ship, a cruise ship, the death star,

### **Cell analogy Project TEAMS of 3 (chosen by teacher)**

- 1- Title slide**
- 2- Actual and correct Cell**
- 3- Slides of each part of your analogy:**
  - nucleus (and nucleolus)**
  - ER (both rough and smooth)**
  - Golgi**
  - Cell membrane**
  - Chloroplasts**
  - DNA**
  - Vacuole**
  - Mitochondrion**
  - Ribosomes (make proteins!)**

### **TEAM GRADING**

- 11 + slides (5 points)**
- Thorough and correct (20 points)**
- Interesting (10 points)**
- Teamwork (20 points)**
- Colorful (10 points)**
- Unique pictures (5 points)**
- Send to Ms. Evans ([adrienne.science15@gmail.com](mailto:adrienne.science15@gmail.com)) school linked (10)**
- Actual presentation (20 points)**

**STEP1- sit with your team close to the screen**

**STEP 2- Log in with a RELIABLE device**

**Step 3- make a team plan**

**STEP 4- WIN!!!!**

**TEAM KAHOOT!!!**

**7 PLS**

**7 SLP**

**7 LPS**

**1 point= any answer 3 points= correct answer**

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As	Arsenic	Blue
B	Boron	Bright green
Ba	Barium	Pale/Yellow-green
Ca	Calcium	Orange-red
Cu (I)	Copper (I)	Blue
Cu (II)	Copper (II) non-halide	Green
Cu (II)	Copper (II) halide	Blue-green
Fe	Iron	Gold
In	Indium	Blue
K	Potassium	Light purple to red
Li	Lithium	Deep pink to dark red
Mg	Magnesium	Bright white
Mn (II)	Manganese (II)	Yellow-green
Mo	Molybdenum	Yellow-green
Na	Sodium	Bright yellow
P	Phosphorous	Pale blue-green
Pb	Lead	Blue
Rb	Rubidium	Red/Purple-red
Sb	Antimony	Pale green
Se	Selenium	Bright blue
Sr	Strontium	Crimson
Te	Tellurium	Pale green
Tl	Thallium	Bright green

Zn	Zinc	Blue-green to pale green
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