High School

Here you will find the Distance Learning Enrichment for **ALL high school English (9th-12th grade)**. We have decided that this would be the best way to keep your skills fresh. This week you will focus on reading skills. Passages and questions are supplied by ACT.

DIRECTIONS: The following passage is followed by several questions. After reading a passage, choose the best answer to each question and write the corresponding letter on your paper.
After you complete the questions, find your teacher's name below and follow the directions to submit your assignment.

Dibble:

Mrs. Lewis: Return a picture of your work to her email lewisc@dibble.k12.ok.us or text it to her.

Mrs. Meyers: In order to turn in the work either upload a google doc into the appropriate folder on Google Classroom, email, or text a picture to hert email address. jmyers@dibble.k12.ok.us

Lexington: All Lexington students may email a picture of your response to your English teacher at her school email address. Responses must be submitted before the next week's assignments come out in the paper. If you are already completing work in your teacher's Google Classroom, you do not have to do these additional assignments. I encourage you to work on them anyway if you have time!

dbox@lexington.k12.ok.us

dhayes@lexington.k12.ok.us

nennis@lexington.k12.ok.us

Washington: All Washington students can send their answers by taking a picture of your answers and then emailing that picture to your English teacher. You can also send those answers in Google Docs through Google Classroom, if you have access. This is due the same time all your other work is due.

bcastle@wps-isd.com

jenox@wps-isd.com

dlanham@wps-isd.com

A Family Heirloom

I live with my father in the summer, when I'm on vacation from school. Last week, he told me he had to go on a business trip 1) in connection with his work and that I'd be staying with his sister for three days. Although I love my aunt, I wasn't happy about the prospect of three days at her house with nothing to do. It turns out I was in for a surprise.

2) Soon after I arrived, my 3) aunt said she had a gift for me. "It belonged to my mother, your grandma. I'm sorry you never had the chance to know her," she told me. I was expecting my aunt to hand me a ring or a bracelet, or maybe an old book, but instead she led me outside. 4)

[1] She pointed to a corner of the yard, where a tortoise was calmly munching a dandelion. [2] Rosie must 5) have heard us talking, because she began to amble over to us. [3] She was over a foot long and about seven inches high. [4] 6) As soon as my aunt assured me that Rosie wouldn't snap or bite, I reached down to stroke her neck, admiring her brown and tan carapace, or upper shell. 7)

8) Rosie, it turns out is: a desert tortoise that my grandmother had 9) started raising over twenty years ago. My aunt said that she 10) would have checked with my parents, who each agreed that if I wanted to take responsibility for Rosie, I could take her home with me.

11) It's interesting that Rosie is older than I am. Tortoises are land-dwelling, vegetarian turtles. They can 12) experience the satisfaction of contentment through a diet of grass clippings, lettuce, broccoli, melons, and other 13) vegetables and fruit. They like to warm themselves in the sun but will burrow into the ground when they want to be safe and cool. I learned that I should build plywood enclosures in each of my 14) parents' backyards so that Rosie would be safe year-round. I learned that tortoises are among the most
endangered 15) families in reptiles. That means having a tortoise is a privilege, and I'm proud that my family has entrusted me with Rosie's care. By caring for Rosie I'll be able to share something with the grandma I never knew.

1. A. No change
   B. having something to do with his job
   C. that involved traveling to another city
   D. Omit the underlined portion

2. Which of the following alternatives to the underlined portion would NOT be acceptable?
   A. Not long
   B. A short time
   C. As soon
   D. Shortly

3. A. No change
   B. aunt, said
   C. aunt said,
   D. aunt said;

---

4. The writer is considering deleting the first part of the preceding sentence, so that the sentence would read: She led me outside.
If the writer were to make this change, the essay would primarily lose:
   A. Details that indicate to the reader what will eventually happen.
   B. The contrast between the gift and what the narrator had anticipated receiving..
   C. Examples of the kinds of gifts the narrator normally receives.
   D. An indication of how close the narrator and her aunt are.

5. A. NO CHANGE
   B. have heard of
   C. of heard about
   D. of heard

6. Which of the following alternatives to the underlined portion would not be acceptable?
   A. After my
   B. When my
   C. My
   D. Once my

7. Upon reviewing this paragraph and realizing that some information has been left out, the writer compose is the following sentence:
"This Rosie," she announced.
The sentence should most logically be placed after sentence:

   A. 1
   B. 2
   C. 3
   D. 4

8. A. No change
   B. Rosie, it turns out,
   C. Rosie, it turns out is
   D. Rosie it turns out, is

9. Which of the following alternatives to the underlined portion would not be acceptable?

   A. begun to raise
   B. started to raise
   C. started up raising
   D. begun raising

10. A. No change
   B. had checked
   C. would check
   D. must check

11. Given that all the choices are true, which one most effectively introduces the information that follows in this paragraph?

   A. No change
   B. I asked my aunt about Rosie's needs and care.
   C. Most tortoise species are now found only in Africa.
   D. Some giant tortoises weigh as much as 180 kg.

12. A. No change
   B. reap their necessary nutritional requirements from
   C. be kept as happy as a clam with
   D. be adequately nourished by

13. Which choice provides the most specific and precise information?

   A. No change
   B. things they could eat.
   C. edible items.
   D. fresh foods.

14. A. No change
   B. parent's backyards
   C. parents backyards
   D. parents backyards,

15. A. NO CHANGE
   B. families of
   C. family in
   D. family of

SCHOOLHOUSE NEWS

The Purcell Register

High School

Substitution Method	A method of solving systems of equations by substituting equations within one another.
Steps to Solve	• **Step 1:** Solve one equation for X or Y. • **Step 2:** Substitute this expression into the other equation and solve for the variable. • **Step 3:** Substitute your answer into the revised equation from Step 1 and solve for the other variable.
Examples	**Directions:** Solve each system by substitution.

