Chemistry: Rea	Rm #	PERIOD 1 8:00-8:50	PERIOD 2 8:55-9:45	PERIOD 3 9:50-10:40	PERIOD 4 10:45-11:35	PERIOD 5 11:40-12:30	PERIOD 6 1:50-2:40	PERIOD 7 2:45-3:35
ENGLISH								
Coleman, D.	400							
Deleon, T.	409	Activity 1: On-line Achieve 3000 Article: "Animated Favorites Get Real". Read the article and answer the Activity questions. **Or** Activity 1: Paper copy of the Achieve 3000 Article: "Animated Favorites Get Real". Read the paper copy of the article and answer the Activity questions.	Activity 1: On-line Achieve 3000 Article: "Animated Favorites Get Real". Read the article and answer the Activity questions . **Or** Activity 1: Paper copy of the Achieve 3000 Article: "Animated Favorites Get Real". Read the paper copy of the article and answer the Activity questions.	Activity 1: On-line Achieve 3000 Article: "Animated Favorites Get Real". Read the article and answer the Activity questions . **Or** Activity 1: Paper copy of the Achieve 3000 Article: "Animated Favorites Get Real". Read the paper copy of the article and answer the Activity questions.	Activity 1: On-line Achieve 3000 Article: "Animated Favorites Get Real". Read the article and answer the Activity questions. **Or** Activity 1: Paper copy of the Achieve 3000 Article: "Animated Favorites Get Real". Read the paper copy of the article and answer the Activity questions.	Activity 1: On-line Achieve 3000 Article: "Animated Favorites Get Real". Read the article and answer the Activity questions. **Or** Activity 1: Paper copy of the Achieve 3000 Article: "Animated Favorites Get Real". Read the paper copy of the article and answer the Activity questions.	CONF	Activity 1: On-line Achieve 3000 Article: "Animated Favorites Get Real". Read the article and answer the Activity questions. **Or** Activity 1: Paper copy of the Achieve 3000 Article: "Animated Favorites Get Real". Read the paper copy of the article and answer the Activity questions.
Contreras, M.	411	Week 1: YOU MAY COMPLETE THIS ASSIGNMENT IN GOOGLE CLASSROOM OR WITH PAPER & PENCIL. Write an expository journal explaining the following items in separate paragraphs: 1) How are you? How is your family? 2)Explain one thing (or more) you are doing to stay either physically, mentally, emtionally, or spiritually healthy during this time of "social distancing." 3)Include anything else you feel is important to share including questions, fears, anxieties, or just general things happening in your world right now. **DUE BY 03-30**	Week 1: YOU MAY COMPLETE THIS ASSIGNMENT IN GOOGLE CLASSROOM OR WITH PAPER & PENCIL. Write an expository journal explaining the following items in separate paragraphs: 1) How are you? How is your family? 2)Explain one thing (or more) you are doing to stay either physically, mentally, emtionally, or spiritually healthy during this time of "social distancing." 3)Include anything else you feel is important to share including questions, fears, anxieties, or just general things happening in your world right now. **DUE BY 03-30**	Week 1: YOU MAY COMPLETE THIS ASSIGNMENT IN GOOGLE CLASSROOM OR WITH PAPER & PENCIL. Write an expository journal explaining the following items in separate paragraphs: 1) How are you? How is your family? 2)Explain one thing (or more) you are doing to stay either physically, mentally, emtionally, or spiritually healthy during this time of "social distancing." 3)Include anything else you feel is important to share including questions, fears, anxieties, or just general things happening in your world right now. **DUE BY 03-30**	Week 1: YOU MAY COMPLETE THIS ASSIGNMENT IN GOOGLE CLASSROOM OR WITH PAPER & PENCIL. Write an expository journal explaining the following items in separate paragraphs: 1) How are you? How is your family? 2)Explain one thing (or more) you are doing to stay either physically, mentally, emtionally, or spiritually healthy during this time of "social distancing." 3)Include anything else you feel is important to share including questions, fears, anxieties, or just general things happening in your world right now. **DUE BY 03-30**	Week 1: YOU MAY COMPLETE THIS ASSIGNMENT IN GOOGLE CLASSROOM OR WITH PAPER & PENCIL. Write an expository journal explaining the following items in separate paragraphs: 1) How are you? How is your family? 2)Explain one thing (or more) you are doing to stay either physically, mentally, emtionally, or spiritually healthy during this time of "social distancing." 3)Include anything else you feel is important to share including questions, fears, anxieties, or just general things happening in your world right now. **DUE BY 03-30**	CONF	Week 1: YOU MAY COMPLETE THIS ASSIGNMENT IN GOOGLE CLASSROOM OR WITH PAPER & PENCIL. Write an expository journal explaining the following items in separate paragraphs: 1) How are you? How is your family? 2)Explain one thing (or more) you are doing to stay either physically, mentally, emtionally, or spiritually healthy during this time of "social distancing." 3)Include anything else you feel is important to share including questions, fears, anxieties, or just general things happening in your world right now. **DUE BY 03-30**
Baker, B.	410	Activity 1: On-line Achieve 3000 Article: "Music for Pooches and Iguanas?. Read the article and answer the Activity questions # 1 - 8. Or Activity 1: Paper copy of the Achieve 3000 Article: "Music for Pooches and Iguanas?". Read the paper copy of the article and answer the Activity questions #1 - 3	Activity 1: On-line Achieve 3000 Article: "Music for Pooches and Iguanas?. Read the article and answer the Activity questions # 1 - 8. Or Activity 1: Paper copy of the Achieve 3000 Article: "Music for Pooches and Iguanas?". Read the paper copy of the article and answer the Activity questions #1 - 3.	Activity 1: On-line Achieve 3000 Article: "Music for Pooches and Iguanas?. Read the article and answer the Activity questions # 1 - 8. Or Activity 1: Paper copy of the Achieve 3000 Article: "Music for Pooches and Iguanas?". Read the paper copy of the article and answer the Activity questions #1 - 3.	Activity 1: On-line Achieve 3000 Article: "Music for Pooches and Iguanas?. Read the article and answer the Activity questions # 1 - 8. Or Activity 1: Paper copy of the Achieve 3000 Article: "Music for Pooches and Iguanas?". Read the paper copy of the article and answer the Activity questions #1 - 3.	Activity 1: On-line Achieve 3000 Article: "Music for Pooches and Iguanas?. Read the article and answer the Activity questions # 1 - 8. Or Activity 1: Paper copy of the Achieve 3000 Article: "Music for Pooches and Iguanas?". Read the paper copy of the article and answer the Activity questions #1 - 3.	CONF	Activity 1: On-line Achieve 3000 Article: "Music for Pooches and Iguanas?. Read the article and answer the Activity questions # 1 Activity 1: Paper copy of the Achieve 3000 Article: "Music for Pooches and Iguanas?". Read the paper copy of the article and answer the Activity questions #1-3.
FOR. LANG.								
Castillo, J.	602	Continue your APEX assignment	CONF	Continue your APEX assignment	Continue your APEX assignment	Continue your APEX assignment	Continue your APEX assignment	Continue your APEX assignment
Ybarra, P.	603							CONF
SCIENCE								

Chemistry: Rea	Rm #	PERIOD 1	PERIOD 2	PERIOD 3	PERIOD 4	PERIOD 5	PERIOD 6	PERIOD 7
Huser, A.	504	Chemistry: Read *Chapter 7.1: Ions* **Activity 1**: Students will answer questions: 1) How can you determine the number of valence electrons in an atom of representative element? 2) How do cations form? 3)How do anions form? 4) How many valence electrons are in each atom: a. potassium, b.carbon, c.magnesium, d.oxygen **Activity 2:** Students will answer questions: 1) Draw the electron dot structure for each element: a. potassium, b.carbon, c. magnesium, d.oxygen 2) How many electrons will each element gain or lose in forming an ion: a.calcium, b. flourine, c.aluminum, d.oxygen	CONF	Chemistry: Read *Chapter 7.1: Ions* **Activity 1:** Students will answer questions: 1) How can you determine the number of valence electrons in an atom of representative element? 2) How do cations form? 3)How do anions form? 4) How many valence electrons are in each atom: a. potassium, b.carbon, c.magnesium, d.oxygen **Activity 2:** Students will answer questions: 1) Draw the electron dot structure for each element: a. potassium, b.carbon, c. magnesium, d.oxygen 2) How many electrons will each element gain or lose in forming an ion: a.calcium, b. flourine, c.aluminum, d.oxygen	Chemistry: Read *Chapter 7.1: Ions* **Activity 1:** Students will answer questions: 1) How can you determine the number of valence electrons in an atom of representative element? 2) How do cations form? 3)How do anions form? 4) How many valence electrons are in each atom: a. potassium, b.carbon, c.magnesium, d.oxygen **Activity 2:** Students will answer questions: 1) Draw the electron dot structure for each element: a. potassium, b.carbon, c. magnesium, d.oxygen 2) How many electrons will each element gain or lose in forming an ion: a.calcium, b. flourine, c.aluminum, d.oxygen	***A&P:*** Read *Chapter 7.1: The Eye* **Activity 1:**Student will answer questions: 1)What do tarsal glands produce? 2)What are the two functions of tears? 3)Describe two different ways by which tears clean the eyes. **Activity 2**: Students will answer questions: 1)Explain the purpose of aqueous and vitreous humors. 2)Name the three layers of the eye. 3)Which nerve is responsible for transmitting sensory signals to the brain?	Chemistry: Read *Chapter 7.1: Ions* **Activity 1:** Students will answer questions: 1) How can you determine the number of valence electrons in an atom of representative element? 2) How do cations form? 3)How do anions form? 4) How many valence electrons are in each atom: a. potassium, b.carbon, c.magnesium, d.oxygen **Activity 2:** Students will answer questions: 1) Draw the electron dot structure for each element: a. potassium, b.carbon, c. magnesium, d.oxygen 2) How many electrons will each element gain or lose in forming an ion: a.calcium, b. flourine, c.aluminum, d.oxygen	Chemistry: Read *Chapter 7.1: Ions* **Activity 1:** Students will answer questions: 1) How can you determine the number of valence electrons in an atom of representative elemnt? 2) How do cations form? 3)How do anions form? 4) How many valence electrons are in each atom: a.potassium, b.carbon, c. magnesium, d.oxygen **Activity 2:** Students will answer questions: 1) Draw the electron dot structure for each element: a. potassium, b.carbon, c. magnesium, d.oxygen 2) How many electrons will each element gain or lose in forming an ion: a. calcium, b.flourine, c.aluminum, d.oxygen
Jimenez, M.	501	Astronomy: Chapter 8: The Sun (New Unit) **Activity 1**: Students will answer these three questions after reading their notes on the sun. 1) What are the 3 layers of the sun's atmosphere? Which layer is the only one we can see year-round and what is the sun's true color? 2) Explain what sunspots are, who saw them first, and what is peculiar (strange) about them. 3) What causes the auroras? **Activity 2**) Reflect on what the slides teach you about the sun, write two paragraphs explaining in your own words just how the Sun turns hydrogen into energy and helium. All of these activities can be done with access to Chapter 8 Notes.	CONF	Physics Regular: Chapter 9 Heat **Activity 1)** Read Chapter 9 Section 1 pgs 300-306 and review your section 1 notes. Write a paragraph reflecting on what you learned or what you still have questions about. (4 sentence minimum) **Activity 2**) Read Chapter 9 Section 1 pgs 300-306 and complete the Formative Assessment on page 306 questions 1-4. Both of these can be completed on paper or through Google classroom.	Physics Regular: Chapter 9 Heat **Activity 1**) Read Chapter 9 Section 1 pgs 300-306 and review your section 1 notes. Write a paragraph reflecting on what you learned or what you still have questions about. (4 sentence minimum) **Activity 2**) Read Chapter 9 Section 1 pgs 300-306 and complete the Formative Assessment on page 306 questions 1-4. Both of these can be completed on paper or through Google classroom.	Physics Honors: Read Chapter 6 Section 3 pgs. 206 - 214 and review Chapter 6 notes. **Activity 1)** Do 3 word problems posted on Google classroom (also available on paper). **Activity 2)** Complete Chapter 6 section 3 Formative Assessment problems 1-3 on page 214. Available online and on paper.	Biology: Chapter 6 Section 6 Review: **Activity 1)** Read pages 183 - 185 online or in packet and answer questions 1-4 on page 185. **Activity 2)** Complete Chapter 6 Section 6 Interactive Reader worksheets available online or on paper.	Astronomy: Chapter 8: The Sun (New Unit) **Activity 1**: Students will answer these three questions after reading their notes on the sun. 1) What are the 3 layers of the sun's atmosphere? Which layer is the only one we can see year-round and what is the sun's true color? 2) Explain what sunspots are, who saw them first, and what is peculiar (strange) about them. 3) What causes the auroras? **Activity 2**) Reflect on what the slides teach you about the sun, write two paragraphs explaining in your own words just how the Sun turns hydrogen into energy and helium. All of these activities can be done with access to Chapter 8
Pooley, G.	502			Choose On-line or Paper copy they are the same assignment and only choose one option. **Option 1: On-line or Paper copy** Achieve 3000 Article: "A Promise to Help the Planet". Read the article and answer the Activity questions # 1 - 8. **Option 2: On-line or Paper copy** Achieve 3000 Article: "The Last Generation?". Read the article and answer the Activity questions # 1 - 8.	Choose On-line or Paper copy they are the same assignment and only choose one option. **Option 1: On-line or Paper copy** Achieve 3000 Article: "A Promise to Help the Planet". Read the article and answer the Activity questions # 1 - 8. **Option 2: On-line or Paper copy** Achieve 3000 Article: "The Last Generation?". Read the article and answer the Activity questions # 1 - 8.		CONF	Medical Term. (17)
Zuniga, L.	505	Biology - Complete Chapter 6.3 Study Guide A online using given textbook pages and word document **OR** Complete Chapter 6.3 Study Guide A paper copy using the given textbook pages and word document		Biology Honors - Complete Chapter 6.3 Study Guide B online using given textbook pages and word document **OR** Complete Chapter 6.3 Study Guide B paper copy using the given textbook pages and word document	Biology - Complete Chapter 6.3 Study Guide A online using given textbook pages and word document **OR** Complete Chapter 6.3 Study Guide A paper copy using the given textbook pages and word document	Biology - Complete Chapter 6.3 Study Guide A online using given textbook pages and word document **OR** Complete Chapter 6.3 Study Guide A paper copy using the given textbook pages and word document	CONF	Athletics (52)
MATH								
Auten, K.	802/Gym	Athletics (69)	You may complete this problem on paper, or through Google Classroom. You should have an email with the link to the class. A realtor sold a home for $361,600. The commission was 6% of the sale price; however, the realtor receives only 60% of the commission while 40% of the commission remains with the broker. 1. Total Commission on the sale: 2. Commission received by the realtor: 3. Commission received by the broker:	Week 1: You may complete this factoring assignment on paper, or through google classroom.1. Solve for x. Hint: Factor as a first step; there will be two correct answers. Here is the video that helps you factor when the lead coefficient is not 1. https://www.youtube.com/watch?v=r1JAJfmRG5w&t=7 2x2 + 5x − 3 = 0 (2x squared +5x -3 = 0) 2. Solve for t. Hint: Cube both sides. 3. Solve for u. Hint: Square both sides. 4. Solve for x. Hint: Please remember	PE - No Assignemnt this week	PE - No assignment this week	Week 1: You may complete this factoring assignment on paper, or through google classroom.1. Solve for x. Hint: Factor as a first step; there will be two correct answers. Here is the video that helps you factor when the lead coefficient is not 1. https://www.youtube.com/watch?v=r1JAJfmRG5w&t=7 2x2 + 5x − 3 = 0 (2x squared +5x -3 = 0) 2. Solve for t. Hint: Cube both sides. 3. Solve for u. Hint: Square both sides. 4. Solve for x. Hint: Please remember	CONF