1. $\begin{cases} y = 4x - 1 \\ y = 2x - 5 \end{cases}$

$4x - 1 = 2x - 5$
$2x - 1 = -5$
$2x = -4$
$x = -2$

$y = 2(-2) - 5$
$y = -4 - 5$
$y = -9$

$(-2, -9)$

2. $\begin{cases} y = 6x \\ 2x + 3y = -20 \end{cases}$

$2x + 3(6x) = -20$
$2x + 18x = -20$
$20x = -20$
$x = -1$

$y = 6(-1)$
$y = -6$

$(-1, -6)$

Elimination Method	A method for solving systems of equations by adding or subtracting to eliminate a variable.
Steps to Solve	• **Step 1:** Make sure the equations are lined up! • **Step 2:** Add or subtract the equations to eliminate the variable with common coefficients. • **Step 3:** Solve for the remaining variable. • **Step 4:** Substitute your answer into either original equation and solve for the other variable.
Examples	**Directions:** Solve each system by elimination.

1. $\begin{cases} y = 3x + 4 \\ y = x - 2 \end{cases}$ (−)

$0 = 2x + 6$
$-6 = 2x$
$-3 = x$

$y = -3 - 2$
$y = -5$

$(-3, -5)$

2. $\begin{cases} x + 4y = 13 \\ x - y = 3 \end{cases}$ (−)

$5y = 10$
$y = 2$

$x - 2 = 3$
$x = 5$

$(5, 2)$

3. $\begin{cases} 3x - 10y = 14 \\ 3x - 9y = 15 \end{cases}$ (−)

$-y = -1$
$y = 1$

$3x - 10(1) = 14$
$3x - 10 = 14$
$3x = 24$
$x = 8$

$(8, 1)$

Algebra 1 Name_____ ID: 1

Assignment Week 4 System of Equations

Period____

Solve each system by substitution.

1) $y = 4x - 2$
$-6x - 3y = -12$
A) $(4, 2)$ B) $(1, 2)$
C) $(-2, 4)$ D) $(4, -2)$

2) $y = 3x + 9$
$-4x + 6y = 12$
A) $(-3, 0)$ B) $(0, -8)$
C) No solution D) $(-8, 0)$

3) $-8x - 5y = 16$
$y = 3x + 6$
A) $(0, 2)$ B) $(-2, 0)$
C) $(-6, -2)$ D) $(-2, -6)$

4) $y = 2x - 3$
$4x - y = 7$
A) $(4, 2)$ B) $(4, 1)$
C) $(2, 1)$ D) $(1, 2)$

5) $7x - 3y = 13$
$y = -5x + 3$
A) $(-2, 1)$ B) $(1, 2)$
C) $(5, 1)$ D) $(1, -2)$

6) $5x + 2y = -19$
$y = x + 1$
A) $(6, -2)$ B) $(-7, 6)$
C) $(6, -7)$ D) $(-3, -2)$

Solve each system by elimination.

7) $-4x - 9y = 14$
$-9x + 9y = -27$
A) $(1, -2)$ B) $(-1, -2)$
C) $(-2, 1)$ D) $(1, 2)$

8) $-5x + 6y = -3$
$5x - 5y = -5$
A) $(-9, -8)$ B) $(9, 8)$
C) $(8, 9)$ D) $(-6, 8)$

9) $-3x + 7y = 0$
$3x - 4y = -9$
A) $(-7, -3)$
B) $(6, -3)$
C) Infinite number of solutions
D) $(-8, 3)$

10) $-x - 7y = -13$
$-7x + 7y = 21$
A) $(-1, 2)$ B) $(-9, -2)$
C) $(-9, 4)$ D) $(9, 4)$

11) $-9x + 2y = -8$
$-6x + 3y = -12$
A) No solution B) $(0, -4)$
C) $(0, 4)$ D) $(4, 0)$

12) $5x - 8y = 23$
$8x - 10y = 20$
A) $(-5, -6)$
B) Infinite number of solutions
C) $(-6, -5)$
D) $(5, -6)$

13) $4x - 4y = -8$
$-6x + 3y = 21$
A) $(-9, 3)$ B) $(-9, -3)$
C) $(9, -3)$ D) $(-5, -3)$

14) $-7x + 3y = 3$
$-8x + 5y = 16$
A) $(3, -8)$ B) $(3, 8)$
C) $(9, -8)$ D) $(9, 8)$

15) $6x + 9y = -15$
$4x + 8y = 0$
A) $(10, 2)$ B) $(-10, 5)$
C) $(-10, -5)$ D) $(9, 2)$

16) $-7x + 10y = 5$
$10x - 9y = -23$
A) No solution B) $(-5, -3)$
C) $(-3, -5)$ D) $(3, -5)$

Algebra 2 Name_____

Assignment Week 4 Systems of Equations

Solve each system by substitution.

1) $4x - y = 6$
$y = -3x - 6$
A) $(-6, 0)$ B) $(-6, 4)$
C) $(0, -6)$

2) $y = -2x + 7$
$6x - 5y = -19$
A) $(1, 5)$ B) $(-1, -5)$
C) $(1, -5)$

3) $-3x - 5y = -19$
$y = 5x - 13$
A) $(-3, 2)$ B) No solution
C) $(3, 2)$

4) $-3x - y = 0$
$y = 3$
A) $(-1, 3)$
B) Infinite number of solutions
C) $(-1, -3)$

5) $y = 2x + 11$
$-3x - 6y = 9$
A) $(-5, 1)$ B) $(1, 1)$
C) $(-1, -5)$

6) $-4x - 8y = 24$
$y = 3x - 17$
A) $(3, -5)$ B) $(4, -5)$
C) No solution

7) $y = -5x + 6$
$-x + 3y = 2$
A) No solution B) $(1, 1)$
C) $(-1, -1)$

8) $-3x + 4y = 0$
$y = 6$
A) $(8, 6)$
B) Infinite number of solutions
C) $(-6, 8)$

Solve each system by elimination.

9) $-7x - 5y = -7$
$10x + 9y = -3$
A) $(-7, 6)$ B) $(-7, -6)$
C) $(6, -7)$

10) $-7x - 5y = -5$
$-8x - 9y = 14$
A) $(5, -6)$ B) $(-5, 6)$
C) $(5, -4)$

11) $5x - 8y = 21$
$-8x + 5y = 21$
A) $(6, -7)$ B) $(-7, -7)$
C) $(10, 6)$

12) $-5x + 7y = -28$
$6x - 3y = -15$
A) $(-7, -9)$ B) $(9, -7)$
C) No solution

13) $-8x - 7y = 13$
$6x + 3y = -3$
A) $(-1, -3)$ B) $(1, -3)$
C) $(-8, -3)$

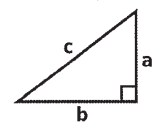
14) $4x + 10y = 2$
$-3x - 8y = -3$
A) $(7, 3)$ B) $(7, -6)$
C) $(-7, 3)$

15) $5x + 5y = -25$
$8x + 4y = -4$
A) $(9, -4)$ B) $(-9, 4)$
C) $(4, -9)$

16) $-4x - 5y = 2$
$5x + 3y = 4$
A) $(2, -4)$ B) $(2, -2)$
C) $(2, 4)$

Geometry Week 4 Review

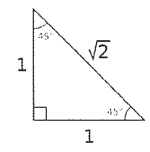
★ **Pythagorean Theorem** - In a right triangle the sum of the squares of the lengths of the legs are equal to the square of the length of the hypotenuse. .



$c^2 = a^2 + b^2$

★ **Special Right Triangles** - In a right triangle there are two special types of angle relationships used to solve for missing sides.

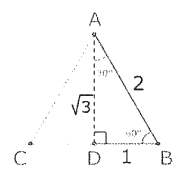
★ **45-45-90 Triangle Theorem** - In a 45-45-90 triangle, both legs are congruent, and the length of the hypotenuse is the length of a leg times √2.



Rules

Given- Looking for □	Equation
Leg - Leg □	Legs are equal to each other
Leg - Hypotenuse□	Leg times √2
Hypotenuse- Leg □	Hypotenuse divided by √2

★ **30-60-90 Triangle Theorem** - In a 30-60-90 triangle, The length of the hypotenuse is 2 times the length of the shorter leg, and the length of the longer leg is the length of the shorter leg times √3.



Rules

★ **ALWAYS FIND SHORT LEG 1ST**

Given- Looking for □	Equation
Long Leg- Short Leg□	Long Leg divided by √3
Hypotenuse - Short Leg□	Hypotenuse divided by 2
Short Leg - Long Leg □	Short Leg times √3
Short Leg - Hypotenuse □	Short Leg times 2

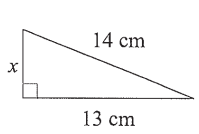
High School

Geometry - Dibble, Lexington, Washington

Week 4 Assignment

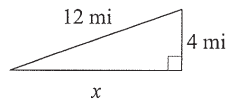
Find the missing side of each triangle. Leave your answers in simplest radical form.

1)



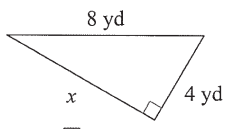
*A) $3\sqrt{3}$ cm B) $\sqrt{223}$ cm
C) $\sqrt{142}$ cm

2)



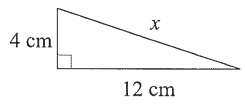
*A) $8\sqrt{2}$ mi B) $4\sqrt{7}$ mi
C) $4\sqrt{10}$ mi

3)



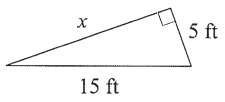
A) $4\sqrt{7}$ yd *B) $4\sqrt{3}$ yd
C) $4\sqrt{5}$ yd

4)



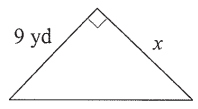
A) $8\sqrt{2}$ cm B) $4\sqrt{19}$ cm
*C) $4\sqrt{10}$ cm

5)



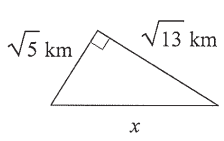
A) $5\sqrt{17}$ ft B) $5\sqrt{7}$ ft
*C) $10\sqrt{2}$ ft

6)



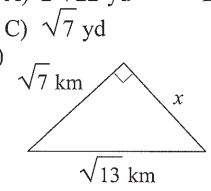
*A) $2\sqrt{22}$ yd B) $\sqrt{257}$ yd
C) $\sqrt{7}$ yd

7)



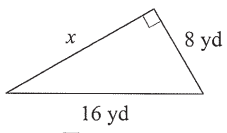
A) $2\sqrt{2}$ km *B) $3\sqrt{2}$ km
C) $\sqrt{31}$ km

8)



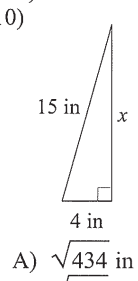
*A) $\sqrt{6}$ km B) 1 km
C) $2\sqrt{5}$ km

9)



*A) $8\sqrt{3}$ yd B) $8\sqrt{5}$ yd
C) $8\sqrt{7}$ yd

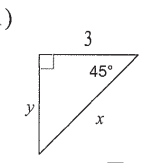
10)



A) $\sqrt{434}$ in B) $\sqrt{193}$ in
*C) $\sqrt{209}$ in

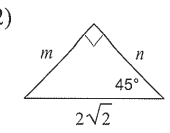
Find the missing side lengths. Leave your answers as radicals in simplest form.