Chemistry: Rea	Rm #	PERIOD 1	PERIOD 2	PERIOD 3	PERIOD 4	PERIOD 5	PERIOD 6	PERIOD 7
Eppright, T.	805	Week 1 Activities: There are two options one involves Solving Equations and the other is Combining Like Terms. You only have to complete one total assignment. CHOOSE TO DO only ONE PAPER OR ONE ONLINE BUT CHOSE ONLY ONE. First, click on this cell to bring up the white comments box with the 2 assignment options. Next, choose either the online or paper version and then choose either option 1: Solving Equations or option 2: Combining Like Terms to complete. There are examples to guide you. **For the online option, sign in to Google Classroom and use your Google sign in for BOOM.**		Week 1 Activities: There are two options one involves Solving Equations and the other is Combining Like Terms. You only have to complete one total assignment. CHOOSE TO DO only ONE PAPER OR ONE ONLINE BUT CHOSE ONLY ONE. First, click on this cell to bring up the white comments box with the 2 assignment options. Next, choose either the online or paper version and then choose either option 1: Solving Equations or option 2: Combining Like Terms to complete. There are examples to guide you. **For the online option, sign in to Google Classroom and use your Google sign in for BOOM.**	Week 1 Activities: There are two options one involves Solving Equations and the other is Combining Like Terms. You only have to complete one total assignment. CHOOSE TO DO only ONE PAPER OR ONE ONLINE BUT CHOSE ONLY ONE. First, click on this cell to bring up the white comments box with the 2 assignment options. Next, choose either the online or paper version and then choose either option 1: Solving Equations or option 2: Combining Like Terms to complete. There are examples to guide you. **For the online option, sign in to Google Classroom and use your Google sign in for BOOM.**	Week 1 Activities: There are two options one involves Solving Equations and the other is Combining Like Terms. You only have to complete one total assignment. CHOOSE TO DO only ONE PAPER OR ONE ONLINE BUT CHOSE ONLY ONE. First, click on this cell to bring up the white comments box with the 2 assignment options. Next, choose either the online or paper version and then choose either option 1: Solving Equations or option 2: Combining Like Terms to complete. There are examples to guide you. **For the online option, sign in to Google Classroom and use your Google sign in for BOOM.**	eek 1 Activities: There are two options one involves Solving Equations and the other is Combining Like Terms. You only have to complete one total assignment. CHOOSE TO DO only ONE PAPER OR ONE ONLINE BUT CHOSE ONLY ONE. First, click on this cell to bring up the white comments box with the 2 assignment options. Next, choose either the online or paper version and then choose either option 1: Solving Equations or option 2: Combining Like Terms to complete. There are examples to guide you. **For the online option, sign in to Google Classroom and use your Google sign in for BOOM.**	eek 1 Activities: There are two options one involves Solving Equations and the other is Combining Like Terms. You only have to complete one total assignment. CHOOSE TO DO only ONE PAPER OR ONE ONLINE BUT CHOSE ONLY ONE. First, click on this cell to bring up the white comments box with the 2 assignment options. Next, choose either the online or paper version and then choose either option 1: Solving Equations or option 2: Combining Like Terms to complete. There are examples to guide you. **For the online option, sign in to Google Classroom and use your Google sign in for BOOM.**
VanGundy, L.	803	CONF	Week 1 Activities: OPTION 1: First, click on this cell to bring up the white comments box with the assignment options. Next, choose either the online or paper version to complete. Use your QUADRATIC notes and/or the example provided to help guide you. **For the online option, sign in with Google to sign in.**	Week 1 Activities: OPTION 1: First, click on this cell to bring up the white comments box with the assignment options. Next, choose either the online or paper version to complete. Use your QUADRATIC notes and/or the example provided to help guide you. **For the online option, sign in with Google to sign in. **	Week 1 Activities: OPTION 1: First, click on this cell to bring up the white comments box with the assignment options. Next, choose either the online or paper version to complete. Use your QUADRATIC notes and/or the example provided to help guide you. **For the online option, sign in with Google to sign in.**	Week 1 Activities: OPTION 1: First, click on this cell to bring up the white comments box with the assignment options. Next, choose either the online or paper version to complete. Use your QUADRATIC notes and/or the example provided to help guide you. **For the online option, sign in with Google to sign in. **	Week 1 Activities: OPTION 1: First, click on this cell to bring up the white comments box with the assignment options. Next, choose either the online or paper version to complete. Use your QUADRATIC notes and/or the example provided to help guide you. **For the online option, sign in with Google to sign in. **	eek 1 Activities: OPTION 1: First, click on this cell to bring up the white comments box with the assignment options. Next, choose either the online or paper version to complete. Use your QUADRATIC notes and/or the example provided to help guide you. **For the online option, sign in with Google to sign in.**
Watkins, J.	804	Week 1 Activities: Complete assignment over solving for the variable. Go to the website joinmyquiz.com and enter the code 273609 to complete this online.	Week 1 Activities: Complete assignment over solving for the variable. Go to the website joinmyquiz.com and enter the code 273609 to complete this online.	Week 1 Activities: Continue assignments on the OnRamps website.	Week 1 Activities: Complete assignment over solving for the variable. Go to the website joinmyquiz.com and enter the code 273609 to complete this online.	Week 1 Activities: Complete assignment over solving for the variable. Go to the website joinmyquiz.com and enter the code 273609 to complete this online.	CONF	Athletics (52)
Social Studies								
Houdman, K.	607	Athletics (69)	Week 1: complete Sit ins and Protests assignment. It is simple, all you have to do is read the paragraphy and answer questions. This is available through print or google classroom.	Week 1: First Assignment will be to complete the reading and questions over Democracy. This is available on google classroom or print options are available.	Week 1: First Assignment will be to complete the reading and questions over Democracy. This is available on google classroom or print options are available.	Week 1: First Assignment will be to complete the reading and questions over Democracy. This is available on google classroom or print options are available.	Week 1: First Assignment will be to complete the reading and questions over Democracy. This is available on google classroom or print options are available.	CONF
Winsmann, J.	609	Athletics (69)	Week 1: First Assignment will be to complete the reading and questions over the Stock Market Crash of 1929 . This is available on google classroom or print options are available.	Week 1: First Assignment will be to complete the reading and questions over the Stock Market Crash of 1929 . This is available on google classroom or print options are available.	Week 1: First Assignment will be to complete the reading and questions over the Stock Market Crash of 1929 . This is available on google classroom or print options are available.	Week 1: First sign in to google classroom with code dtszf5a. The assignment will be to complete the reading and questions over the Legislative Branch. This is available on google classroom or print options are available.	Week 1: complete Sit ins and Protests assignment. It is simple, all you have to do is read the paragraph and answer questions. This is available through print or google classroom.	CONF
Stone, P.	610	elective	Go to my Google Classroom to complete assignments online. For pencil/paper version see World War I Questions available in printed version.	Go to my Google Classroom to complete assignments online. For pencil/paper version see World War I Questions available in printed version.	Go to my Google Classroom to complete assignments online. For pencil/paper versions see Vietnam war protest available in printed version	Go to my Google Classroom to complete assignments online. For pencil/paper versions see Vietnam war protest available in printed version	Go to my Google Classroom to complete assignments online. For pencil/paper version see World War I Questions available in printed version.	CONF
ELECTIVES								

Chemistry: Rea	Rm #	PERIOD 1	PERIOD 2	PERIOD 3	PERIOD 4	PERIOD 5	PERIOD 6	PERIOD 7
Bahlmann, C.	707							
White, S.	706				CONF		(MS)Prin. of Ag	(MS) Prin. of Ag (4)
Brown, L.	702			CONF			Prin. of ED/PRAC. (7)	
Scarbrough, C	408			**FINANCIAL MATH ACTIVITY - WEEK 1** **ONLINE VERSION:** Sign into your Financial Math Classroom in Google Classroom. Complete the assignment and submit. **PAPER VERSION:** Complete your assignment, then take a picture of it and send by email, or turn it in to the dropbox on the bus or in front of the school building. **ASSIGNMENT:** Write a paragraph or more explaining how this "Coronavirus shutdown" has affected	(MS) Prin. of Tech (4)	CONF	**FINANCIAL MATH ACTIVITY - EEK 1** **ONLINE VERSION:** Sign into your Financial Math Classroom in Google Classroom. Complete the assignment t. **PAPER VERSION:** Complete your assignment, then take a picture of it and send by email, or turn it in to the dropbox on the bus or in front of the school building. **ASSIGNMENT:** Write a paragraph or more explaining how this "Coronavirus shutdown" has affected	
Wyrwich, T.	606			CONF				Athletics (S2)
Pantoja, T.	708					MS	CONF	MS
Morgan, J.	407						CONF	
Williams, S.	600	Activity 1: On-line Achieve 3000 Article: "Animated Favorites Get Real". Read the article and answer the Activity questions # 1 - 8. **Or** Activity 1: Paper copy: Dictionary Context Clues	Activity 1: On-line Google Classroom Activity Order of Operations Task Cards **OR** paper copy "Order of Operations Puzzle" #2	Activity 1: On-line Google Classroom Activity Order of Operations Task Cards **OR** paper copy "Order of Operations Puzzle" #2	Activity 1: On-line Achieve 3000 Article: "Animated Favorites Get Real". Read the article and answer the Activity questions # 1 - 8. **Or** Activity 1: Paper copy: Dictionary Context Clues	Activity 1: On-line Google Classroom Activity Order of Operations Task Cards OR paper copy "Order of Operations Puzzle" #2	CONF	Activity 1: On-line Achieve 3000 Article: "Animated Favorites Get Real". Read the article and answer the Activity questions # 1 - 8. **Or** Activity 1: Paper copy: Dictionary Context Clues

Chemistry: Rea	Rm #	PERIOD 1	PERIOD 2	PERIOD 3	PERIOD 4	PERIOD 5	PERIOD 6	PERIOD 7	
Janicek, T.	Stage/Rm 123		*Please check your school e-mail to join our Google Classroom.* ACTIVITY—Create an image of single words that includes: *Your name and where you are right now. *At least 3 feeling that you have about Coronavirus (COVID-19) *Words that show why you and your family are or are not social distancing. *At least 3 things that you are thankful for. ONLINE—Use one of the following online applications https://www.wordclouds.com, https://worditout.com/word-cloud/create, (or the app of your choice) to create your image. PAPER—Draw your own word cloud and submit a picture of it. If you will be utilizing the meal bus to return work, please make sure that you have your full name, Theatre						
Lozano, S.	712								
Sikes, L.	601								
APEX:		Continue your APEX assignment	Continue your APEX assignment	Continue your APEX assignment	Continue your APEX assignment	Continue your APEX assignment	Continue your APEX assignment	Continue your APEX assignment	

Baker
Eng 3
Eng 4

ACHIEVE3000
THE LEADER IN DIFFERENTIATED INSTRUCTION

Printed by: Brooke Baker
Printed on: March 22, 2020

Music for Pooches and Iguanas?

Article

STOCKHOLM, Sweden (Achieve3000, February 19, 2020). If you see a dog wearing earbuds and wagging its tail to the music, there's a plausible explanation. That lucky pooch might be listening to a selection from its very own playlist of favorite tunes. Indeed, Spotify, the Swedish music streaming service, has unleashed a playlist generator for its 113 million international subscribers that handpicks (pawpicks?) tracks from their digital music libraries for the special animals in their lives. And canines won't be the only pets bopping to the beat—the generator provides individualized playlists for cats, hamsters, birds, and iguanas as well.

Photo credit: damedeeso/iStock/Getty Images Plus

What's this pooch listening to? It's very own playlist of favorite tunes, courtesy of Spotify, the music streaming service.

Rock on, animal kingdom!

All Spotify users have to do is go to the company's website, select the appropriate species, and answer a few questions aimed at assessing the pet's personality (animality?): Is your dog energetic or lethargic? Is your cat apathetic or curious? Is your iguana...can anyone *actually* determine an iguana's personality? Users are then invited to upload a picture of the pet and add its name. And Spotify's algorithms take it from there, curating what it calls "the pawfect playlist" for Fido, Fluffy, Harry, Polly, and Iggy in a digital flash.

There's scientific evidence that suggests playing music for pets is a very good idea. According to animal psychologists, music can destress pets, have a positive effect on them emotionally, and make them feel less lonely when their human caretakers are out all day. And who doesn't want a happy, well-adjusted, musically literate pet?

Spotify users do, according to an online survey the company conducted with 5,000 of its customers. The majority of respondents agreed that music is good for their pets' well-being. Eighty percent said they believe their pets enjoy music, which explains why 71 percent play music for their pets, 69 percent sing to them, and 57 percent dance with them. Twenty percent of respondents went so far as to name their pets after a music artist or group, with music legends Bob Marley and Elvis Presley topping the list of artist-inspired names. So animal playlists are a win-win-win situation for everyone involved, four-legged, feathered, or otherwise.

But you can't just play "Old McDonald Had a Farm" and expect every pet to "ee-i-ee-i-o." Experts say that music is a very personal thing for an animal, just as it is for humans, and a cat's idea of a *purr*fect tune might make a dog howl at the moon. To help determine the most suitable selections for each pet, Spotify enlisted the help of a musicologist who's actually composed music (mewsic?) especially for felines. It seems that cats purr at high-pitched squeaks with lilting melodies, and dogs dislike very low-sounding, hard-pounding music like heavy metal because they find it threatening. Beyond these species-specific preferences, high-energy pets may prefer a pumping beat, whereas couch potatoes may go for something gentle, slow, and relaxing.

And in case a digital playlist is simply not enough for its pooch-loving subscribers, Spotify has also launched "My Dog's Favourite Podcast." The program runs in two five-hour blocks and is intended for dogs that are home alone. (Once again, Spotify's survey supports this new offering, as 53 percent of dog owners admit that they leave their dog alone for up to five hours a day.) The podcast features comforting human voices praising the dog listener, long stretches of relaxing music, and soothing sounds such as rainfall that mask startling outdoor noises, like honking horns and clanking garbage cans.

So what'll it be? A little hip-hop for a perky Siamese cat? Some classical music for a languid Labrador retriever? It's enough to give a pet something to sing about—iguanas included.

Video credit: CSound

Dictionary

algorithm *(noun)* a set of steps that are followed in order to solve a mathematical problem or to complete a computer process

languid *(adjective)* showing or having very little strength, energy, or activity

lethargic *(adjective)* feeling a lack of energy or a lack of interest in doing things

podcast *(noun)* a program (such as a music or news program) that is like a radio or television show but that is downloaded over the Internet

Activity

PART 1

Question 1

What is this Article mainly about?

Ⓐ In a recent online survey of 5,000 Spotify customers, 80 percent of the respondents said that they believe their pets enjoy music, which explains why 71 percent play music for them, 69 percent sing to them, and 57 percent dance with them.
Ⓑ "My Dog's Favourite Podcast," which runs in two five-hour blocks and is intended for dogs that are home alone, features comforting human voices praising the dog listener, long stretches of relaxing music, and soothing sounds, like rainfall.
Ⓒ The Swedish music streaming service Spotify has created a playlist generator for its subscribers that selects tracks from their digital music libraries to make individualized playlists for dogs, cats, hamsters, birds, and iguanas.
Ⓓ Animal psychologists say that music has the ability to relieve stress in animals, can have a positive effect on them emotionally, and can make them feel less lonely when their human caretakers are out of the house all day.

Question 2

What is one inference the reader can make from the Article?

Ⓐ Cats like very low-sounding, hard-pounding music like heavy metal though dogs do not.

Ⓑ Dogs like to listen to long stretches of relaxing music and soothing sounds, such as rainfall.

Ⓒ Low-energy dogs and cats that like to relax prefer listening to music with a pumping beat.

Ⓓ Spotify is certain that dogs will enjoy the new handpicked playlists more than cats.

Question 3

The Article states:

> **There's scientific evidence that suggests playing music for pets is a very good idea. According to animal psychologists, music can destress pets, have a positive effect on them emotionally, and make them feel less lonely when their human caretakers are out all day. And who doesn't want a happy, well-adjusted, musically literate pet?**

The author's purpose for writing this passage was to _____.

Ⓐ provide some support for the idea that listening to music can have beneficial effects for animals

Ⓑ suggest that it is not a good idea to leave a pet home all day while its owner is out

Ⓒ explain that some pets can be happier and better adjusted if they can enjoy time to themselves

Ⓓ point out why some animals tend to get stressed when listening to certain types of music

Question 4

Which is the closest **synonym** for the word *languid*?

Ⓐ malleable

Ⓑ lethal

Ⓒ listless

Ⓓ manic

Question 5

Which passage from the Article best supports the idea that not all types of music are appropriate to play for some pets?

Ⓐ To help determine the most suitable selections for each pet, Spotify enlisted the help of a musicologist who's actually composed music (mewsic?) especially for felines. It seems that cats purr at high-pitched squeaks with lilting melodies, and dogs dislike very low-sounding, hard-pounding music like heavy metal because they find it threatening.

Ⓑ There's scientific evidence that suggests playing music for pets is a very good idea. According to animal psychologists, music can destress pets, have a positive effect on them emotionally, and make them feel less lonely when their human caretakers are out all day. And who doesn't want a happy, well-adjusted, musically literate pet?

Ⓒ Spotify users do, according to an online survey the company conducted with 5,000 of its customers. The majority of respondents agreed that music is good for their pets' well-being. Eighty percent said they believe their pets enjoy music, which explains why 71 percent play music for their pets, 69 percent sing to them, and 57 percent dance with them.

Ⓓ (Once again, Spotify's survey supports this new offering, as 53 percent of dog owners admit that they leave their dog alone for up to five hours a day.) The podcast features comforting human voices praising the dog listener, long stretches of relaxing music, and soothing sounds such as rainfall that mask startling outdoor noises, like honking horns and clanking garbage cans.

Question 6

Read this passage from the Article:

> **All Spotify users have to do is go to the company's website, select the appropriate species, and answer a few questions aimed at assessing the pet's personality (animality?): Is your dog energetic or lethargic? Is your cat *apathetic* or curious?**

In this passage, the word *apathetic* means _____.

Ⓐ not having or showing much emotion or interest

Ⓑ characterized by displays of kindness towards others

Ⓒ seen for the first time in a public setting

Ⓓ not commonly known by very many people

Question 7

Which of these is a statement of opinion?

(A) Dogs seem to dislike very low-sounding, hard-pounding music like heavy metal because they find it threatening.

(B) Out of 5,000 Spotify subscribers surveyed, 80 percent said that they believe their pets enjoy listening to music.

(C) It's a waste of time to play music for pets because animals obviously can't understand the songs' lyrics.

(D) In order to use Spotify's new pet playlist, subscribers must answer questions about a pet's personality.

Question 8

Which information is **not** in the Article?

(A) Why cats seem to like songs with high-pitched squeaks and lilting melodies

(B) How long a majority of pet owners say that they leave their pets alone

(C) What subscribers must do in order to create a Spotify playlist for their pets

(D) How music could possibly affect the well-being of dogs, cats, and other pets

DeLeon
English 2
English 4

ACHIEVE3000
THE LEADER IN DIFFERENTIATED INSTRUCTION

Printed by: Treca Deleon
Printed on: March 23, 2020

Animated Favorites Get Real

Article

LOS ANGELES, California (Achieve3000, August 20, 2019). Guess what's about to get real, movie fans? Your old animated favorites! That is, if they haven't already.

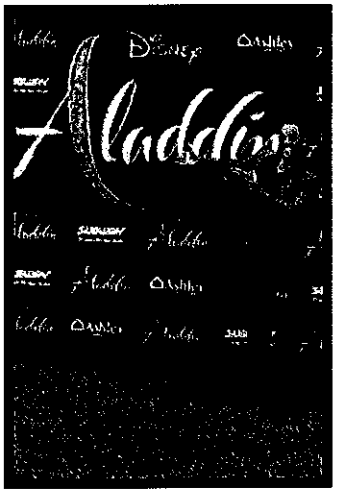


Photo credit: Tinseltown/Shutterstock

These days, many families flock to theaters to watch live-action remakes of animated movie classics such as "Aladdin," starring Will Smith.

Like the Fairy Godmother waving her magic wand over a pumpkin, movie studios have been bringing new life to animated classics. They've transformed them—bibbidi-bobbidi-*booyah*!—into live-action blockbusters. *Beauty and the Beast*, *The Jungle Book*, *Alice in Wonderland*, and *Dumbo* are just some of the live-action remakes released since 2010. Actors have also stepped into Cinderella's glass slippers, Dora the Explorer's sneakers, and Aladdin's curly-toed kicks. And according to Hollywood buzz, we can expect the reboots to keep on comin'.

So what's the big attraction to going live-action? For studios, it's mostly about the math. Ticket prices have gone up, and the Internet and TV have a lot to offer, so it takes something special to get people off the couch and into the megaplex. But with live-action remakes, studios have stumbled upon a winning formula. It starts with stories audiences love and characters who seem like old friends, throw in a few A-listers, add some of modern technology's jaw-dropping special effects, and ka-*ching*, it all equals box office gold. The Disney live-action remakes of *Aladdin*, *Beauty and the Beast*, and *Alice in Wonderland* each brought in more than a billion bucks worldwide. Meanwhile, Disney's other live-action movies like *A Wrinkle in Time* and *Tomorrowland* might have scored points for originality but were lucky if they broke even, let alone make some cash.