11)



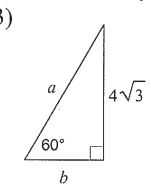
*A) $x=3\sqrt{2},\ y=3$
B) $x=\frac{3\sqrt{2}}{2},\ y=3$
C) $x=3\sqrt{2},\ y=2\sqrt{3}$

12)



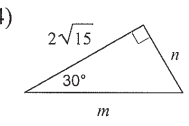
A) $m=\sqrt{3},\ n=\frac{4\sqrt{3}}{3}$
*B) $m=2,\ n=2$
C) $m=1,\ n=1$

13)



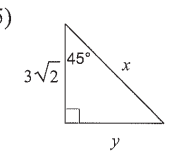
A) $a=8,\ b=4\sqrt{2}$
*B) $a=8,\ b=4$
C) $a=4\sqrt{2},\ b=4\sqrt{2}$

14)



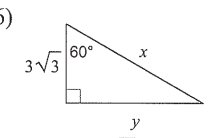
A) $m=2\sqrt{5},\ n=2\sqrt{5}$
*B) $m=4\sqrt{5},\ n=2\sqrt{5}$
C) $m=4\sqrt{5},\ n=2\sqrt{15}$

15)



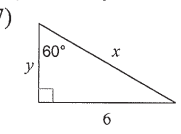
A) $x=12,\ y=2\sqrt{6}$
B) $x=12,\ y=3\sqrt{2}$
*C) $x=6,\ y=3\sqrt{2}$

16)



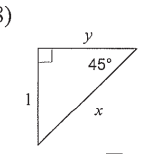
A) $x=12\sqrt{3},\ y=9\sqrt{3}$
*B) $x=6\sqrt{3},\ y=9$
C) $x=12\sqrt{3},\ y=9$

17)



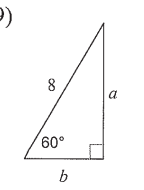
A) $x=2\sqrt{3},\ y=6$
*B) $x=4\sqrt{3},\ y=2\sqrt{3}$
C) $x=4\sqrt{3},\ y=4$

18)



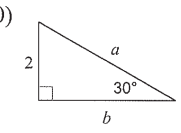
A) $x=2\sqrt{2},\ y=2$
B) $x=\sqrt{2},\ y=2$
*C) $x=\sqrt{2},\ y=1$

19)



A) $a=8,\ b=2\sqrt{2}$
B) $a=4\sqrt{3},\ b=2\sqrt{2}$
*C) $a=4\sqrt{3},\ b=4$

20)



A) $a=4,\ b=2\sqrt{6}$
B) $a=2\sqrt{3},\ b=\frac{8\sqrt{3}}{3}$
*C) $a=4,\ b=2\sqrt{3}$

Environmental Science

Lesson Objectives

List the characteristics used to describe a population. Identify factors that affect population growth. Describe both exponential and logistic growth. Identify factors that determine carrying capacity. Identify the limiting factors that depend on and do NOT depend on population density.

Lesson Summary

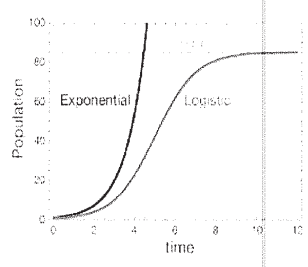
Describing Populations: Researchers study five important characteristics of a population:

- Geographic range is the area in which a population lives.
- **Population density** is the number of individuals per unit area.
- Population distribution is how individuals are spaced out in their range.
- Growth rate determines whether a population grows, shrinks, or stays the same.
- **Age structure** is the number of males and females of each age in a population.

Population Growth: Populations can grow, shrink, or stay the same size.

- Factors that increase population size include births and **immigration**, which is the movement of individuals into an area.
- Factors that decrease population size include deaths and **emigration**, which is the movement of individuals out of an area.

Exponential Growth: When conditions are ideal, the larger a population gets, the faster it grows. When a population's numbers grow larger with each generation, **exponential growth** is occurring. Ideal conditions include unlimited resources and absence of predation and disease.



Logistic Growth: Resources become less available as a population grows.

- **Logistic growth** occurs when population growth slows and then stops after a period of exponential growth has occurred.
- Population size stabilizes at the **carrying capacity**, the maximum number of individuals of a given species that an environment can support.

Limiting Factors: A **limiting factor** is a factor that controls the growth of a population.

- Some factors depend on the density of the population. Others do not.
- Acting separately or together, limiting factors determine an environment's carrying capacity.
- Limiting factors produce the pressures of natural selection.

Density-Dependent Limiting Factors:

- **Density-dependent limiting factors** operate strongly when the number of individuals per unit area reaches a certain point.
- Examples include: competition, predation and herbivory, parasitism and disease, stress and overcrowding

Density-Independent Limiting Factors: Some limiting factors do not necessarily depend on population size.

- **Density-independent limiting factors** depend on population density, or the number of organisms per unit area.
- Examples include: severe weather, natural diseases, and human activities.
- Some of these factors may have more severe effects when population density is high.

Environmental Science

1. Population density is the _____ of individuals per unit area.
2. How the individuals are spaced in their range is a population's _____.
3. Growth rate is how quickly a population _____ or _____ in size.
4. To find the _____ of a population, count the number of males and females of each age.

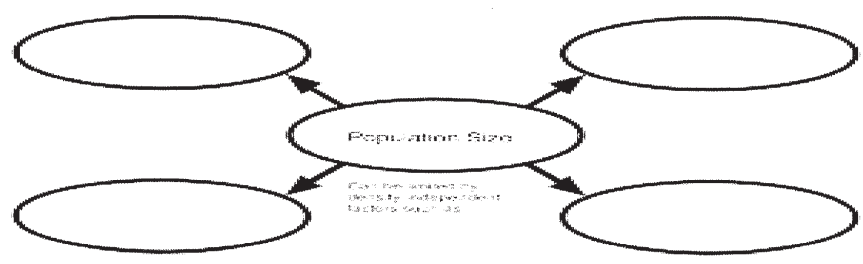
Write True or False for the questions below.

5. _____ If the death rate is less than the birthrate, the population is likely to shrink.
6. _____ Immigration increases population size.
7. _____ A high birth rate and immigration decrease population size.
8. _____ Populations grow if more individuals are born than die in a period of time.
9. Describe the conditions in which exponential growth occurs._____
10. What does the term carrying capacity refer to? _____
11. **Complete the table by looking at the picture of the Logistic graph on the resource page.**

Phases of Logistic Growth		
Phase	Phase name	Explanation
1	Exponential growth	
2		Population size increases slowly. The growth rate slows.
3	Growth stops	

Write True or False for the statements below.

12. _____ Limiting factors determine the immigration capacity of a population.
13. _____ A limiting factor controls the growth of a population.
14. _____Poulations grow too large in the absence of limiting factors.
15. _____Competition is an example of a limiting factor.
16. **Complete the graphic organizer with examples of density-independent limiting factors**.



SCHOOLHOUSE NEWS

The Purcell Register

High School

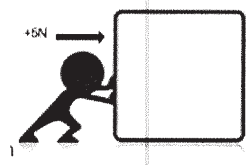
Physical Science : Forces

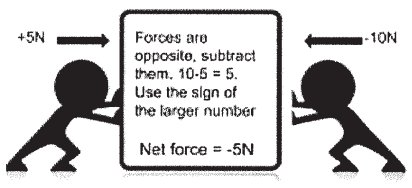
Lesson Objectives:
Describe force as a vector - define force - compare and contrast different types of forces - define friction - identify causes of friction - distinguish among the different types of friction - determine net force - define equilibrium

Lesson Summary:
A **force** is a push or a pull and has the ability to change motion. Forces can be created in many ways. For example, muscles create force to move your arm, movement of air creates forces we call wind, and gravity creates a downward force called weight. All forces come from one of the **Four Basic Forces**. The four basic forces are the Strong Nuclear force, Electromagnetic force, Weak force, and gravity.

Pretend you are working at the post office and someone comes in to mail a package. How do you know how much to charge them? You measure the *weight*. In the United States, the unit of force used to measure weight is the **pound** (lb). When you measure weight, what you are measuring is the force of gravity acting on that object. Even though we use pounds in our everyday lives, scientists prefer to use the **newton (N)** which is the metric unit of force. A newton is smaller than a pound (1 lb = 4.448 N). If you want to convert pounds to newtons, multiply the number of pounds by 4.448! For example, lets convert 5 lbs to newtons. 5 x 4.448 = 22.24 N

The direction of the force makes a big difference in what the force does. So, we make force a vector, we include a direction. Remember that a (+) or (-) just indicates direction. The force being applied to the box at the right is +5N, or 5N to the right. We can also have more than one force acting on the same object. If more than one force is present, forces going in the same direction combine. Forces going in opposite directions are subtracted from each other. This creates a net force on the object. A **net force** is the sum of all forces acting on the object. So now, we have two people pushing on the box, one in each direction. The net force is -5N because one side is stronger than the other. If the net force equals something other than zero, we have an **unbalanced force**. Unbalanced forces will cause a change in motion because this is a net force, and forces have the ability to change direction of motion. But what if they are the same size and going opposite directions? When this happens, we get a net force of zero which is a **balanced** force. Balanced forces cannot change the motion of the object because the net force, or overall force, is zero. This is also known as **equilibrium**.





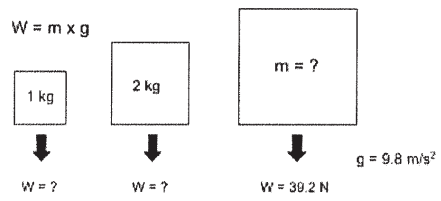
The force of gravity is called *weight*. On earth, gravity pulls down with an acceleration of 9.9m/s². The pull of gravity is not the same everywhere in the universe. On the moon it is much less which is why astronauts weigh less on the moon! This acceleration is part of the information that we need to calculate weight. The other part is mass. Mass is the amount of matter in an object. The base unit of mass is the gram, but that's a really small unit so we use kilograms (kg). A kilogram is equal to 1000 grams. To Calculate the weight of something, you have to use kilograms. As an example, let's find the weight of a 10 kg object. Weight equals mass times gravity so multiply 10 kg by 9.8 m/s² (gravity). Our object's weight is 98 N.

$$W = m \times g$$

Weight (N) = mass (kg) x gravity (m/s²)

If looking for mass, divide weight by the gravity

$$m = W/g$$



Find the weight of the first and second box, then the mass of the third box

Let's do one that is a little more challenging. What is the mass of a 75 N object? To find mass we divide weight by gravity, so 75 N divided by 9.8 m/s². The mass is 7.65 kg.

Last one, what is the mass of a 10 **lb** object? We are going to use the same equation as before (m=W/g) but we have an incorrect unit! Weight has to be in Newtons! So we have to change it. Remember that to change pounds to newtons we multiply by 4.448 (10 x 4.448 = 44.48N). Now that we have the correct unit of weight, plug in the numbers

m = W/g = 44.48N/9.8 m/s² = 4.5 kg

Find the weight/mass of the boxes on the left for some practice.

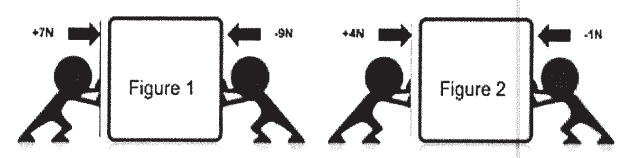
Answers: 9.8N, 19.6N, and 4 kg

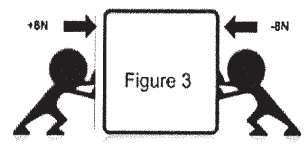
Friction is a force that resists motion and is found anywhere that two objects are in contact with each other. Friction is caused by microwelds, small areas of contact between the two objects that stick together. Objects that have rough edges create more microwelds and more friction. You can reduce microwelds by making the object smoother or adding a layer of lubricant (like oil). Some things, like sports cleats and brakes are designed to INCREASE friction. To start moving, you have to break the microwelds.