It's partly the power of good ol' nostalgia that makes the formula so lucrative. Plenty of adults who spent their childhoods waltzing around the living room in Belle ball gowns bought tix to 2017's *Beauty and the Beast*. And millennials who grew up watching Pokémon cartoons were charged up to catch (get it? catch?) *Detective Pikachu*. Of course, the parents among them likely took their kiddos to the theater. (Hello, next-gen fans!)

Treating their golden oldies to a modern makeover also gives studios a chance to make them more inclusive. Diversity plays a starring role in Disney's latest remakes, so more kids are seeing characters on the big screen who look like them. In *Aladdin*, Egyptian-Canadian actor Mena Massoud plays the lovable hero and African American actor and rapper Will Smith is the wisecracking Genie. And, as just about everybody and their pet crustacean knows, African American singer and actress Halle Bailey landed the part of Ariel in *The Little Mermaid*.

Some moviemakers also see these do-overs as an opportunity to crank up the girl power. The producer of *Aladdin*, for example, said one reason the reprise was such a big hit was because Jasmine isn't just along for the magic carpet ride. She's a strong character who speaks up and takes a stand. Likewise, the new Mulan doesn't have a fast-talking dragon as her sidekick, but she's a master of kicks, and her sword fighting skills are just as stellar. Like its predecessor, the live-action *Mulan* tells the story of a young woman who takes her father's place in the Chinese Imperial Army, but this version aims to be more culturally respectful and accurate.

Any list of live-action remakes has gotta include the 2019 blockbuster *The Lion King*, right? Well...it's complicated! The footage was created by artists with computers, not by cameras filming actors or animals (we know, not exactly spoiler alert material). So technically, it isn't live-action, but it all looks so real that some people believe the word *animation* feels just plain wrong. What do *you* think?

Whatever your take on *The Lion King* debate, live-action remakes are part of the "Circle of Life" in movies today. And for lots of moviegoers, they offer "A Whole New World" that looks fresh yet feels familiar and fun.

Dictionary

inclusive *(adjective)* open to everyone: not limited to certain people

lucrative *(adjective)* producing money or wealth

predecessor *(noun)* something that comes before something else

Activity

PART 1

Question 1

According to the Article, what is one reason that the new live-action blockbusters are so popular with fans?

Ⓐ Adults who grew up watching animated versions of the movies enjoy the sense of nostalgia that they get from watching the new crop of live-action movies.

Ⓑ Live-action hits such as *A Wrinkle in Time* and *Tomorrowland* were popular because they used the very latest jaw-dropping special effects.

Ⓒ Studios have added entirely new characters to classic animated features that are a hit with today's viewing audience.

Ⓓ The use of expertly trained animals, as seen in *The Lion King*, thrilled audiences who flocked to theaters to watch the hit live-action remake.

Question 2

What is this Article mainly about?

Ⓐ Not all live-action films are popular with audiences as was shown in Disney's recent films *A Wrinkle in Time* and *Tomorrowland*, both of which were lucky to break even at the box office.

Ⓑ Studios have stumbled onto a winning cinematic formula by making live-action remakes of classic animated films but with greater diversity and stronger female characters than ever before.

Ⓒ Live-action films such as *Beauty and the Beast* and *Detective Pikachu* were both popular because they made adult viewers remember watching them in their animated forms as children.

Ⓓ While the blockbuster remake of the film *The Lion King* cannot technically be considered live action because the footage was created by artists with computers, its images do appear amazingly lifelike.

Question 3

Which of these statements is **contrary** to the ideas presented in this Article?

Ⓐ Parents who grew up enjoying the animated versions of films such as *Beauty and the Beast* and *Aladdin* introduce a new generation to the beloved characters by bringing their own children to the live-action remakes.

Ⓑ One of the reasons for the popularity of the recent live-action films is that these movies show a greater degree of diversity than earlier animated films and can therefore appeal to a wider audience than ever before.

Ⓒ Live-action movies have proven universally popular among theater-going audiences around the world, as films such as *A Wrinkle in Time* and *Tomorrowland* have clearly demonstrated.

Ⓓ The character of Jasmine, who speaks her mind and makes a stand in the hit Disney film *Aladdin*, is representative of the stronger female characters seen in the latest crop of live-action remakes of classic animated films.

Question 4

Vietnam profile - Timeline

22 April 2018

* Do/ten (10) write out — Complete sentences Past tense

A chronology of key events:

1858 - French colonial rule begins.

1930 - Ho Chi Minh founds the Indochinese Communist Party (ICP).

1941 - ICP organises a guerrilla force, Viet Minh, in response to invasion by Japan during World War II.

1945 - The Viet Minh seizes power. Ho Chi Minh announces Vietnam's independence.

1946 - French forces attack Viet Minh in Haiphong in November, sparking the war of resistance against the colonial power.

1950 - Democratic Republic of Vietnam is recognised by China and USSR.

1954 - Viet Minh forces attack an isolated French military outpost in the town of Dien Bien Phu. The

Founding father

Images of Ho Chi Minh abound

- Born 1890
- Founded Indochina Communist Party 1930

Stone
6th Period World History
Honors - Assignment #1
Tues 3/24
Due 3/30

attempt to take the outpost lasts two months, during which time the French government agrees to peace talks in Geneva.

- President of North Vietnam 1945-69

BBC History: Ho Chi Minh

Vietnam is split into North and South at Geneva conference.

1956 - South Vietnamese President Ngo Dinh Diem begins campaign against political dissidents.

1957 - Beginning of Communist insurgency in the South.

Vietnam war

1959 - Weapons and men from North Vietnam begin infiltrating the South.

1960 - American aid to Diem increased.

1962 - Number of US military advisors in South Vietnam rises to 12,000.

1963 - Viet Cong, the communist guerrillas operating in South Vietnam, defeat units of the ARVN, the South Vietnamese Army.

- US, South Vietnam failed to stop communist-led unification
- War, known as "American War" in Vietnam, claimed millions of lives 1955-1975
- 58,000 Americans died

President Diem is overthrown and then killed in a US-backed military coup.

US enters the war

1964 - Gulf of Tonkin incident: the US says North Vietnamese patrol boats fire on two US Navy destroyers. US Congress approves Gulf of Tonkin Resolution, authorising military action in region.

1965 - 200,000 American combat troops arrive in South Vietnam.

1966 - US troop numbers in Vietnam rise to 400,000, then to 500,000 the following year.

1968 - Tet Offensive - a combined assault by Viet Cong and the North Vietnamese army on US positions - begins. More than 500 civilians die in the US massacre at My Lai. Thousands are killed by communist forces during their occupation of the city of Hue.

1969 - Ho Chi Minh dies. President Nixon begins to reduce US ground troops in Vietnam as domestic public opposition to the war grows.

1970 - Nixon's national security advisor, Henry Kissinger, and Le Duc Tho, for the Hanoi government, start talks in Paris.

1973 - Ceasefire agreement in Paris, US troop pull-out completed by March.

1975 - North Vietnamese troops invade South Vietnam and take control of the whole country after South Vietnamese President Duong Van Minh surrenders.

Refugee crisis

Thousands of Vietnamese "boat people" fled abroad in overcrowded vessels

Reconstruction

1976 - Socialist Republic of Vietnam proclaimed. Saigon is re-named Ho Chi Minh City. Hundreds of thousands flee abroad, including many "boat people".

1979 - Vietnam invades Cambodia and ousts the Khmer Rouge regime of Pol Pot. In response, Chinese troops cross Vietnam's northern border. They are pushed back by Vietnamese forces. The number of "boat people" trying to leave Vietnam causes international concern.

1986 - Nguyen Van Linh becomes party leader. He introduces a more liberal economic policy.

1989 - Vietnamese troops withdraw from Cambodia.

1992 - New constitution adopted allowing certain economic freedoms. The Communist Party remains the leading force in Vietnamese society.

Reconciliation

1994 - US lifts its 30-year trade embargo.

1995 - Vietnam and US restore full diplomatic relations. Vietnam becomes full member of Association of Southeast Asian Nations (Asean).

1997 - Le Kha Phieu becomes party leader. Tran Duc Luong chosen as president, Phan Van Khai becomes prime minister.

1998 - A senior party member, Pham The Duyet, faces charges of corruption. Economic growth slumps in the wake of the Asian financial crisis.

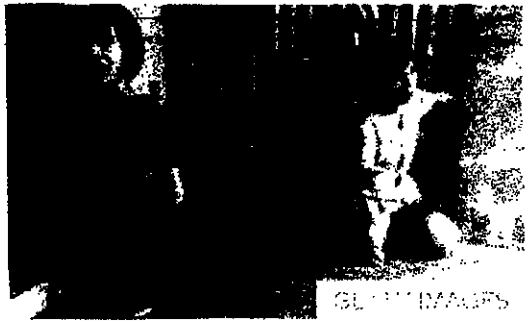
1999 - A former high-ranking party member, Tran Do, is expelled after calling for more democracy and freedom of expression.

2000 - US President Bill Clinton pays a three-day official visit. The US pledges more help to clear landmines left over from the Vietnam war. The Vietnamese government estimates nearly 40,000 people have been killed by unexploded munitions.

2001 - The Communist Party chooses Nong Duc Manh as its new leader. US, Vietnam implement a trade agreement which normalises the trade status between them.

2002 - Russia hands back the Cam Ranh Bay naval base, once the largest Soviet base outside the Warsaw Pact. President Tran Duc Luong reappointed for second term by National Assembly, which also reappoints Prime Minister Phan Van Khai for second five-year term.

Agent Orange



- Herbicide used by US forces to clear vegetation, depriving enemy of cover
- Name derives from orange markings on the drums containing the chemical
- Children born in areas sprayed have disproportionate rate of mental and physical problems

PBS video: The leaves keep falling

US to ease deadly Vietnam legacy

2004 - First US commercial flight since the end of the Vietnam War touches down in Ho Chi Minh City.

2005 - Prime Minister Phan Van Khai makes the first visit to the US by a Vietnamese leader since the end

Hanoi: Ancient capital

HISTORY

World War I

World History - Stone

World War I began in 1914 after the assassination of Archduke Franz Ferdinand and lasted until 1918. During the conflict, Germany, Austria-Hungary, Bulgaria and the Ottoman Empire (the Central Powers) fought against Great Britain, France, Russia, Italy, Romania, Japan and the United States (the Allied Powers). Thanks to new military technologies and the horrors of trench warfare, World War I saw unprecedented levels of carnage and destruction. By the time the war was over and the Allied Powers claimed victory, more than 16 million people —soldiers and civilians alike—were dead.

Archduke Franz Ferdinand

Tensions had been brewing throughout Europe—especially in the troubled Balkan region of southeast Europe—for years before World War I actually broke out.

A number of alliances involving European powers, the Ottoman Empire, Russia and other parties had existed for years, but political instability in the Balkans (particularly Bosnia, Serbia and Herzegovina) threatened to destroy these agreements.

World History 3/24 Assignment #1 due 3/30

Go to History.com world war I (Pg 1)

1. List the Central Powers
2. List the Allied Powers
3. Why was there "unprecedented levels of carnage?" (Pg 2)
1. Where was the Archduke assassinated?
2. Why?
3. What is "blank check" (explain)?
4. Where were the two "fronts"?

The spark that ignited World War I was struck in Sarajevo, Bosnia, where Archduke Franz Ferdinand—heir to the Austro-Hungarian Empire—was shot to death along with his wife, Sophie, by the Serbian nationalist Gavrilo Princip on June 28, 1914. Princip and other nationalists were struggling to end Austro-Hungarian rule over Bosnia and Herzegovina.

The assassination of Franz Ferdinand set off a rapidly escalating chain of events: Austria-Hungary, like many countries around the world, blamed the Serbian government for the attack and hoped to use the incident as justification for settling the question of Serbian nationalism once and for all.

Kaiser Wilhelm II

Because mighty Russia supported Serbia, Austria-Hungary waited to declare war until its leaders received assurance from German leader Kaiser Wilhelm II that Germany would support their cause. Austro-Hungarian leaders feared that a Russian intervention would involve Russia's ally, France, and possibly Great Britain as well.

On July 5, Kaiser Wilhelm secretly pledged his support, giving Austria-Hungary a so-called carte blanche, or "blank check" assurance of Germany's backing in the case of war. The Dual Monarchy of Austria-Hungary then sent an ultimatum to Serbia, with such harsh terms as to make it almost impossible to accept.

World War I Begins

Convinced that Austria-Hungary was readying for war, the Serbian government ordered the Serbian army to mobilize and appealed to Russia for assistance. On July 28, Austria-Hungary declared war on Serbia, and the tenuous peace between Europe's great powers quickly collapsed.

Within a week, Russia, Belgium, France, Great Britain and Serbia had lined up against Austria-Hungary and Germany, and World War I had begun.

The Western Front

According to an aggressive military strategy known as the Schlieffen Plan (named for its mastermind, German Field Marshal Alfred von Schlieffen), Germany began fighting World War I on two fronts, invading France through neutral Belgium in the west and confronting Russia in the east.

HISTORY

UPDATED: JUN 6, 2019 · ORIGINAL: FEB 22, 2010

Stone
U.S. History Assignment #1
Tues 3/24 due 3/30

Vietnam War Protests

HISTORY.COM EDITORS

CONTENTS

The movement against U.S. involvement in the Vietnam War began small–among peace activists and leftist intellectuals on college campuses–but gained national prominence in 1965, after the United States began bombing North Vietnam in earnest. Anti-war marches and other protests, such as the ones organized by Students for a Democratic Society (SDS), attracted a widening base of support over the next three years, peaking in early 1968 after the successful Tet Offensive by North Vietnamese troops proved that war's end was nowhere in sight.

Vietnam War Protests: The Beginnings of a Movement

In August 1964, North Vietnamese torpedo boats attacked two U.S. destroyers in the Gulf of Tonkin, and President Lyndon B. Johnson ordered the retaliatory bombing of military targets in North Vietnam. And by the time U.S. planes began regular bombings of North Vietnam in February 1965, some critics had begun to question the government's assertion that it was fighting a democratic war to liberate the South Vietnamese people from Communist aggression.

Did you know? Boxer Muhammad Ali was one prominent American who resisted being drafted into service during the Vietnam War. Ali, then heavyweight champion of the world, declared himself a "conscientious objector," earning a prison sentence (later overturned by the U.S. Supreme Court) and a three-year ban from boxing.

The anti-war movement began mostly on college campuses, as members of the leftist organization Students for a Democratic Society (SDS) began organizing "teach-ins" to express their opposition to the way in which it was being conducted. Though the vast majority of the American population still supported the administration policy in Vietnam, a small but outspoken liberal minority was making its voice heard by the end of 1965. This minority included many students as well as prominent artists and intellectuals and members of the hippie movement, a growing number of young people who rejected authority and embraced the drug culture.

U.S. History Assignment #1
Tues 3/24 due 3/30

Go to History.com Vietnam War Protest

pg 1 (1.) What happened to cause protests?
(2.) What happened in 1968?

pg 2 (1.) Where did the anti-war movement start?
(2) By the end of 1965, who joined the liberal minority?
(3) What added fuel to the anti-war movement?

Consequences of Vietnam War Protests

Houdmann - World Geography

Name _____ Democracy Houdman

Democracy

A democracy is a system of government in which the people have a direct say in what is going on. A democracy is different from a monarchy or a dictatorship. In these forms of government all the power is concentrated in just one person (the monarch or the dictator).

There are two kinds of democracies. In a direct democracy, each individual citizen votes on every important decision. This kind of democracy originated in Athens, Greece, where all the citizens would gather in a central place to cast their votes on major issues. A direct democracy works best with a limited number of people, since as the population grows, it becomes increasingly more difficult and then impossible for every citizen to gather in one place. In a representative democracy, citizens elect people to represent them in the government, and then these elected representatives vote for or against the actual issues. The United States has a representative democracy. Our elected representatives include the president, the members of congress, and the members of the senate.

Democratic governments tend to have certain things in common. As described above, the citizens have power over what the country does, either by voting directly for or against an issue, or through elected representatives. In a democratic society, elections are conducted fairly, and citizens are free to vote however they want. Results are on the basis of majority rule, however, each individual, whether in the majority or the minority, has the same individual rights and freedoms. Democracies also impose limitations on what elected officials can do and how long each can serve. These limitations prevent any one elected official from becoming too powerful. Finally, a democracy is characterized by the participation of its citizens. This participation includes understanding the issues and exercising their right to vote.

Name _____ Democracy Houdonan

QUESTIONS: Democracy

Circle the correct answer.

1. In every form of democratic government:
   A. individual citizens vote on every important decision
   B. citizens elect people to represent them in the government
   C. people have a direct say in what is going on
   D. elected officials have unlimited power

2. Which form of democracy does the United States have?
   A. ancient Greek democracy
   B. direct democracy
   C. the United States does not have a democracy
   D. representative democracy

3. A direct democracy works best with:
   A. political parties
   B. a limited number of people
   C. limitations on what elected officials can do
   D. the participation of its citizens

4. Which of the following is NOT something that most democratic governments have in common?
   A. the citizens have power over what the country does
   B. all citizens gather in a central place to cast their votes
   C. elections are conducted fairly
   D. citizens are free to vote however they want

5. Why do democracies impose on elected officials?
   A. to preserve the majority rule
   B. to encourage citizens to run for office
   C. to help citizens to understand the issues
   D. prevent any one elected official from becoming too powerful

Houdman · US History

Name Houdman Date

Sit-ins and Protests

Reasonably priced domestic items have long been provided at department stores such as Kress and Woolworth. These stores also provided comfortable and affordable lunch counters. In the South, however, African Americans were banned from these lunch counters. Civil rights activists began to conduct sit-ins at these counters in the 1960's. As African American individuals sat and were ultimately removed or arrested, another group would be ready to peacefully sit down. February 1, 1960 marks the day the first sit in occurred in Woolworth's Greensboro, North Carolina store.

1. Reasonably priced items means that most people could afford the items. True False

2. Name a department store around today. _____

3. Kress and Woolworth are both _____ stores.

4. What is another term for banned?

A. prohibited B. permitted C. helpful D. none of these

5. Describe a sit-in.

_____

_____

_____

6. What might have happened to an African American who sat at the lunch counter?

A. arrested B. removed C. greeted D. A & B

7. The first sit-in occurred on February 1, 1960. True False

8. Where was the first sit-in?

_____

Winsmann - US History

Name _____ Date _____

Sit-ins and Protests

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_____

Winsmann - Government

Name _____ Legislative Branch of Government

The Legislative Branch

The Legislative Branch is the branch of government that makes and votes on laws. The powers of this branch of the government also include declaring war, confirming Presidential appointments, and investigating abuses of power across all the branches of the government. The Legislative Branch is more commonly known as Congress.

Congress is made up of two bodies: the House of Representatives and the Senate, each composed of representatives from every state. There are currently 435 Representatives in the House. The number of representatives per state in the House varies according to each state's population. The higher the population of the state, the more representatives that state has in the House. Representatives serve two-year terms. In order to represent a state in the House, you must be at least 25 years old, have been a U.S. citizen for at least seven years, and you must live in the state that you represent. Every state has two Senators. Senators serve six-year terms. In order to represent your state as a Senator, you must be at least 30 years old, have been a U.S. citizen for at least nine years, and you must live in the state you represent. Representatives and Senators are elected by the public.

The steps involved in order for Congress to make a law are as follows. First, someone must write a bill. The bill a be written by anyone in the country, but only a member of Congress can present the bill to Congress. Next, the bill is turned over to a committee that has some subject matter expertise regarding whatever the bill is about. The committee can accept, change, or reject the bill. One bill can also move through multiple committees. When the committee(s) is in agreement about the bill, the bill is presented to Congress. The House and the Senate both debate the bill. The bill must receive a majority vote in both the House and the Senate in order to make it to the final step, when the President's signature makes the bill a law.

Name _____ Legislative Branch of Government

QUESTIONS: The Legislative Branch

Circle the correct answer.

1. The job of the legislative branch of government is to:
   A. make and vote on laws
   B. declare war
   C. confirm Presidential appointments
   D. all of the above

2. In which chamber of Congress is representation based on population?
   A. House of Representatives
   B. Senate
   C. both chambers of Congress
   D. neither chamber of Congress

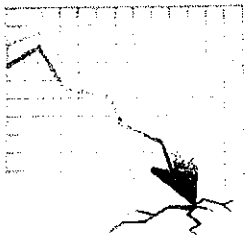
3. In which chamber of Congress does every state have equal representation?
   A. House of Representatives
   B. Senate
   C. both chambers of Congress
   D. neither chamber of Congress

4. Before an idea for a law is presented to Congress, it is articulated in a written document called:
   A. a committee
   B. a debate
   C. a bill
   D. a term

5. The President's signature creates a new law:
   A. after it has been through committee
   B. after it has been debated and approved by the House
   C. after it has been debated and approved by the Senate
   D. all of the above

Winsmann - Economics

Name _____ The Great Depression



The Stock Market Crash of 1929

The stock market crash that took place in 1929 was one of the worst crashes in the market's history.

One reason for the crash is what is called over speculation, which means that stocks had become worth much more than the actual values of the companies they represented. The new automobile and radio industries had spurred a rampant optimism that the economy would continue to grow. In fact, the stock market had grown 600% between 1921 and 1929, with the Dow Jones Industrial Average rising from 63 points to 381 points. People were also purchasing stocks on credit, rather than putting actual money into the stock market, so the supposed rise in the value of the stock market was actually just an illusion. As the economy slowed, the value of the stock market fell. Not wanting to lose their money, people panicked and began selling their stock. On October 28th and 29th, known as Black Monday and Black Tuesday, stock values fell a total of 23%, which remains the worst 2-day drop in history.

The market was unable to recover, and over the next few months the stock market fell to 40% of what it had been, and many people lost everything that they had. The market finally reached its all-time low in the summer of 1932 when its value was only about 10% of what it had been at its peak. By that point, the country was entrenched in a deep economic depression.

The stock market crash had cascading effects. Over 10,000 banks that had invested in the stock market, or who had lent money to investors, went out of business. Many other businesses went bankrupt, and unemployment rose to 25%. The stock market would not recover its pre-1929 value until the middle of the 1950s.

Name _____ The Great Depression

QUESTIONS: The Stock Market Crash of 1929

Circle the correct answer.

1. What is overs peculation?
   A. stocks are worth much more than the companies they represented
   B. purchasing stocks on credit
   C. stocks are worth much less than the companies they represented
   D. rapid increase in the value of stocks

2. Which industry had spurred optimism in economic prospects?
   A. automobile
   B. radio
   C. A and B
   D. none of the above

3. The Stock Market Crash of 1929 is also known as:
   A. Black Monday
   B. Black Tuesday
   C. Black Monday and Tuesday
   D. the darkest days in history

4. In the summer of 1932, the Stock Market reached its all-time low of _____ of what it had been at its peak.
   A. 40%
   B. 600%
   C. 25%
   D. 10%

5. Which was NOT a cascading effect of the stock market crash?
   A. many charities sprang up around the country
   B. banks went out of business
   C. businesses went bankrupt
   D. unemployment rose to 25%

Zuniga - Biology

6.3 Mendel and Heredity

VOCABULARY 1. trait 2. genetics 3. purebred 4. cross law of segregation

Key Concept Mendel's research showed that traits are inherited as discrete units.

Main Ideas
Mendel laid the groundwork for genetics. Mendel's data revealed patterns of inheritance.
When a magician makes a coin disappear, you know that the coin has not really vanished. You simply cannot see where it is. Maybe it is up a sleeve or in a pocket. When organisms reproduce, some traits seem to disappear, too. For centuries, no one could explain why. Then a careful, observant scientist showed that behind this phenomenon were inherited units, or genes. Gregor Mendel is called "the father of genetics" for discovering hereditary units. The significance of his work went unrecognized for almost 40 years.

Main Idea Mendel laid the groundwork for genetics.
When we think of how offspring resemble or differ from their parents, we typically refer to specific traits. **traits** are distinguishing characteristics that are inherited, such as eye color, leaf shape, and tail length. Scientists recognized that traits are hereditary, or passed from one generation to the next, long before they understood how traits are passed on. **Genetics** is the study of biological inheritance patterns and variation in organisms.

The groundwork for much of our understanding of genetics was established in the middle of the 1800s by an Austrian monk named Gregor Mendel, shown in. Scientists of the time commonly thought that parents' traits were blended in offspring, like mixing red and white paint to get pink paint. But this idea failed to explain how certain traits remained without being "diluted." Mendel, a shrewd mathematician, bred thousands of plants, carefully counting and recording his results. From his data, Mendel correctly predicted the results of meiosis long before chromosomes were discovered. He recognized that traits are inherited as discrete units from the parental generation, like different colored marbles mixed together that can still be picked out separately. By recognizing that organisms inherit two copies of each discrete unit, what we now call genes, Mendel described how traits were passed between generations.

Main Idea Mendel's data revealed patterns of inheritance.
Mendel studied plant variation in a monastery garden. He made three key choices about his experiments that played an important role in the develop- ment of his laws of inheritance: control over breeding, use of purebred plants, and observation of "either-or" traits that appeared in only two alternate forms.

Experimental Design Mendel chose pea plants for his experiments because they reproduce quickly, and he could easily control how they mate. The sex organs of a plant are in its flowers, and pea flowers contain both male and female reproductive organs. In nature, the pea flower typically self-pollinates; that is, the plant mates with itself. If a line of plants has self-pollinated for long enough, that line becomes genetically uniform, or **purebred.** As a result, the offspring of purebred parents inherit all of the parent organisms' characteristics. Mendel was able to mate plants with specific traits by interrupting the self-pollination process. He removed the male parts of flowers and fertilized the female parts with pollen that contained sperm cells from a different plant. Because he started with purebred plants, Mendel knew that any variations in offspring resulted from his experiments.

Mendel chose seven traits to follow: pea shape, pea color, pod shape, pod color, plant height, flower color, and flower position. All of these traits are simple "either-or" characteristics; they do not show intermediate features. The plant is tall or short. Its peas are wrinkled or round. What Mendel did not know

was that most of the traits he had selected were controlled by genes on separate chromosomes. The selection of these particular traits played a crucial role in enabling Mendel to identify the patterns he observed.

Results In genetics, the mating of two organisms is called a **cross.** In one of his examples, he crossed a purebred white-flowered pea plant with a purebred purple-flowered pea plant. These plants are the parental, or P, generation. The resulting offspring, called the first filial—or F_1—generation, all had purple flowers. The trait for white flowers seemed to disappear. When Mendel allowed the F_1 generation to self-fertilize, the resulting F_2 generation produced both plants with purple flowers and plants with white flowers. Therefore, the trait for white flowers had not disappeared; it had been hidden, or masked.

Mendel did not cross only two plants, however; he crossed many plants. As a result, he was able to observe patterns. He noticed that each cross yielded similar ratios in the F_2 generation: about three-fourths of the plants had purple flowers, and about one-fourth had white flowers. A ratio is a compari- son that tells how two or more things relate. This ratio can be expressed as 3:1 (read "three to one") of purple:white flowers. Mendel's data show this approximately 3:1 ratio for each of his crosses.

Conclusions From these observations, Mendel drew three important conclusions. He demonstrated that traits are inherited as discrete units, which provided an explanation for individual traits that persisted without being blended or diluted over successive generations. Mendel's two other key conclusions are collectively called the **law of segregation,** or Mendel's first law.

- Organisms inherit two copies of each gene, one from each parent.
- Organisms donate only one copy of each gene in their gametes. Thus, the two copies of each gene segregate, or separate, during gamete formation.

Activity (on a separate piece of paper):

Please write the definitions of the vocabulary words from this section (located at beginning of the section – 4 words)

Please fill in the following blanks:

1. Genetics is the study of biological _____ patterns and variation in organisms.

2. A man named Gregor _____ did early work that is the basis for much of our current understanding of genetics.

3. Mendel's views on inheritance differed from the views of many scientists of his time. Mendel recognized that _____ are inherited as discrete units.

Please circle the best answer that completes the sentence/statement

4. Mendel used pea plants, because they reproduce *quickly / slowly*, and he could control how they *grow / mate.*

5. Mendel bred flowers resulting in F1 generation with *dominant / recessive* phenotype. He then allowed the F1 generation offspring to self-pollinate. This resulted in an F2 generation with *dominant phenotypes only / both dominant and recessive phenotypes.*

6. Mendel concluded that traits are inherited as "discrete units." Today, we call these discrete units *gametes / genes.*

Zuniga - A+P

Eye Structure and Seeing Light

The eye is like a camera: Light enters, is focused on a surface, and a picture is made.

Light enters your eye through a clear portion of the sclera (the tough, white, outer covering of the eye), called the cornea.

The cornea is curved, so it slightly bends the light as it goes through.

Light then passes through the aqueous humor (a clear fluid for eye nourishment, in the anterior chamber) and through the pupil.

The pupil is simply a hole in the iris.

The iris is a muscle that controls the size of the pupil. The iris is the colored part of the eye.

In bright light, the iris expands and the pupil gets smaller.

In low light, the iris contracts and the pupil gets bigger.

Directly behind the iris is the lens. This structure changes shape to focus the light so that we can see clearly. Its shape is convex, meaning it curves outward on both sides.

The ciliary muscles above and below the lens control the shape of the lens.

Behind the lens is a clear gel called the vitreous humor. After moving through the vitreous humor, the light strikes the retina. The retina is the lining on the inside of the back of the eye that contains two types of light-sensitive cells: rods and cones.
Rods sense black and white and work in low light.

Cones sense color and must have more light than rods to work. Three kinds of cones:

L-cones sense long wavelengths in the red range

M-cones sense mid-range wavelengths in green range

S-cones sense short wavelengths in the blue range

The rods and cones send messages to the brain through the optic nerve. The brain makes sense of all the information it is receives.
In your brain, the sight center is in the back, between your ears. This location explains why a blow to the back of your head might cause blindness, even though your eyes are fine.

Two Causes of Color Blindness

1. Genetic (you are born with these types) Sometimes a cone is missing, or the cone does not recognize the correct wavelengths of light. L- and M-cone problems result in red-green color blindness, the most common.
2. Non-Genetic (these types occur after birth) Accidents that damage the vision center of the brain, cataracts, glaucoma, Parkinson's Disease can cause S-cone problems, diabetic retinopathy can affect color vision.

Questions:

1. **In your own words, describe how we see light and how our eyes respond to light entering the eyes.**

2. **Describe the three types of cones and the colors and wavelengths they are able to distinguish.**

3. **Describe the difference between the 2 types of color blindness.**

Rodley - IPC

Name_____ Date_____
Period_____
IPC – Achieve 3000

A Promise To Help the Planet

PARIS, France. In December 2015, leaders from nearly 200 nations met in Paris, France, to discuss a pressing issue: climate change. The United Nations (UN) climate talks yielded the Paris Agreement, a global pact that obliges nations to cut and then eliminate greenhouse gas pollution. To this end, government and business leaders from around the world also made pledges to take action for the future of the planet

The Paris Agreement

The biggest news of the climate talks arrived toward the event's conclusion. On December 12, the nations adopted the Paris Agreement. The agreement sets goals for slowing climate change and requires participating nations to take action to meet those goals.

The objective of the pact is to limit greenhouse gases, which are emitted during the burning of fossil fuels, like coal, oil, and natural gas. Scientists say that greenhouse gases trap heat, warming the planet's surface and contributing to climate change

In the pact, the countries pledged to limit the amount of greenhouse gases emitted by human activity to the levels that trees, soil, and oceans can absorb naturally. The deal sets a deadline for this action at sometime between 2050 and 2100. It also specifies that by the year 2100, global temperatures cannot rise more than 2 degrees Celsius (3.6 degrees Fahrenheit) higher than they were before the Industrial Age began in the 19th century. In fact, the deal states that the increase should be "well below" this. Earth has already warmed by almost 1 degree Celsius (1.8 degrees Fahrenheit) since preindustrial times.

Reaching the Goal

Achieving the goal of limiting global warming means that people have to stop emitting greenhouse gases altogether. How can this be done? Even before the UN climate talks began, more than 180 nations submitted climate action plans. Then, in Paris, many attendees vowed to cooperate on climate initiatives.

One such pledge aimed to reduce greenhouse gas emissions by promoting clean energy—that is, energy that does not produce greenhouse gas pollution. As the climate talks got underway, some leaders announced a joint initiative to research clean energy in order to make it cheaper for the world to use. Microsoft founder Bill Gates, along with U.S. President Barack Obama and French President François Hollande, launched the initiative; 19 governments and 28 leading world investors later joined them.

New technology will be required to make clean energy cheaper to capture and use. For example, new ways to store wind and solar energy are needed so that access to these energy sources is not so dependent on the weather

All of this will require money. At the climate talks, a number of governments pledged to double their spending on clean energy by 2020. This group included leading energy producers and consumers, such as the U.S., China, India, Brazil, Saudi Arabia, Australia, Canada, France, and Norway. These nations currently invest a total of about $10 billion a year in clean

energy. Business leaders will help. In addition to committing $1 billion of his own money, Gates persuaded others to invest.

Another key to stopping climate change is to rebuild natural resources. Earth has lost more than half of its forests over the course of human history, according to the World Resources Institute. Because flora absorbs greenhouse gases, deforestation has contributed to climate change.

Deforestation is an issue in many parts of the world, including Africa, where illegal logging is a problem. At the Paris talks, Ethiopia, Kenya, Uganda, Burundi, Rwanda, and other African nations pledged to replant about 100 million hectares (386,000 square miles) of forest by 2030.

Next Steps

Around the world, reactions to the Paris Agreement were mixed. Millions celebrated both the agreement and the pledges. They praised the commitment of resources to stopping climate change, as well as the novelty of the event. They also said that the meeting was historic in that so many countries came together in peace. Millions of others criticized the agreement, believing that it was not enough. Still others questioned whether the nations that agreed to the pact would follow through on their promises.

To take effect, the deal needs to be ratified by at least 55 countries representing those that produce most—at least 55 percent—of global emissions. In December, UN Secretary-General Ban Ki-moon said he wanted world leaders to sign the Paris Agreement on April 22, 2016. That's Earth Day. If approved, the agreement will go into effect in 2020.

Dig Deeper

Some gases absorb and release infrared radiation. These gases are known as greenhouse gases. Greenhouse gases occur naturally in the atmosphere. Carbon dioxide, methane, water vapor, and nitrous oxide are examples. Greenhouse gases absorb and trap heat (solar energy). This keeps Earth's average surface temperature around 15° Celsius (59° Fahrenheit). Greenhouse gases cause heat energy to stay in Earth's system longer.

What would happen if the atmosphere had no greenhouse gases? The infrared radiation would go straight through the atmosphere into space. Earth's average surface temperature would be only about 18 below 0° Celsius (0° Fahrenheit). Water would freeze. It would be too cold for most forms of life to survive.

But remember what you read on page 1. Many human activities greatly increase greenhouse gases. The Paris Agreement aims to limit these gases. But burning fossil fuels, clearing forests, and agricultural operations all increase greenhouse gases. This causes excess trapped heat. The excess heat affects weather patterns and climates worldwide. That's because the global oceans and atmosphere are interconnected.

Oceans absorb and store heat. Then, they slowly release it. This release helps to redistribute heat around the world. The atmosphere and the oceans continually exchange heat. So, any increase in the ocean's heat means changes to weather and climate. For example, warmer ocean temperatures increase the frequency of extreme weather events. Some regions experience hurricanes and typhoons. Other regions experience droughts. A rise in oceanic and atmospheric temperatures triggers ice caps and glaciers to melt. This can cause a rise in sea levels. The rise leads to flooding in coastal cities. Over the decades, levels of atmospheric carbon dioxide have gotten higher. This increase has caused oceans to become more acidic. The acidity has changed the ability of some marine animals (including corals, clams, and oysters) to build protective skeletons or shell.

Question 1

Which is a cause and effect relationship that takes place in the article?
A. Since the United Nations climate talks yielded the Paris Agreement, the burning of fossil fuels will decrease very rapidly.
B. After the United Nations climate talks yielded the Paris Agreement, people both celebrated and criticized the agreement.
C. Since the United Nations climate talks yielded the Paris Agreement, most nations in the world will be required to use solar energy.
D. After the United Nations climate talks yielded the Paris Agreement, leaders agreed to limit spending on clean energy technology.

Question 2

What is this article mainly about?

A. New technology can create ways to make it cheaper to use clean energy, such as wind and solar power.
B. More than 180 nations submitted climate action plans prior to a meeting that took place in Paris, France.
C. Nearly 200 world leaders met and created the Paris Agreement, a plan to address climate change on a global level.
D. Scientists say that greenhouse gases are emitted during the burning of fossil fuels, like coal and natural gas.