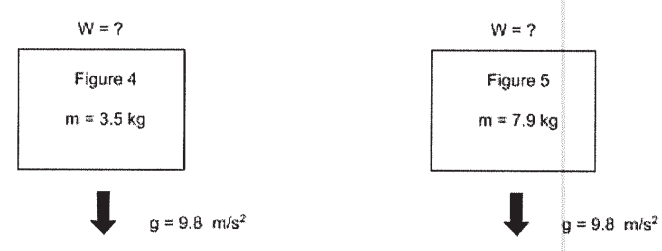
There are three different types of friction. **Static friction** resists the motion between two objects that are not moving. This is when you are trying to push a heavy box that doesn't want to start moving. **Sliding friction** resists the motion of an object moving (sliding) across the surface. This is the resistance as you are sliding a box across the floor. **Rolling friction** resists the motion when one object rolls on a surface. This friction occurs when a ball is rolling across the floor. Static friction is the strongest because all possible microwelds are formed. Sliding is the second strongest. Microwelds are forming as the object is sliding but some of them are being broken at the same time. Rolling friction is the weakest because only a small portion of the object actually touches the surface, so fewer microwelds are able to form.

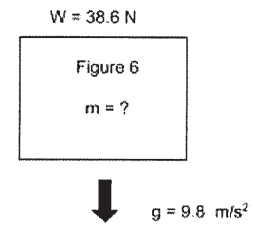
Physical Science : Motion

1) A _____ is a push or a pull.
2) _____ is the metric unit for weight.
3) The sum of all forces acting on an object is the _____.
4) If the net force does not equal zero, it is said to be a(n) _____ force.
5) A _____ force is one where the net force equals zero.
6) This type of force cannot change the motion of an object.
   a) Balanced
   b) Unbalanced
7) _____ is a force that resists motion.
8) The strongest type of friction is _____ friction.
9) What type of friction resists the motion of an object moving (sliding) across the surface?
10) The type of friction that creates the least amount of microwelds and friction is _____ friction.
11) What is the net force on the box in figure 1?
12) What is the net force on the box in figure 2?
13) Is the net force on the box in figure 3 balanced or unbalanced?
14) Convert 12 lbs to Newtons.
15) What is the value for the pull of gravity on earth?
16) What is the weight of the object in Figure 4?
17) What is the weight of the object in Figure 5?
18) What is the mass of the object in Figure 6?









Oklahoma History Assignment: Week 4

THE GREAT DEPRESSION IN OKLAHOMA

The Great Depression shook the United States to its social and economic foundations in the 1930's. Entire regions of Oklahoma and many key industries were economically depressed long before the stock market crash in 1929. As the rest of the nation's conditions improved after 1933, conditions in the state grew worse. Indeed, for many Oklahomans, some of the federal New Deal programs helped make the end of the 1930's the Depression's worst years.

Oklahoma oil production throughout the 20's and 30's far exceeded demand. Oil prices dropped as low as 10 cents a barrel. Oil boomtowns become ghost towns. Farm output exceeded demand and commodity prices collapsed. As more cattle, cotton, corn, and wheat were produced, less was paid for it, and farmers sank deeper into debt. Owners of half of Oklahoma's farms and ranches lost their property to debt in the 1930's. As a result, many of the state's cotton-growing sharecroppers and tenants were particularly hard hit.

Your assignment: use the information above and the internet to answer the questions below. If you need additional help, email your teachers for help. Write short answers/paragraphs about each question

1. Identify the reasons the Great Depression hit Oklahoma especially hard.
2. Explain why Oklahoma Indians rejected the Indian New Deal.
3. Assess at least three achievements of Robert S. Kerr as governor.

** Dibble students should email your answers to prince@dibble.k12.ok.us

Government Assignment Week 4

Foreign policy is a nation's set of plans and procedures for dealing with foriegn or other countries. It will reflect the country's political values and engaging with foreign countries is very complex.

The Five Goals of Foreign Policy

1. National security
2. Establishing free and open trade
3. Promoting world peace
4. Supporting democracy
5. Providing aid to people in need

For many years, **isolationism** was the main U.S. foreign policy. That means we tried to stay out of the affairs of other countries. After WWII, we adopted a policy of **containment** or stopping the spread of Communism. Today, the United States practices an **internationalist** approach which promotes cooperation between nations.

Tools of Diplomacy

- The United States has more than 160 embassies in foreign nations and attempts to keep international peace and order through **collective security** and **defense alliances** with other nations.
- Money is powerful foreign policy tool as well as **economic sanctions** or trade bans and restrictions on foreign aid

Executive Powers

- President is U.S. foreign policy leader and chief diplomat
- President has constitutional authority to issue foreign policy statements called presidential doctrines and the power to grant nations diplomatic recognition
- President is commander-in-chief of armed forces

Legislative Powers

Congress influences foreign policy in three ways:

- By introducing resolutions and directives
- By approving or denying funding requested by executive branch
- By providing advice and oversight to executive branch

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Government Week 4 Questions: Email the answers to the following questions to your teacher.

Choose which word completes the sentence:

1. For a long period, the United States mostly followed a policy of _____ with regard to world affairs. **(internationalism/isolationism)**
2. Treaties and _____ help to ensure collective security, an attempt to keep international peace and order. **(embassies/defense alliances)**
3. The Constitution grants _____ the power to declare war. **(congress/the president)**
4. Today the active role of the United States in world affairs can be described as _____. **(internationalist/isolationist)**
5. The president has the power to issue foreign policy statements, called _____, which guide the direction of U.S. foreign policy. **(presidential doctrines/executive mandates)**

Answer the following questions:

6. How does Congress's funding authority serve as a check on the president's foreign policy authority?
7. Why would a nation impose an economic sanction?
8. What is the advantage of belonging to a defense alliance?
9. What are some steps our government has taken during the COVID-19 pandemic that could have an impact on foreign policy?