Question 3

Which is the closest **synonym** for the word *initiative*, as it is used in this article?
A. Proposal
B. Memorandum
C. Conference
D. Evaluation

Question 4

Suppose Carmen wants to find out more about clean energy. She would find **most** of her information _____.
A. In a history book about landmark United Nation resolutions
B. In a reference book about various fuel alternative
C. On a website about international conferences in Paris, France
D. On a map of the countries that produce the most global emissions

Question 5

The reader can infer from the article that _____.

A. People in France are more aware of climate change than those in other parts of the world.

B. The U.S., China, India, Brazil, Saudi Arabia, and Australia have not experienced deforestation.

C. Ratification of an international agreement is a complex process that takes some time.

D. Ethiopia, Kenya, Uganda, Burundi, and Rwanda were reluctant to support the Paris Agreement.

Question 6

The article states:

> **The objective of the pact is to limit greenhouse gases, which are *emitted* during the burning of fossil fuels, like coal, oil, and natural gas. Scientists say that greenhouse gases trap heat, warming the planet's surface and contributing to climate change.**
>
> Which would be the closest **antonym** for the word *emitted*?

A. Transformed

B. Contained

C. Released

D. Merged

Question 7

Which statement from the article best supports the idea that the leaders who crafted the Paris Agreement understand that a significant reduction of greenhouse gas pollution requires the participation and cooperation of many nations

A. The objective of the pact is to limit greenhouse gases, which are emitted during the burning of fossil fuels, like coal, oil, and natural gas.

B. To take effect, the deal needs to be ratified by at least 55 countries representing those that produce most—at least 55 percent—of global emissions.

IC. n the pact, the countries pledged to limit the amount of greenhouse gases emitted by human activity to the levels that trees, soil, and oceans can absorb naturally.

D. One such pledge aimed to reduce greenhouse gas emissions by promoting clean energy—that is, energy that does not produce greenhouse gas pollution.

Question 8

Pooley - IPC

Name_____ Date_____
Period_____

IPC -- Achieve 3000
The Last Generation?

MAJURO, Marshall Islands (Achieve3000, November 7, 2019). Living on a tropical island might sound fabulous, but what if you took a trip or went away for college and found you could never return? What if your home, and even the land it stood on, was gone forever? This isn't the plot of a fantasy movie or the premise of a video game—it's a painfully real possibility faced by people living in the Pacific Islands. Rising sea levels, due to the advent of climate change, threaten the very existence of these island nations. And young people whose families have deep roots on the islands are starting to wonder if they will be the last generation.

But the islanders' determination is as strong as their connection to their home. The Pacific Islands are made up of 11 independent countries, including the Marshall Islands, Fiji, Samoa, and the Federated States of Micronesia. However, the people of these distinct nations are banding together to confront the challenges of climate change.

Why is climate change such a huge threat to this part of the world? It's a matter of "first and worst." Because of their low elevations, islands are among the *first* places where communities are harmed by rising sea levels, and scientists have found that sea levels have risen more in the South Pacific than in other parts of the world. The Pacific Islands will likely face some of the *worst* devastation from the impacts of climate change. The region is susceptible to very destructive tropical storms, and it's hard for small, remote countries to recover from natural disasters.

The nations of the Pacific Islands, which are home to more than 2 million people, recognize that when it comes to climate change, they are all in the same boat. Working together, they set about looking for ways to take the helm and address the problem. Scientists already know one way to slow or reverse the impacts of climate change. That's by significantly reducing carbon dioxide and other greenhouse gas emissions. But cutting back air pollution on the islands is unlikely to have a big effect because they aren't a major source of emissions to begin with. China, for example, emits 29 percent of the world's carbon annually, and the United States emits 16 percent. The Marshall Islands, on the other hand, emit less than 0.00001 percent of the world's carbon.

But there's one feature of island life that gives these small nations an opportunity to make a big difference. Most of the things that people on islands buy are delivered by ships, and the environmental impact of these seafaring vessels is enormous. In fact, experts say cargo ships are responsible for almost 3 percent of the world's carbon emissions. That's about the same amount attributed to the entire country of Germany!

Realizing it was up to them to come up with solutions in their own backyards—or bays and harbors—Pacific Islanders came up with a plan. At the United Nations Climate Action Summit in 2019, the governments of Fiji, the Marshall Islands, Samoa, Vanuatu, the Solomon Islands, and Tuvalu announced the Pacific Blue Shipping Partnership. The alliance pledges a 40 percent reduction in carbon emissions from shipping by 2030 and wants to achieve zero-carbon shipping by 2050.

How will the countries meet these ambitious goals for going green with Pacific Blue? They plan to leverage some really cool, environmentally friendly, carbon-free technologies, including solar-powered ships and hydrogen fuel cells. They'll also harness wind energy for sailing and converting to electric power. Through the partnership and their efforts to assemble a fleet of these greener ships, Pacific Island nations are leading the world by example. They're hoping their move could start a wave of change in the shipping industry.

But Pacific Islanders aren't stopping there! They're coordinating programs to focus attention on increasing their resilience to changes in climate, preparing for natural disasters, and protecting fisheries and farms from rising seawater.

Sea levels are rising, but hopes aren't sinking in the Pacific Islands, where people are fighting for life and land. The citizens of these island nations are inspired to work together so they all can survive and thrive in their homelands for generations to come.

Question 1

What is a cause and effect relationship that takes place in the Article?

A. Because China emits high levels of carbon as compared with the rest of the world, communities in China will be some of the first places to experience the harmful consequences of rising sea levels resulting from climate change.
B. Because cargo ships are responsible for approximately 3 percent of the world's carbon emissions, the United Nations Climate Action Summit made a plan called the Pacific Blue Shipping Partnership in 2019.
C. Because the Pacific Island region is coordinating programs to increase its ability to effectively react to destructive tropical storms, some Pacific Island countries pledged to achieve zero-carbon emissions from shipping by 2050.
D. Because Pacific Island countries contribute only a minor proportion of the world's carbon emissions, reducing air pollution on the islands is unlikely to significantly impact the amount of carbon worldwide.

Question 2

The Article primarily discusses _____.

A. the geography of the Pacific Islands, including their location in the South Pacific and the 11 independent countries they encompass, such as the Marshall Islands, Fiji, Samoa, and the Federated States of Micronesia
B. the potential of solar power, hydrogen fuel cells, and wind energy, all of which are technologies that do not emit carbon, to replace carbon-emitting technologies that cause damage to the environment in the Pacific Islands
C. the effect of climate change on the Pacific Island nations, and the Pacific Blue Shipping Partnership, in which carbon-free technologies will be used to reduce carbon emitted by cargo ships that deliver goods to the islands
D. the amount of carbon dioxide and other greenhouse gases emitted by the Pacific Islands compared to larger countries, including China, which emits 29 percent of the world's carbon annually, and the United States, which emits 16 percent

Question 3

Which is the closest **synonym** for the word *resilience*?

A. flexibility

B. probability

C. clarity

D. sensitivity

Question 4

Which information is **not** in the Article?

A. Why the countries in the Pacific Islands rely on carbon-producing cargo ships more than some other countries do

B. Why the Pacific Island countries are experiencing the effects of climate change more than some other areas

C. Why the Pacific Blue Shipping Partnership includes only some of the countries that make up the Pacific Islands rather than all of them

D. Why the Marshall Islands, Fiji, Samoa, the Federated States of Micronesia, and other countries in the Pacific Islands have started working together

Question 5

Read the following passage from the Article:

> **But there's one feature of island life that gives these small nations an opportunity to make a big difference. Most of the things that people on islands buy are delivered by ships, and the environmental impact of these seafaring vessels is enormous. In fact, experts say cargo ships are responsible for almost 3 percent of the world's carbon emissions. That's about the same amount attributed to the entire country of Germany!**

Why did the author include this information?

A. To inform readers that the Pacific Islands are responsible for producing almost 3 percent of the world's carbon emissions

B. To emphasize the dangerous environmental impact of climate change caused by carbon dioxide and other greenhouse gas emissions

C. To explain why the Pacific Island countries developed a plan for reducing carbon emissions from cargo ships rather than emissions from other sources

D. To describe a variety of creative strategies for reducing carbon emissions in an effort to slow or reverse climate change

Question 6

The Article states:

> **This isn't the plot of a fantasy movie or the premise of a video game—it's a painfully real possibility faced by people living in the Pacific Islands. Rising sea levels, due to the *advent* of climate change, threaten the very existence of these island nations.**

Which is the closest **antonym** for the word *advent*?

A. apprehension

B. terminatio

C. affirmatio

D. expansion

Question 7

What is one inference the reader can make from the Article?

A. Zero-carbon shipping is an unattainable ideal, so the countries in the Pacific Blue Shipping Partnership accept a 40 percent reduction in shipping-related carbon emissions as a realistic goal.

B. Small island nations are unable to reduce air pollution since their levels of carbon and other greenhouse gas emissions are already so low.

C. The Pacific Island countries are the first to propose solutions to the problems resulting from climate change because other countries are not affected by rising sea levels.

D. Countries that emit high levels of carbon cause negative consequences not only in their own backyards but around the entire world.

Question 8

Which passage from the Article best supports the belief that the threat to the Pacific Islands resulting from climate change is critical?

A. But cutting back air pollution on the islands is unlikely to have a big effect because they aren't a major source of emissions to begin with. China, for example, emits 29 percent of the world's carbon annually, and the United States emits 16 percent.

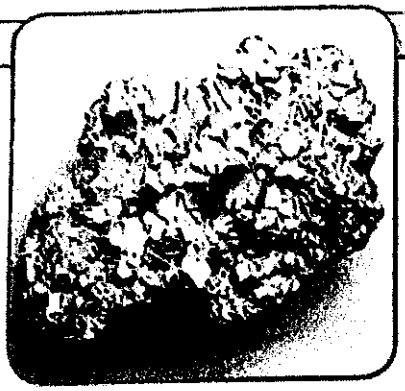
B. But there's one feature of island life that gives these small nations an opportunity to make a big difference. Most of the things that people on islands buy are delivered by ships, and the environmental impact of these seafaring vessels is enormous. In fact, experts say cargo ships are responsible for almost 3 percent of the world's carbon emissions. That's about the same amount attributed to the entire country of Germany!

C. What if your home, and even the land it stood on, was gone forever? This isn't the plot of a fantasy movie or the premise of a video game—it's a painfully real possibility faced by people living in the Pacific Islands. Rising sea levels, due to the advent of climate change, threaten the very existence of these island nations. And young people whose families have deep roots on the islands are starting to wonder if they will be the last generation.

D. How will the countries meet these ambitious goals for going green with Pacific Blue? They plan to leverage some really cool, environmentally friendly, carbon-free technologies, including solar-powered ships

Hauser- Chemistry

7.1 Ions



Q: What is fool's gold? Pyrite (FeS_2) is often mistaken for gold. Because of that, it is sometimes called "fool's gold." Pyrite is a crystalline solid. Particles in crystalline solids are arranged in an orderly, repeating fashion. In this chapter, you will learn about crystalline solids, like pyrite, that are made up of ions that are bonded together.

Key Questions

- *How do you find the number of valence electrons in a representative element?*
- *How are cations formed?*
- *How are anions formed?*

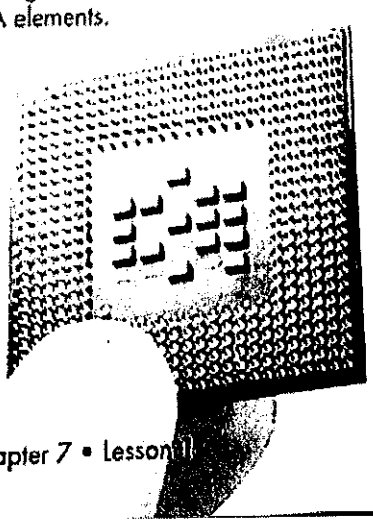
Valence Electrons

Mendeleev organized his periodic table based on similarities in the properties of elements. Each column of the periodic table is called a group. All of the elements in each group react in similar ways. Scientists later learned that all of the elements in each group have the same number of valence electrons. **Valence electrons** are the electrons in the highest occupied energy level of an element's atoms. The chemical properties of an element are largely determined by the number of valence electrons.

Determining the Number of Valence Electrons The number of valence electrons in an atom of an element is related to the element's group number in the periodic table. For a representative element, the number of valence electrons is the same as its group number. For example, atoms of the Group 1A elements (including hydrogen, lithium, and sodium) all have one valence electron. The number 1 in Group 1A means that there is one valence electron.

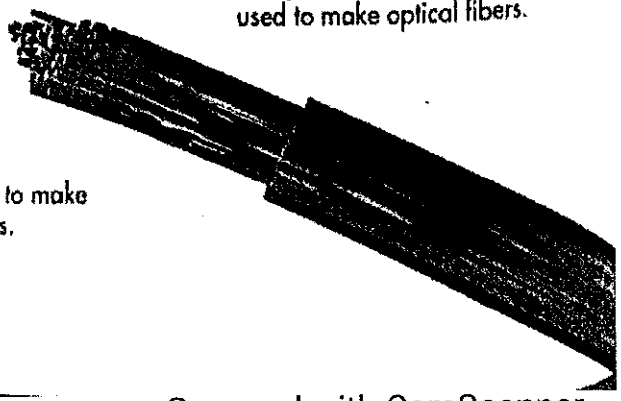
Atoms in Group 4A have four valence electrons. The figure below shows some uses of Group 4A elements. Atoms in Group 5A, including nitrogen, have five valence electrons. Oxygen and sulfur atoms, in Group 6A, have six. Helium is the only exception to the rule. Helium is in Group 8A, but helium atoms have two valence electrons.

Group 4A Elements
Silicon and germanium are Group 4A elements.



Silicon is used to make computer chips.

Compounds of germanium are used to make optical fibers.



Electron Dot Structures of Some Group A Elements

Period	Group 1A	2A	3A	4A	5A	6A	7A	8A
1	H·							He:
2	Li·	·Be·	·B·	·C·	·N·	:O·	:F·	:Ne:
3	Na·	·Mg·	·Al·	·Si·	·P·	:S·	:Cl·	:Ar:
4	K·	·Ca·	·Ga·	·Ge·	·As·	:Se·	:Br·	:Kr:

Electron dot structures are diagrams that show an atom's valence electrons as dots. In general, only valence electrons are involved in chemical bonds. Electrons in lower energy levels are usually not involved in bonds. The table above shows electron dot structures for atoms of some Group A elements. Notice that all of the elements in a group (with the exception of helium) have the same number of electron dots in their structures.

The Octet Rule You learned in Chapter 6 that noble gases, such as neon, are generally nonreactive. That is, they are stable. In 1916, the chemist Gilbert Lewis used this fact to explain why atoms form certain kinds of ions and molecules. Recall that atoms of each of the noble gases (except helium) have eight valence electrons. The general electron configuration for these atoms is ns^2np^6. A set of eight is an octet. Lewis explained that atoms tend to form compounds in a way that allows them to have eight electrons in their highest occupied energy level. He called his explanation the **octet rule.**

Atoms of metals tend to lose their valence electrons, leaving an octet in the next lowest energy level. Atoms of some nonmetals tend to gain or share electrons with another atom or atoms to form an octet. Although exceptions occur, the octet rule applies to atoms in most compounds.

Key Question How do you find the number of valence electrons in a representative element? **For a representative element, the number of valence electrons is the same as its group number.**

Formation of Cations

An atom is electrically neutral because it has an equal number of protons and electrons. An ion forms when an atom or molecule loses or gains electrons. A positively charged ion is called a cation. A cation forms when an atom loses one or more valence electrons. For metals, the cation's name is the same as the element's name. For example, a sodium atom (Na) forms a sodium cation (Na^+). Although their names are the same, metals and their cations have many important chemical differences. Sodium metal reacts explosively with water. Sodium cations, however, are quite nonreactive. Sodium cations are in table salt, a compound that is very stable in water.

Build up Vocabulary

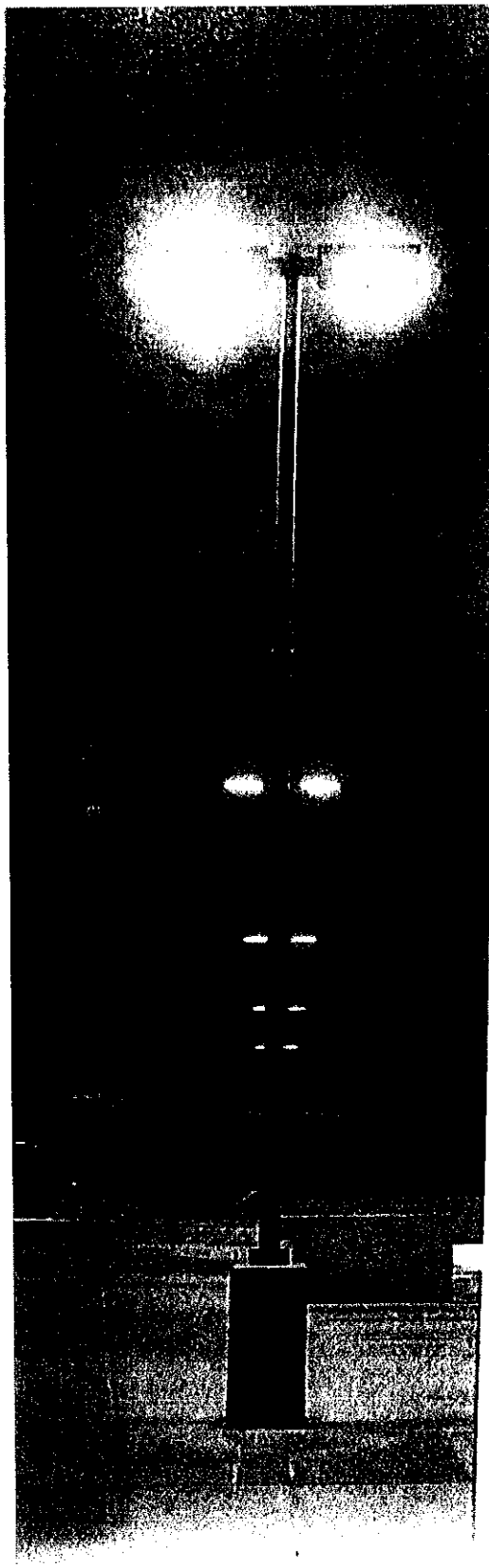
valence electron electron in the highest occupied energy level of an element's atoms

electron dot structure diagram that shows valence electrons as dots

octet rule in a chemical reaction, atoms gain or lose electrons to acquire the electron structure of a noble gas

WORD ORIGINS

Octet comes from the Greek word *okto*, meaning "eight." There are eight electrons in the highest occupied energy level of the noble gases, except for helium.



Sodium Vapor Lamp
The sodium atoms (Na) in a sodium vapor lamp ionize to form sodium cations (Na^+).

Metallic Cations The most common cations are those formed by the loss of valence electrons from metal atoms. Most of these atoms have one to three valence electrons. These valence electrons are easily removed. When an atom loses electrons, it becomes positively charged because the number of positively charged protons is now greater than the number of negatively charged electrons. As an example, think about sodium.

▶ **Losing Electrons to Form a Cation** Sodium belongs to Group 1A. A sodium atom can lose one electron to form a cation with a charge of 1+. The sodium ion is positive because once the electron is lost, the number of protons (11) is greater than the number of electrons (10). Sodium atoms become sodium ions in a sodium vapor lamp. This kind of lamp is shown in the photo to the left.

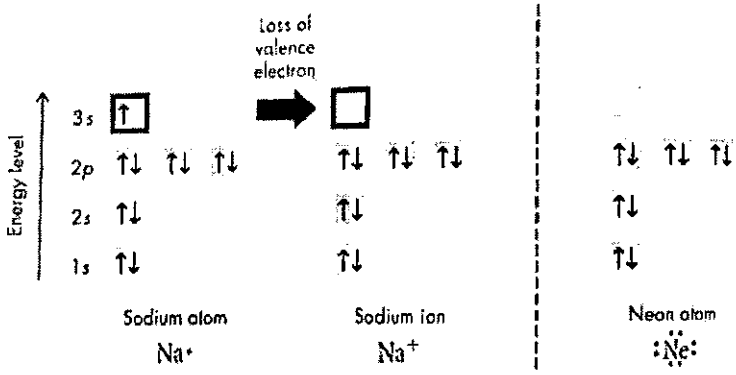
▶ **Representing Ionization** Formation of an ion is called ionization. You can show the ionization by writing the complete electron configuration of the atom and of the ion formed.

$$\text{Na}\ \ 1s^2 2s^2 2p^6 3s^1 \xrightarrow{-e^-} \text{Na}^+\ \ \underbrace{1s^2 2s^2 2p^6}_{\text{octet}}$$

Notice that the electron configuration of the sodium ion ($1s^2 2s^2 2p^6$) is the same as the electron configuration of a neon atom.

$$\text{Ne}\ \ \underbrace{1s^2 2s^2 2p^6}_{\text{octet}}$$

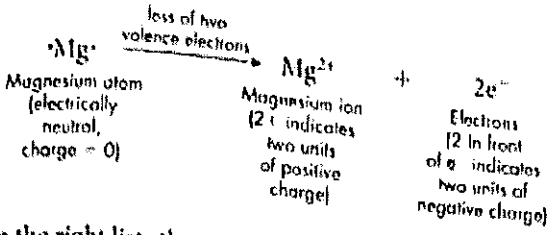
The diagrams below help illustrate this point.



Both the sodium ion and the neon atom have eight valence electrons. Using electron dot structures, you can show the ionization more simply.

$$\underset{\substack{\text{Sodium atom (electrically neutral, charge = 0)}}}{\text{Na}\cdot} \xrightarrow[\text{ionization}]{\text{loss of one valence electron}} \underset{\substack{\text{Sodium ion (plus sign indicates one unit of positive charge)}}}{\text{Na}^+} + \underset{\substack{\text{Electron (minus sign indicates one unit of negative charge)}}}{e^-}$$

Group 2A Cations Magnesium belongs to Group 2A of the periodic table, so magnesium atoms have two valence electrons. A magnesium atom can lose both valence electrons to form a cation with a charge of 2+. This cation has the same electron configuration as a neon atom.

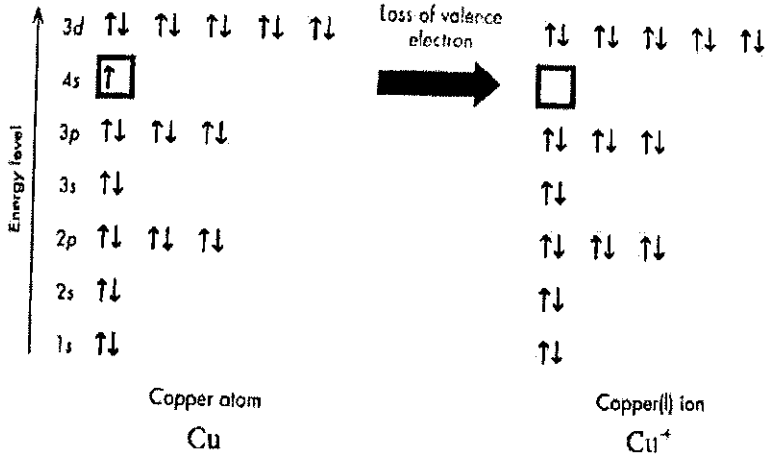


The figure on the right lists the cations formed by metals in Groups 1A and 2A. Cations of Group 1A elements always have a charge of 1+. Cations of Group 2A elements always have a charge of 2+.

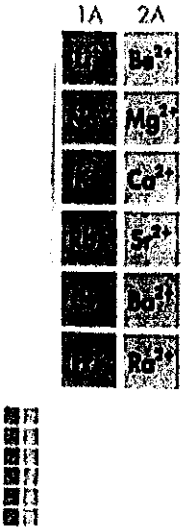
Transition Metal Cations The charges of cations of the transition metals may vary. An iron atom, for example, may lose two electrons to form the Fe^{2+} cation. Alternatively, it may lose three electrons to form the Fe^{3+} cation.

▶ **Octet Rule Exceptions** Some ions formed by transition metals do not have noble gas electron configurations. They are exceptions to the octet rule. Copper is one exception to the rule. To achieve the structure of argon, the noble gas before copper, a copper atom would have to lose 11 electrons. To acquire the electron configuration of krypton, the noble gas after copper, a copper atom would have to gain seven electrons. Ions with charges of three or more are not common. Thus, copper does not form a noble-gas configuration when forming an ion.

▶ **Pseudo Noble Gas Electron Configuration** A copper atom may not be able to attain noble-gas configuration, but it can still form a cation. If a copper atom loses its $4s^1$ electron, as shown below, the copper cation has 18 electrons in the highest occupied energy level. All of the orbitals are filled. So it is relatively stable. Such a configuration is known as a pseudo noble-gas electron configuration. Other elements that act in a similar way are found to the right of the transition metal block of the periodic table.



Key Question How are cations formed? **A positively charged ion, or a cation, is produced when an atom loses one or more valence electrons.**



Groups 1A and 2A Cations Cations of Group 1A elements have a charge of 1+. Cations of Group 2A elements have a charge of 2+.

5A	6A	7A
N^{3-}	O^{2-}	F^-
P^{3-}	S^{2-}	Cl^-
As^{3-}	Se^{2-}	Br^-
	Te^{2-}	I^-

Groups 5A, 6A, and 7A Anions Atoms of nonmetals and metalloids form anions by gaining enough valence electrons to attain the electron configuration of the nearest noble gas.

Formation of Anions

An anion is an atom or molecule with a negative charge. An anion forms when an atom gains one or more electrons. When an atom gains electrons, it becomes negatively charged because the number of negatively charged electrons is greater than the number of positively charged protons. The name of an anion of a nonmetallic element is *not* the same as the element name. The name of the anion ends in *-ide*. A chlorine atom (Cl) forms a chloride anion (Cl^-), and an oxygen atom (O) forms an oxide anion (O^{2-}). The figure on the left shows some anions formed by elements in Groups 5A, 6A, and 7A. The table lists some common anions.

Gaining Electrons to Form an Anion Atoms of nonmetallic elements have relatively full valence shells. For example, chlorine belongs in Group 7A and has seven valence electrons. Such atoms form noble gas electron configurations by gaining electrons instead of losing them.

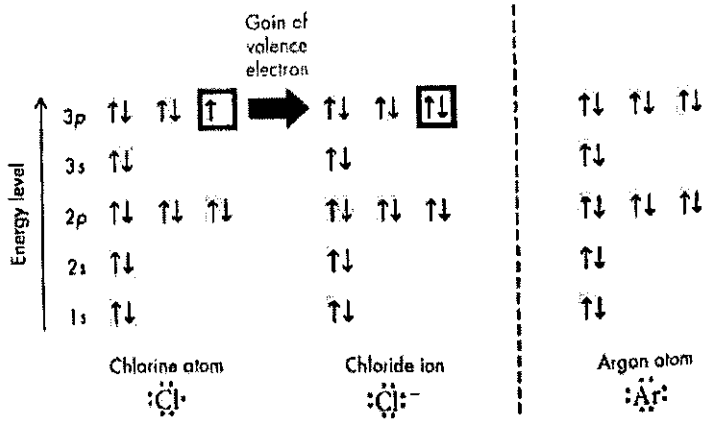
Representing Ionization A gain of one electron gives a chlorine atom an octet and converts a chlorine atom into a chloride ion.

$$Cl\ \ 1s^2 2s^2 2p^6 3s^2 3p^5 \xrightarrow{+e} Cl^-\ \ 1s^2 2s^2 2p^6 \underbrace{3s^2 3p^6}_{\text{octet}}$$

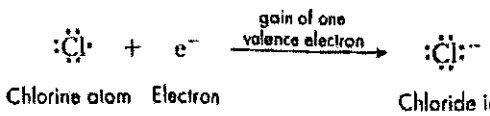
The chloride ion has a single negative charge. Notice that the electron configuration of the chloride ion ($1s^2\,2s^2\,2p^6\,3s^2\,3p^6$) is the same as that of an argon atom.

$$Ar\ \ 1s^2 2s^2 2p^6 \underbrace{3s^2 3p^6}_{\text{octet}}$$

Chlorine atoms need one more valence electron to get the electron configuration of the nearest noble gas. The diagrams below show how both the chloride ion and the argon atom have an octet of electrons in their highest occupied energy levels.



You can use electron dot structures to write an equation showing the formation of a chloride ion from a chlorine atom.

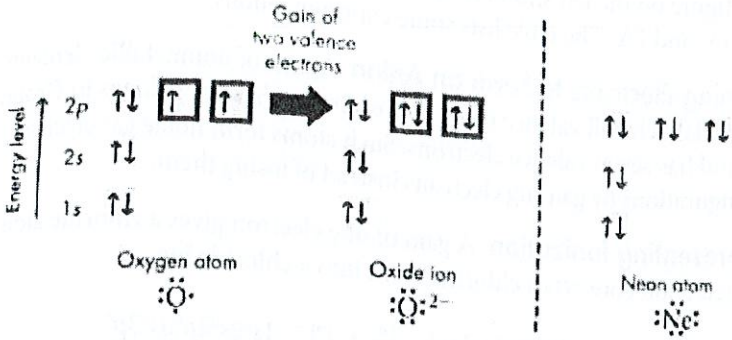


Some Common Anions

Name	Symbol	Charge
Fluoride	F^-	1−
Chloride	Cl^-	1−
Bromide	Br^-	1−
Iodide	I^-	1−
Oxide	O^{2-}	2−
Sulfide	S^{2-}	2−
Nitride	N^{3-}	3−
Phosphide	P^{3-}	3−

Examples of Anions Atoms of nonmetals and some metalloids form anions. Anions of chlorine and other halogens are called **halide ions.** All halogen atoms have seven valence electrons and need to gain only one electron to get the electron configuration of a noble gas. Thus, all halide ions (F^-, Cl^-, Br^-, and I^-) have a charge of 1−. The seawater in the photo contains many different ions. Most of the anions are chloride ions.

Oxygen is in Group 6A, and an oxygen atom has six valence electrons. An oxygen atom gets the electron configuration of neon by gaining two electrons, as shown below.



The oxide anion (O^{2-}) that forms when oxygen gains two electrons has a charge of 2−. You can write the equation for the formation of oxide anions by using electron dot structures.

$$:\ddot{O}\cdot + 2e^- \longrightarrow :\ddot{O}:^{2-}$$

Key Question How are anions formed? **An anion is produced when an atom gains one or more valence electrons.**

Ions in Seawater
Chloride (Cl^-), sodium (Na^+), magnesium (Mg^{2+}), calcium (Ca^{2+}), and potassium (K^+) ions are abundant in seawater.

BUILD Vocabulary

halide ion an anion that forms when a halogen atom gains a valence electron

ROOT WORD

The words *halide* and *halogen* use the root word *hals*, which means "salt" in Greek. Halogens, found in Group 7A, form halide ions. When they form compounds, halide ions form salts.

7.1 LessonCheck

Key Concept Check

1. **Explain** How can you determine the number of valence electrons in an atom of a representative element?
2. **Describe** How do cations form?
3. **Describe** How do anions form?

Vocabulary Check

Choose a highlighted word from the lesson to complete each sentence correctly.

4. An electron in the highest energy level of an element's atoms is called a(n) _____.
5. According to the _____, atoms gain or lose electrons to get the electron configuration of a noble gas.

Think Critically

6. **Make Generalizations** Atoms of which elements tend to gain electrons? Atoms of which elements tend to lose electrons?
7. **Apply Concepts** How many valence electrons are in a potassium atom? An oxygen atom?
8. **Infer** Identify the charge of the ion formed when a potassium atom loses one electron.

CHEMISTRY & YOU

9. Fool's gold is composed of iron(II) cations (Fe^{2+}), and disulfide anions (S_2^{2-}). Write the electron configuration of the Fe^{2+} ion. (Hint: See page 182.)

Name:_____

7.1 Lesson Check Questions

Activity 1: Students will answer questions by reading *Chapter 7.1:Ions*

1) How can you determine the number of valence electrons in an atom of representative element?

2) How do cations form?

3)How do anions form?

4) How many valence electrons are in each atom: a.potassium, b.carbon, c.magnesium, d.oxygen

Name:_____

Activity 2: Students will answer questions by reading *Chapter 7.1:Ions*

1) Draw the electron dot structure for each element: a. potassium, b.carbon, c.magnesium, d.oxygen

2) How many electrons will each element gain or lose in forming an ion: a.calcium, b.flourine, c.aluminum, d.oxygen

Lesson 7.1 The Eye

Before You Read

Try to answer the following questions before you read this lesson.

What enables us to see colors?

What causes near- and farsightedness?

Lesson Objectives

1. Describe the external and internal anatomical structures of the human eye.
2. Explain how the sphincter pupillae and the dilator pupillae muscles work together to control the amount of light that is admitted to the eye.
3. Identify the anatomical structures associated with the retina and explain how they work together to produce vision.
4. Define *myopia*, *hyperopia*, and *presbyopia* and briefly explain what causes each of these common eye disorders.
5. Define *color blindness* and explain why it occurs more often in men than in women.

Key Terms

E-Flash Cards

aqueous and vitreous humors
choroid
ciliary body
ciliary glands
cones
conjunctiva
cornea
extrinsic muscles
iris
lacrimal glands
lens
optic chiasma
optic nerve
optic tracts
pupil
retina
rods
sclera
suspensory ligaments
tarsal glands

According to an old English proverb, "The eyes are the windows to the soul." Whether or not this is true, some people do indeed have expressive eyes that help to convey their emotional states. Eyes "twinkling with amusement" or "flashing with anger" are familiar descriptive phrases. A person can also be described as bright-eyed, dark-eyed, shifty-eyed, or eagle-eyed, all of which suggest distinctive images or characteristics.

The eyes obviously are important parts of our anatomy, with vision being an extremely useful sense. In this lesson we will describe the anatomical components of the eye and learn how they function together to produce the remarkable ability to see.

Anatomy of the Eye

The adult eye, sometimes referred to as the "eyeball," is about 2.5 cm (1 inch) in diameter and has a spherical shape. A variety of external structures serve to protect the eye, and specialized internal structures send sensory signals to the brain, enabling vision.

External Structures

The eye is a delicate structure and, fortunately, is well protected. The eye is encased in the bony, orbital socket of the skull and covered by an eyelid. The eyebrows also function as shields—for example, by protecting the eyes from dripping sweat on a hot day. The eyelashes provide considerable protection from circulating dust particles.

Several structures work together to lubricate the eyes (**Figure 7.1**). **Tarsal** (TAR-sal) **glands** in the eyelids produce an oily secretion, and modified sweat glands, called **ciliary** (SIL-ee-AIR-ee)

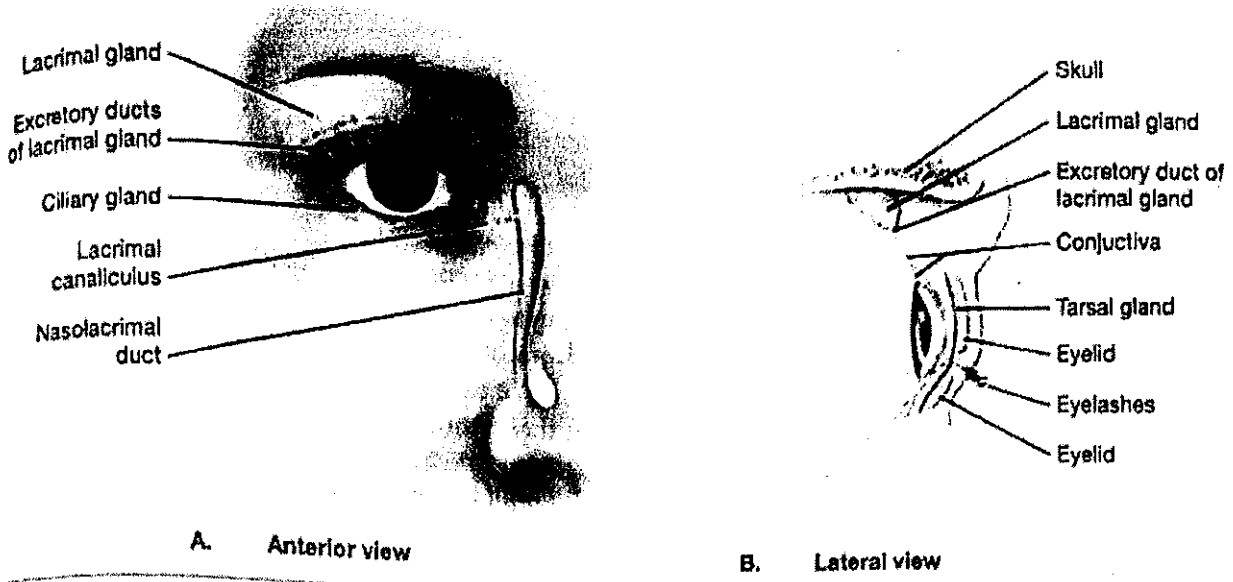


Figure 7.1 Lubricating structures of the eye. A—Anterior view. B—Lateral view. *Some of the structures identified in these drawings serve a function other than lubrication. What are these structures and what is their primary purpose?*

glands, are located between the eyelashes. The **conjunctiva** (KAHN-junk-TIGH-va), a delicate external membrane that covers the exposed eyeball and lines the eyelid, also secretes a lubricating mucus.