US History: Week 4

Vietnam War

French Indochina

- The countries known today as Vietnam, Cambodia & Laos were collectively ruled over by the French starting in the late 1800s. The area was known as French Indochina.
- During World War II, the Japanese conquered the area and "liberated" the people. After the war was over, European nations attempted to reassert their right to rule over the area, but many Southeast Asians were sick of outside domination, and pushed for independence.
- Ho Chi Minh fought to gain independence from the French. His name was a revolutionary one meaning he who enlightens. Ho embraced communism and received aid from the USSR and China in his struggle against the French.
- In 1954, the Vietnamese nationalists won a huge victory over the French at Dien Bien Phu, liberating French Indochina.
- The subsequent peace treaty divided the nation of Vietnam into two parts — a communist government in the North (led by Ho Chi Minh), and a democratic government caught in the Cold War...
- The United States did NOT want to see Vietnam become a communist state. During the Cold War, the U.S. policy was one of containment — containing the spread in the South (led by Ngo Dinh Diem).
- Ho continued to fight to unify his country. He aided a group known as the Viet Cong — communist rebels in S. Vietnam to overthrow the government. of communism. The U.S. was also concerned about the Domino Theory in Southeast Asia. They feared that if Vietnam became a communist state, then so would Laos, Cambodia & other area nations.

- President Kennedy made the decision to send military "advisors" to help prop up the S. Vietnamese government. By 1968, there were 500,000 American troops in Vietnam.
- As American casualties mounted, the war became more and more unpopular at home. Soldiers struggled to fight a guerrilla war in unfamiliar territory. Finally, in 1969, the government began to withdraw troops. In 1973, Americans were gone. In 1975, the government of S. Vietnam fell to communist forces.

Results

- The Vietnam war raged on for nearly two years after the withdrawal of US troops. Eventually, the government of South Vietnam fell to the communists in 1975.
- The human toll for Vietnam was terrible. The military casualties reported from Hanoi (N. Vietnam) were estimated at 1.1 million, and another 500,000 wounded. The US army estimated that between 200,000 and 250,000 South Vietnamese soldiers died.
- Nearly 2 million civilians died in the conflict (in both North and South), and millions more were severely impacted by cancers and birth defects caused by the chemical defoliants used to deforest the jungles of Vietnam.

Email the answers to the questions below to your teacher.

1. Which nations were part of French Indo- china in the 1800s?
2. What happened in Southeast Asia during World War II and after?
3. Who was Ho Chi Minh?
4. Why did China & the USSR aid him?
5. What happened at Dien Bien Phu?
6. How did the peace treaty with the French impact Vietnam?
7. Define Viet Cong.
8. How was US involvement in Vietnam a product of the Cold War?
9. Describe the Domino Theory.
10. What was the largest extent of American involvement in Vietnam?
11. Why did American troops struggle?
12. Why did the US withdraw their troops?
13. What happened to South Vietnam after they did?
14. What were the military casualties in Viet- nam (both North & South)
15. What were the civilian casualties?

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EL CAPARAZÓN

Había una vez un muchacho que se llamaba Juan. Juan era el hijo de un jefe local. Juan estaba enamorado de una joven que se llamaba Marta. Ella era muy inteligente, bonita, y divertida, pero era muy pobre. Era más bonita e inteligente que todo el mundo. Pero, Juan y Marta tenían un problema. Juan ya tenía planes para casarse con otra muchacha--Carla. Ella era la hija de un comerciante rico. Era muy horrible y fea, pero tenía más dinero que Marta.

Juan no quería casarse con Carla. Solamente quería casarse con Marta. Un día, ellos tuvieron una idea. Ellos corrieron al bosque, fueron a la casa de un adivino muy inteligente y mágico. El adivino pensó en una solución y les explicó los detalles: "Esta noche, ustedes deben correr al bosque para visitar La Gran Tortuga. La Gran Tortuga tiene magia y puede protegerlos a ustedes. Vive en una choza."

La noche antes de la boda (de Juan y Carla), Juan y Marta buscaron la tortuga en el bosque. Caminaron por una senda en el bosque y encontraron la choza en el centro del bosque. Los enamorados vieron la choza y entraron en la choza. La Gran Tortuga tenía magia muy poderosa. Pero, había un problema. Los guerreros del pueblo habían visto a Juan y Marta. Los enamorados tenían miedo de los guerreros.

Usando su magia, la tortuga transformó a los enamorados en un caparazón para que pudieran estar juntos. Esto es como la tortuga recibió el caparazón.

adivino fortune teller
boda wedding
bosque forest
buscaron they looked for
caminaron they walked
caparazón shell
casarse to marry
centro center
choza hut
comerciante merchant
correr to run
corrieron they ran
deben should
detalles details
enamorado the loved one/lover
encontraron they found
entraron they entered
esto this
explicó s/he explained
fea ugly
fueron they went
guerreros warriors
había there was
habían they had
juntos together
joven young
llamaba s/he was called
magia magic
miedo fear
mundo world
pensó s/he thought
pobre poor
poderosa powerful
protegerles to protect them
pudieran they were able
pueblo town
puede s/he can
quería s/he wanted
recibió s/he received
rico rich
senda trail
solamente only
solución solution
tenía s/he had
tenían they had
tiene s/he has
tortuga turtle
transformó s/he transformed
tuvieron they had
vieron they saw
visitar to visit
visto seen
vive s/he lives

EL COCODRILO SIMPÁTICO

Hay un cocodrilo joven que se llama Jorge. Él es muy simpático y empático. Pero, todos los otros cocodrilos son antipáticos y nadie quiere jugar ni hablar con Jorge. Por eso, Jorge está muy triste y solo. Por ejemplo, una vez cuando un pájaro se cayó de un árbol, Jorge fue a ayudar al pájaro porque se sintió mal por el pobre pájaro. Pero cuando Jorge ayudó al pájaro, los otros cocodrilos se burlaron de Jorge y le gritaron "Jorge, ¿por qué eres tan raro y diferente?"

Otro día, Jorge ayuda a una serpiente que no puede nadar en la otra dirección de una cascada muy grande. Mientras Jorge ayuda a la serpiente, la cola de Jorge está atascada alrededor de un tronco y él va a la cascada. Jorge intenta nadar en la otra dirección de la cascada, pero él no puede. ¡Ay No! ¡Jorge desciende la cascada!