The **lacrimal** (LAK-ri-mal) **glands** above the lateral end of each eye continually release the familiar, salty solution known as tears through *excretory ducts*. Because tears contain antibodies and an enzyme called *lysozyme* that attacks bacteria, they not only lubricate the surface of the eye but also keep it clean.

Tears are flushed into tiny canals called *lacrimal canaliculi* in the medial corner of each eye. These canaliculi then drain into the *nasolacrimal* (NAY-zoh-LAK-ri-mal) *duct*, which empties into the nasal cavity.

Irritation to the eye produces extra tearing, which helps to wash away foreign substances. Under stressful conditions, tears may be produced at such a high rate that they cannot be drained away fast enough and spill over onto the cheeks.

Six **extrinsic muscles** attach to the outer surface of the eye and are responsible for moving the eye within the orbital socket (**Figure 7.2**). The specific functions of these muscles are listed in the table in **Figure 7.3** on the next page.

Check Your Understanding

1. What do tarsal glands produce?
2. What are the two functions of tears?
3. Describe two different ways by which tears clean the eyes.

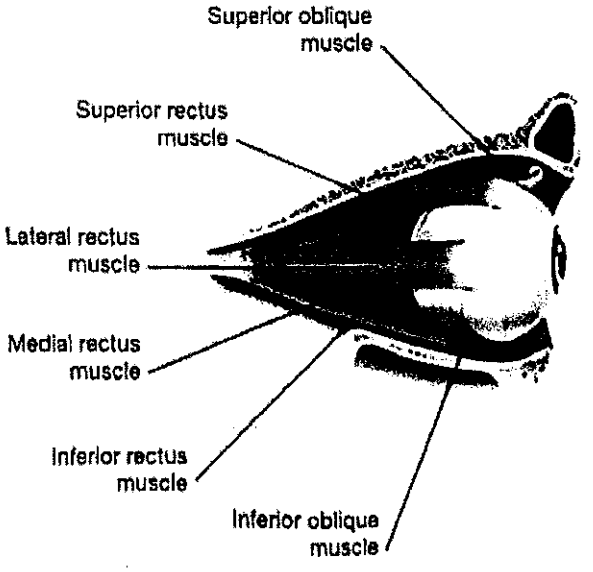


Figure 7.2 Lateral view of the extrinsic muscles of the eye.

Figure 7.3 The Extrinsic Eye Muscles

Muscle	Action
superior rectus	upward eye motion
inferior rectus	downward eye motion
lateral rectus	lateral eye motion
medial rectus	medial eye motion
superior oblique	downward and lateral eye motion
inferior oblique	upward and lateral eye motion

Internal Structures

The eyeball is a hollow chamber, somewhat oblong in shape, filled with fluids called **aqueous** (AY-kwee-us) and **vitreous** (VIT-ree-us) **humors**. These fluids help the eyeball to maintain its shape (**Figure 7.4**).

Three layers of tissue form the walls of the eyeball. The tough, fibrous **sclera** makes up the outer layer of the eye. The sclera includes the "white of the eye" as well as the transparent **cornea** over the anterior center of the eye. The cornea is called the "window of the eye" because light passes through it. The cornea has no blood supply and, therefore, is the one body tissue that can be transplanted from one person to another with no concern for rejection.

The middle layer of the eye, called the **choroid** (KOR-oyd), contains a rich supply of blood vessels that provide nourishment to the eye (**Figure 7.4**). These blood vessels

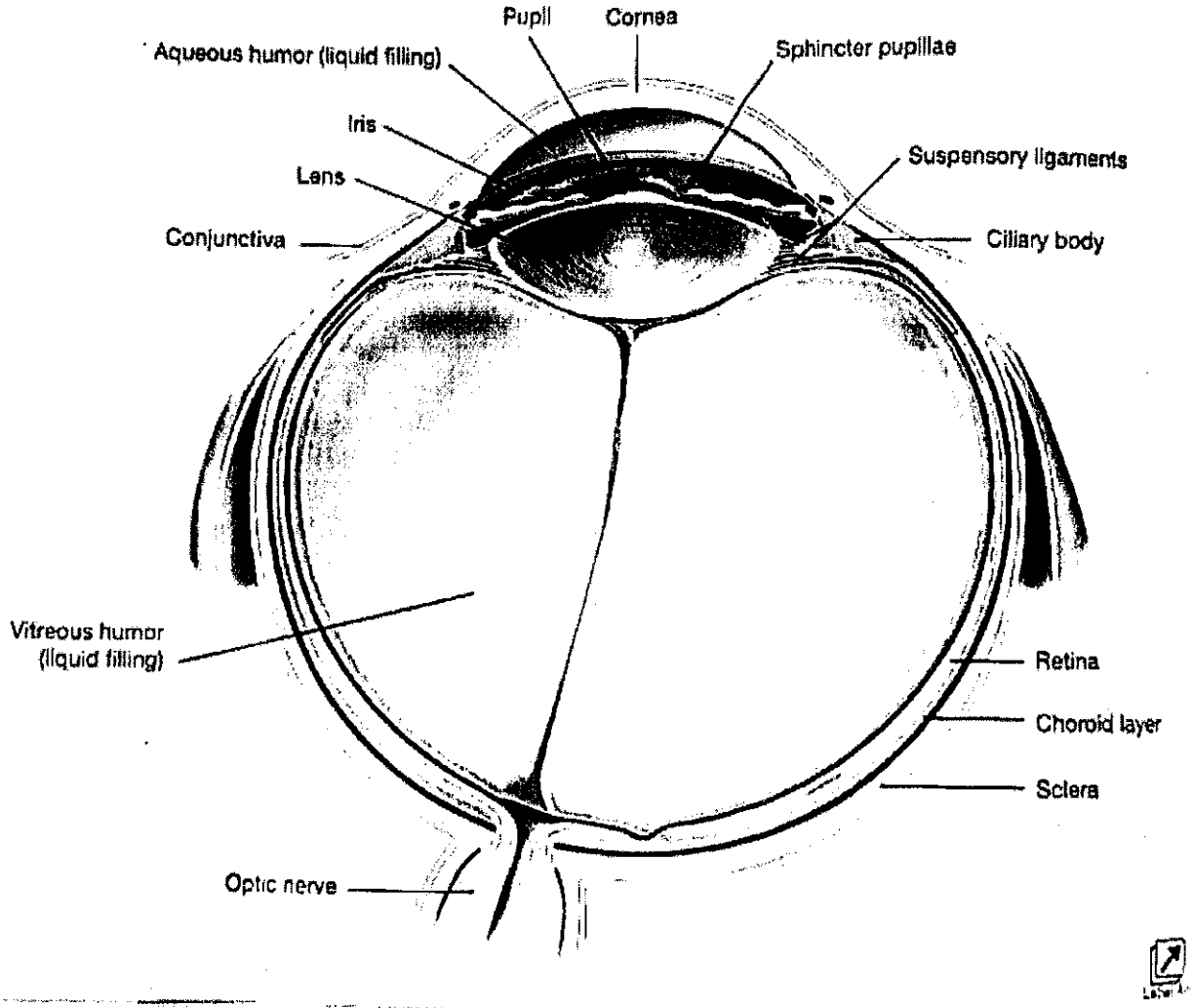


Figure 7.4 Internal structures of the eye. *How would our vision be affected if the iris lacked sphincter pupillae and dilator pupillae muscles to control the amount of light admitted to the eye?*

contribute to a crimson-purple pigmentation that darkens the interior of the eye, preventing light reflections. Anteriorly, the choroid also includes the **iris**, which gives the eye its color. The iris can widen or narrow to control the size of the **pupil**, the opening through which light passes into the interior of the eye.

Two sets of muscles within the iris work to control the amount of light admitted to the eye. The *sphincter pupillae* (pyoo-PIL-ay) contracts in the presence of bright light or when the eye focuses on an object within close range, causing the pupil to grow smaller. In the presence of dim light or when the eye focuses on a distant object, the *dilator pupillae* muscle contracts, causing dilation (enlargement) of the pupil.

The innermost layer of the eye, the **retina**, is located only around the posterior portion of the eye, anterior to the choroid (**Figure 7.4**). The retina is dense in specialized, light-sensitive nerve endings. These nerve endings send impulses through the optic nerve to the occipital lobe of the brain, where visual images are interpreted.

The sensory cells in the retina are called **rods** and **cones** (**Figure 7.5**). The rods are activated in dim light; the cones are sensitive to bright light and also provide color vision. As **Figure 7.5** shows, nerve ganglions (GAYNG-glee-ahnz) and bipolar neurons (discussed in chapter 6) provide connections between the retina and the rods and cones.

You may have heard of the "blind spot" on the retina. The physiological blind spot on each retina is called the *optic disc*. The optic disc is the junction between the optic nerve and the eye. Because there are no rods and cones in the optic disc, this tiny area is unable to transmit visual information—hence the term *blind spot*.

Under normal circumstances, we do not perceive the blind spot because the brain fills in the visual information from the other eye. Given the separation between the two eyes, the blind spots are missing different pieces of the combined visual field.

The lens of the eye is located behind the iris. It is a transparent, flexible, crystal-like structure curved outward on both sides (**Figure 7.4**). The lens is held in place by tiny **suspensory ligaments**

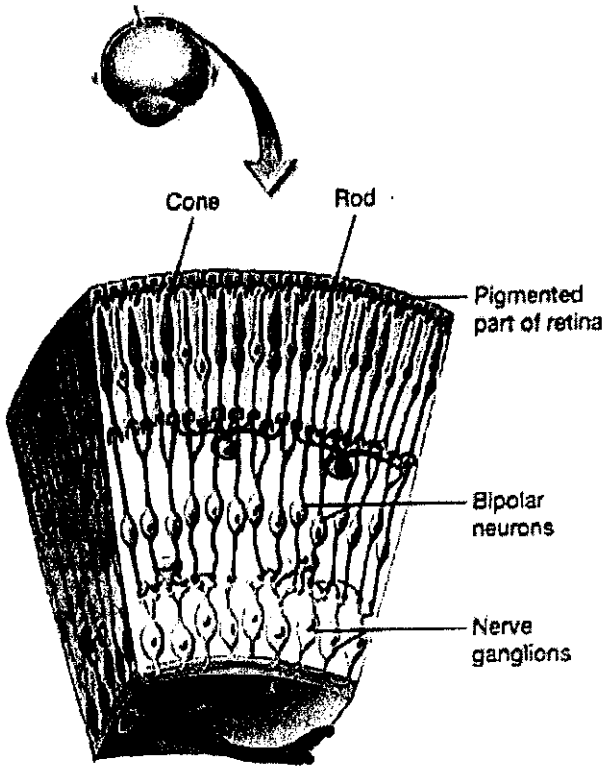


Figure 7.5 Rods and cones in the retina. *Which types of cells—cones or rods—are activated in dim light?*

that surround it. The ligaments attach to the **ciliary body**, which merges with the choroid layer.

When at rest, the eye is focused for distance vision. For the eye to clearly view objects closer than about 20 feet, the muscles of the ciliary body contract to change the shape of the lens. This process of contraction, known as *accommodation*, makes the lens thicker, enabling it to focus incoming light rays on the surface of the retina.

After about 40 years of age, the ability of the ciliary body muscles to appropriately contract diminishes. In the absence of other visual corrections, this causes people in the post-40 age group to need reading glasses for up-close vision.

Check Your Understanding

1. Explain the purpose of aqueous and vitreous humors.
2. Name the three layers of the eye.
3. Which nerve is responsible for transmitting sensory signals to the brain?

Name:_____

7.1: The Eye

Read *Chapter 7.1: The Eye* and answer the following questions

Activity 1

1)What do tarsal glands produce?

_____

_____

_____

_____

2)What are the two functions of tears?

_____

_____

_____

_____

3)Describe two different ways by which tears clean the eyes.

_____

_____

_____

_____

Name:_____

Activity 2

1)Explain the purpose of aqueous and vitreous humors.

2)Name the three layers of the eye.

3)Which nerve is responsible for transmitting sensory signals to the brain?

Van Gundy - Alg 1

QUIZIZZ

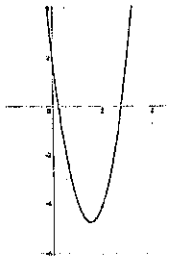
NAME : _____

CLASS : _____

DATE : _____

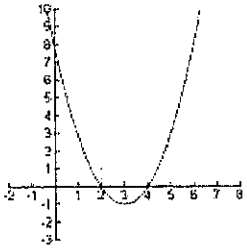
Van Gundy Distance Learning Week 1: Quadratics Review

20 Questions

1.  How many zeros does this parabola have?

☐ a) 3 ☐ b) 2

☐ c) 0 ☐ d) 1

2.  What is the vertex?

☐ a) (2, 4) ☐ b) (3, -1)

☐ c) (0, 8) ☐ d) (-1, 3)

3. What is another name for the highest or lowest point of a parabola?

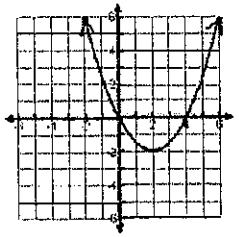
☐ a) parabola ☐ b) vertex

☐ c) graph ☐ d) point

4. What is another name for the x-intercepts?

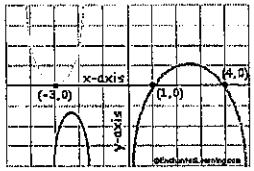
☐ a) y-intercept ☐ b) zeros

☐ c) x-axis ☐ d) domain

5.  What are the x- intercepts?

☐ a) x = 0 and x = -4 ☐ b) x = 0 and x = 4

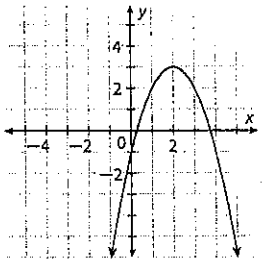
☐ c) y = 0 ☐ d) x = 2

6. 

The point which a parabola touches the x-axis is know as the _____.

☐ a) solution ☐ b) zero

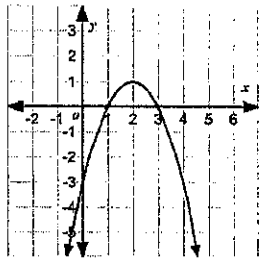
☐ c) x-intercept ☐ d) All answers are correct

7.  What is the range of the function?

☐ a) $y \leq -1$ ☐ b) $y \geq 3$

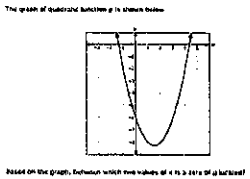
☐ c) all real numbers ☐ d) $y \leq 3$

Van Gundy - Alg 1

8. 

What is the domain of the function?

- ☐ a) $1 \le x \le 3$
- ☐ b) $1 \le y \le 3$
- ☐ c) all real numbers
- ☐ d) $y \le 3$

9. 

Between which two values of x is a zero of g located?

- ☐ a) –9 and –8
- ☐ b) 1 and 2
- ☐ c) –7 and –5
- ☐ d) 4 and 5

10. What is another name for the solution of a function?

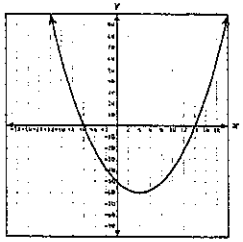
- ☐ a) zero
- ☐ b) domain
- ☐ c) both zero and domain
- ☐ d) neither zero nor domain

11. The x-intercepts and domain are the same thing.

- ☐ a) True
- ☐ b) False

12. Which is not a quadratic function?

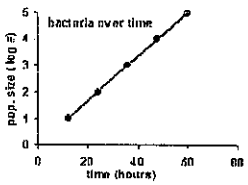
- ☐ a) $y = (x+3)^2$
- ☐ b) $y = 3x^2$
- ☐ c) $y = 6x^2 - 1$
- ☐ d) $y = x + 5$

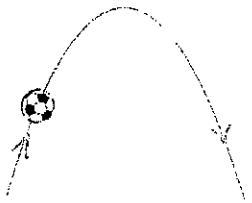
13. 

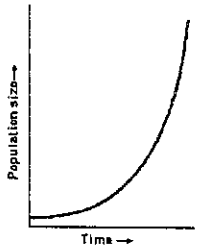
What are the zeros for the quadratic function?

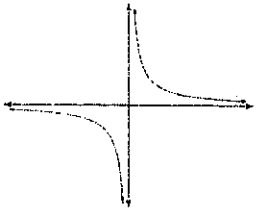
- ☐ a) (-6, 0) and (14, 0)
- ☐ b) (-50, 0) and (14, 0)
- ☐ c) (-6, 0) and (-50, 0)
- ☐ d) (-50, 0) and (-60, 0)

14. Which graph is a parabola?

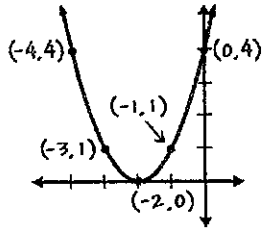
☐ a) 

☐ b) 

☐ c) 

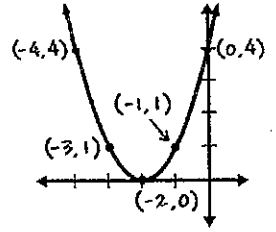
☐ d) 

Van Gundy - Alg 1

15. 

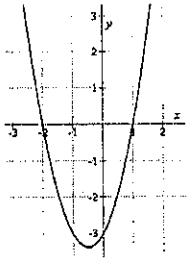
Name the y-intercept.

- ☐ a) (-4,4)
- ☐ b) (0,4)
- ☐ c) (-2,0)
- ☐ d) (0,0)

16. 

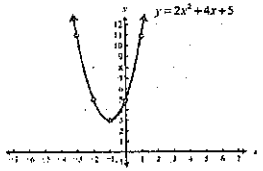
The equation for the axis of symmetry for this parabola is...

- ☐ a) x = 0
- ☐ b) x = -2
- ☐ c) y = -2
- ☐ d) x = 2

17. 

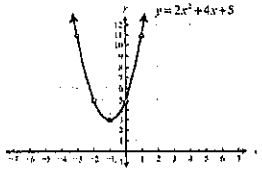
Does this parabola have a maximum or minimum?

- ☐ a) Maximum
- ☐ b) Minimum

18. 

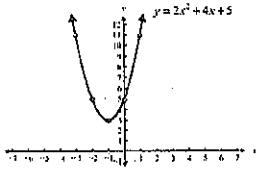
What is the y-intercept of this parabola?

- ☐ a) (–1, 3)
- ☐ b) (–3, 11)
- ☐ c) (–2, 5)
- ☐ d) (0, 5)

19. 

What is the vertex of this parabola?

- ☐ a) (–1, 3)
- ☐ b) (–3, 11)
- ☐ c) (–2, 5)
- ☐ d) (0, 5)

20. 

Where is the axis of symmetry for this parabola?

- ☐ a) x = –1
- ☐ b) x = 0
- ☐ c) y = 3
- ☐ d) x = –3

VanBundy - Alg 1

Key Features of a Quadratic

When a quadratic function is graphed, it is called a PARABOLA.
See below for an example of identifying key features of parabolas.

This graph has two x - intercepts at:
(-3,0) and (1,0) OR -3 and 1.
***also known as zeros or solutions.**

y-intercept: (0,3) or 3

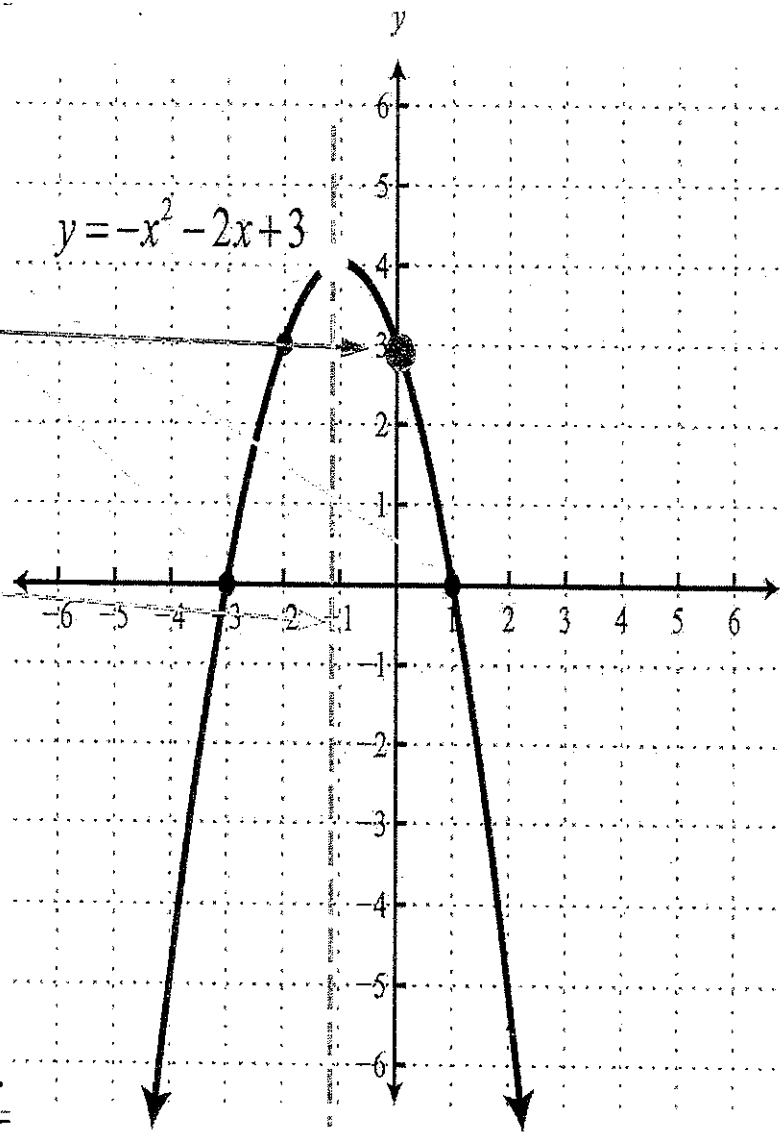
vertex: (-1,4) ***turning point**

Axis of Symmetry: x = -1

Minimum or Maximum (highest point): y=4

Range: $y \leq 4$
(maximum at 4 and will continue dow forever).

Domain: all real numbers
(graph will continue to the left & right forever).



NAME:_____ GEOMETRY - MRS. EPPRIGHT

Eppright
Geometry

SOLVING EQUATIONS - WEEK 1 REMOTE LEARNING

1 Solve for x.

$2x - 4 = 28$

$x =$

2 Solve for x.

$\frac{3}{4}x = 12$

$x =$

3 Solve for x.

$3(x - 2) = 15$

$x =$

4 Solve for x.

$4x - 8 = 2x - 12$

$x =$

5 Solve for x.

$2(x + 4) = 5(x + 4)$

$x =$

6 Solve for x.

$\frac{1}{2}x + 3 = 2x - 6$

$x =$

7 Solve for x.

$6x - 2x + 5 = 3x + 11 - 4$

$x =$

8 Solve for x.

$2(x - 3) - 9 = -2x + 13$

$x =$

9 Solve for x.

$-8x - 8 - 6 = 4x - 6x - 2$

$x =$

10 Solve for x.

$-5(x + 4) - 9 = 6$

$x =$

11 Solve for x.

$2(x + 3) = -6(x + 3)$

$x =$

12 Solve for x.

$\frac{2}{3}x + 6 = -12$

$x =$

13 Solve for x.

$-3x + 5 = -6x - 7$

$x =$

14 Solve for x.

$\frac{2}{3}x + \frac{2}{3}x = -28$

$x =$

15 Solve for x.

$7x + 8 - 4x = 2x - 6 + 1$

$x =$

Auten - Alg 2

Math Distance Learning

March 23-30

1. Solve for x. Hint: Factor as a first step; there will be two correct answers. Here is the video that helps you factor when the lead coefficient is not 1.

https://www.youtube.com/watch?v=r1JAJfmRG5w&t=7s

$2x^2 + 5x - 3 = 0$

2. Solve for t. Hint: Cube both sides.

3. Solve for u. Hint: Square both sides.

4. Solve for x. Hint: Please remember the limitations of the square root operation.

5. Solve for x. Hint: Factor the top of the fraction and simplify.

CONTINUE ON NEXT PAGE

6. Solve for x. Hint: Factor the top of the fraction and simplify.

7. Solve for the unknown variable. Hint: Cross multiply.

8. Solve for the unknown variable. Hint: Cross multiply.

9. What is the domain of the following function? Hint: What is the limitation in the input of the square root operation?

10. What is the domain of the following function? Hint: What is the limitation of dividing?

Watkins - Alg 2
Pre Cal

Math Distance Learning

March 23-30

1. Solve for x. Hint: Factor as a first step; there will be two correct answers. Here is the video that helps you factor when the lead coefficient is not 1.

https://www.youtube.com/watch?v=r1JAJfmRG5w&t=7s

$2x^2 + 5x - 3 = 0$

2. Solve for t. Hint: Cube both sides.

3. Solve for u. Hint: Square both sides.

4. Solve for x. Hint: Please remember the limitations of the square root operation.

5. Solve for x. Hint: Factor the top of the fraction and simplify.

CONTINUE ON NEXT PAGE

6. Solve for x. Hint: Factor the top of the fraction and simplify.

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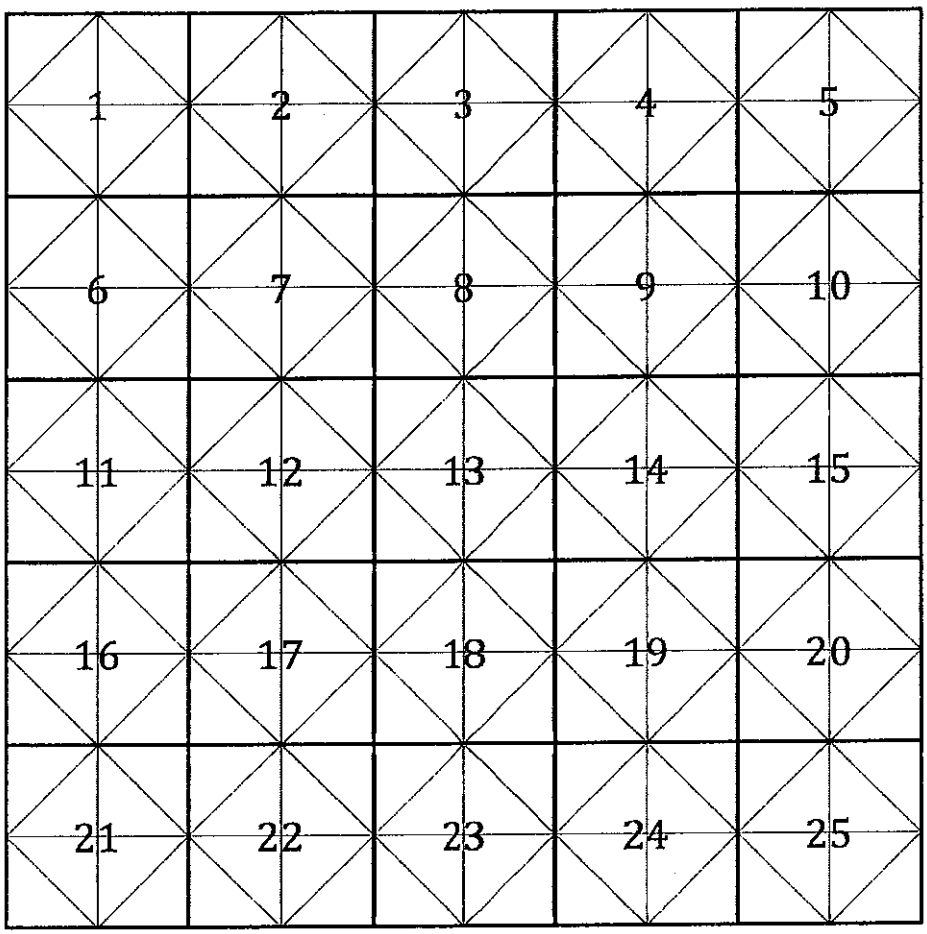
9. What is the domain of the following function? Hint: What is the limitation in the input of the square root operation?

10. What is the domain of the following function? Hint: What is the limitation of dividing?

Williams

Name_____ **Order of Operations #2**



 $7 - 4 + 9$

 $8 - 2 - 3$

 $23 + 1 - 5$

 $12 \div 4 \times 8$

 $36 \div 2 \div 3$

 $6 \times 9 \div 3$

 $3 + 6 \div 3$

 $11 - 2 \times 5$

 $7 + 6 \times 3$

 $(9 - 5) \times 5$

 $3 \times 2 + 4$

 $14 \div 2 - 3$

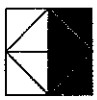
 $8 \times 2 - 1 \times 9$

 $(7 - 4) \times 5$

 $8 \div 2 + 18 \div 2$

 $(4 + 2) \div 3 + 7$

 $3 \times (3 + 4)$

 $22 + 3 - 6 \div 3$

 $5 \times 4 + 8 \div 4$

 $(21 + 1) \div 2$

 $20 - 2 - 2 \times 8$

 $17 - 3 + 9 \div 3$

 $4 \times (24 \div 6)$

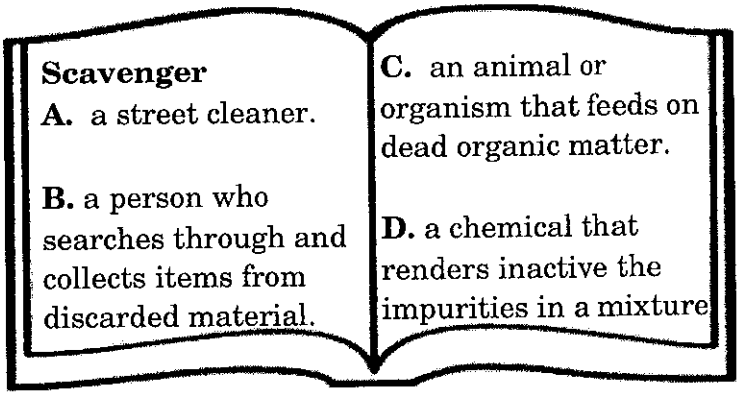
 $2 + 3 \times 7 - 9$

 $(9 - 2 + 9) \div 2$

Williams - English

Use CONTEXT CLUES to determine the correct DICTIONARY ENTRY

Read the dictionary entry for scavenger.



Scavenger

A. a street cleaner.

B. a person who searches through and collects items from discarded material.

C. an animal or organism that feeds on dead organic matter.

D. a chemical that renders inactive the impurities in a mixture

Which meaning of scavenger is used in the following paragraphs?

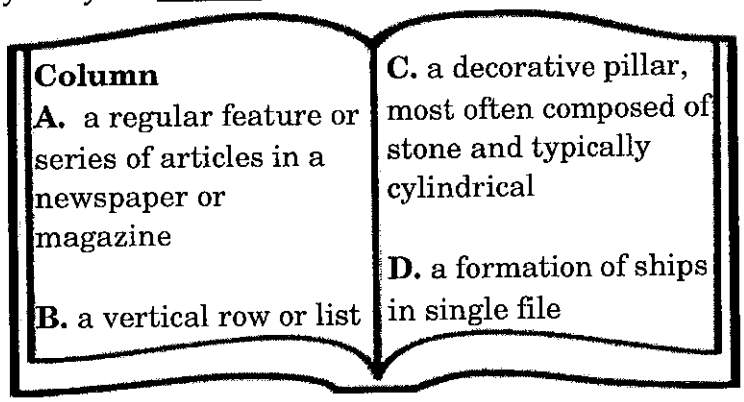
1. The most common scavenger is vulture. Vultures are birds that prey on sick, wounded and dead animals. It is very rare for a vulture to attack a healthy animal.

A. Definition A B. Definition B C. Definition C D. Definition D

2. It was a bone-chilling night in downtown Chicago. In a back alley, a homeless scavenger rifled through a dumpster to find a coat to keep him warm.

A. Definition A B. Definition B C. Definition C D. Definition D

Read the dictionary entry for column.



Column

A. a regular feature or series of articles in a newspaper or magazine

B. a vertical row or list

C. a decorative pillar, most often composed of stone and typically cylindrical

D. a formation of ships in single file

Which meaning of column is used in the following paragraphs?

3. For over 50 years, people have written to the "Dear Abby" column looking for personal advice. The Chicago Tribune and over 1200 publications have printed "Dear Abby" on subjects like "help, my boyfriend is addicted to gaming" or "my friend is a mooch".

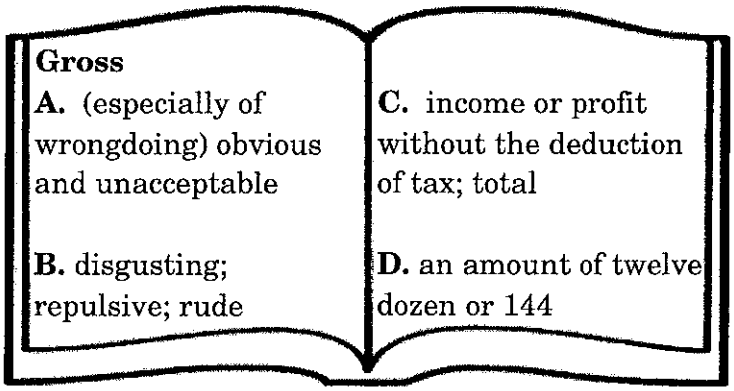
A. Definition A B. Definition B C. Definition C D. Definition D

4. In order to stay sharp, the navy runs drills regularly. You can hear a commanding officer shouting orders over the communications systems "Column! Diamond! Vee! Circle!" Then he times the fleet on how quickly they "fall in" position.

A. Definition A B. Definition B C. Definition C D. Definition D

Use CONTEXT CLUES to determine the correct DICTIONARY ENTRY

Read the dictionary entry for gross.



Gross

A. (especially of wrongdoing) obvious and unacceptable

B. disgusting; repulsive; rude

C. income or profit without the deduction of tax; total

D. an amount of twelve dozen or 144

Which meaning of gross is used in the following paragraphs?

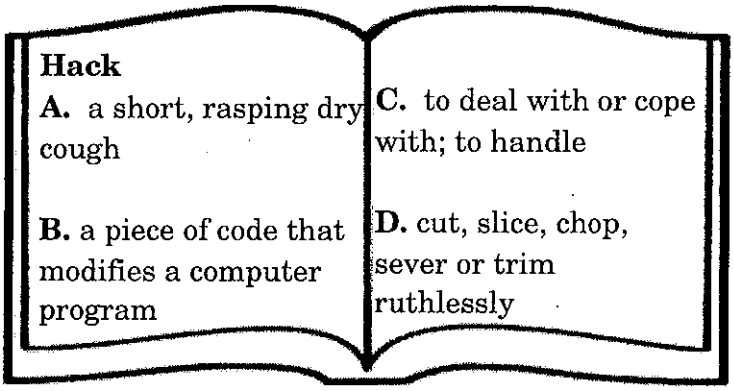
5. McDonald's feeds 68 million people per day (about 1% of the world's population). They sell about 75 hamburgers per second and make $24,000,000,000 in gross sales per year!

A. Definition A B. Definition B C. Definition C D. Definition D

6. Accountability for crimes against humanity and justice for victims involves a stronger focus on rehabilitation after torture, imprisonment with no trial and other gross human rights violations.

A. Definition A B. Definition B C. Definition C D. Definition D

Read the dictionary entry for hack.



Hack

A. a short, rasping dry cough

B. a piece of code that modifies a computer program

C. to deal with or cope with; to handle

D. cut, slice, chop, sever or trim ruthlessly

Which meaning of hack is used in the following paragraphs?

7. A machete is a long broad blade weapon used to hack thick brush and create pathways in the jungle.

A. Definition A B. Definition B C. Definition C D. Definition D

8. The frantic mother took her baby to the emergency room. He had an extremely high fever and a terrible hack.

A. Definition A B. Definition B C. Definition C D. Definition D