Pero al fondo de la cascada, Jorge ve a una cocodrila simpática que está ayudando a un caracol cruzar el lago. Jorge va a la cocodrila y le pregunta "¿Cómo te llamas? Mi nombre es Jorge." La cocodrila responde "Mi nombre es Liliana. ¡Mucho gusto!" Después de esto, Jorge y Liliana son mejores amigos y pasan mucho tiempo juntos.

Irededor around
antipáticos mean
árbol tree
atascada stuck
ayudar to help
burlaron they made fun of/mocked
caracol snail
cascada waterfall
cayó s/he fell
cocodrilos crocodiles
cruzar to cross
desciende s/he goes down
empático
fondo bottom
fue s/he went
gritaron they yelled
intenta s/he tries
joven young
jugar to play
juntos together
lago lake
mientras while
nadar to swim
nadie nobody
pasan they spend
pobre poor
pregunta s/he asks
pájaro bird
raro rare
responde s/he responds
serpiente snake
sintió s/he felt
triste sad
tronco tree trunk
va s/he goes
ve s/he sees

EL ACOSADOR DE MIKE

Había una vez un adolescente que se llamaba Mike. Era alto, delgado, pelirrojo, y muy guapo. Era muy joven. Tenía doce años. Tenía una novia que se llamaba Samantha. Ella era bonita, gorda y tenía pelo negro. Ellos vivían en Los Ángeles.

Pero Mike tenía un problema. Tenía un acosador.

Cuando iba a la escuela, siempre veía a su acosador allí. Veía a su acosador en el vestuario, en el laboratorio de química, y en la biblioteca. En el vestuario, se escondía en los armarios. En el laboratorio de química, explotaba químicos. En la biblioteca, destruía libros. Era un acosador muy malo.

El acosador en realidad no era malo - era un animal - era un león bebé. Era un león actor - era Simba en la película El Rey León.

Mike sabía que tenía que hacer algo. Mike iba a llamar a la policía, pero la policía solo arrestaba a las personas y no a los animales.

Entonces Mike llamó a Animal Kingdom en Orlando.

"¡Necesito ayuda por favor!"

Las personas de Animal Kingdom llegaron a Los Ángeles, pero Simba se escapó. Simba fue al puerto de Los Ángeles y tomó un crucero a Hawaii.

Simba llegó a Hawaii y fue inmediatamente a los volcanes. Quería nadar en los volcanes. Entonces, se murió. Adios Simba.

acosador stalker
adolescente teen
armarios lockers
arrestaba arrested
ayuda s/he helps
biblioteca library
bonita pretty
crucero cruise
delgado thin
destruía s/he used to destroy
doce ten
entonces then
era s/he was
escapó s/he escaped
escondía s/he used to hide
escuela school
explotaba s/he used to explode
favor please
fue s/he went
iba s/he was going to
inmediatamente immediately
joven young
laboratorio laboratory
llamar to call
llegaron they arrived
llegó s/he arrived
murió s/he died
muy very
nadar to swim
necesito I need
pelirrojo redhead
pelo hair
película movie
puerto port
que that
quería s/he wanted
química chemistry
químicos chemicals
realidad reality
rey king
sabía s/he knew
tenía s/he had
tomó s/he took
vestuario locker room
veía s/he would see
vivían they lived

Spanish I & II students

Each week, you will be provided three readings and an assortment of activities to complete with the readings. Choose two stories. Then choose two of the following activities to complete. Complete one activity for each story you read. You will turn in two assignments each week. Take a picture of your work and e-mail it to your Spanish teacher.

SWITCHING SUMMARIES 1. Write a six-sentence summary of the story **in Spanish**. • *Optional: Draw a six-frame comic / storyboard of the story. Write 1 of the sentences in each box and illustrate it.* 2. Translate each of the 6 summary sentences into English. Do **not** use an online translator or app!	**TRUE OR FALSE** Write 10 statements about the story *in English.* 5 of the statements must be true, and 5 must be false. Be sure to mark which answer is correct!	**MY PERSPECTIVE** Re-write the story from your own perspective: as if YOU were the main character in the story and you were telling the story about yourself.
DRAW 1-2-3 **Draw 1** picture to illustrate the story. **Add 2** speech bubbles to the picture (minimum 5 words in Spanish per speech bubble). **Write a 3**-sentence summary of your picture in Spanish.	**FULL TRANSLATION** Translate the story into English. Handwrite your translation on a piece of paper.	**VENN DIAGRAM** Create a Venn Diagram that compares this story with another story (one that you have already read ***or*** another one that you read now). **Fill in the Venn Diagram in ENGLISH.**
DICTIONARY Pick 10 new words that you learned. For each word… 1. Draw a picture of it. 2. Label the picture. 3. Write 1 sentence, in Spanish, that uses the word.	**IT'S A LIE!** Write a new version of the story. Change **every** detail so that every single thing in the new story is a "lie" about the old one.	**EXPANSION** Expand the story by adding one new sentence **in-between** each existing sentence. All writing should be done in SPANISH.

High School

about anxiety

1

you need to know

Anxiety is a common feeling usually described as "uneasiness" or "apprehension." At one time or another, everyone experiences anxiety. It is highly treatable and manageable.

The feeling of anxiety has been described with many different words. Here are some of them:

stress	edginess	apprehension	the jitters
worry	jumpiness	nervousness	the shakes
fear	butterflies	uneasiness	freaking out
panic	disquiet	agitation	angst

While everyone experiences anxiety, some of us feel it more often, some more deeply, some less frequently, and some less intensely. Your own experience of anxiety will depend on:

1. Genetics—how your parents, grandparents, and ancestors experienced anxiety
2. Brain chemistry—the type, amount, and movement of the chemicals working in your brain
3. Life events—the situations you are faced with in your life
4. Personality—how you look at and interpret things that happen to you

Genetics, brain chemistry, and life events are factors that you have little or no control over. Your personality, or the way you perceive and handle life events, is something you have a great deal of control over—probably more than you realize. For that reason, most of the activities in this book will focus on working with your personality, helping you to understand the way you look at and respond to life and suggesting ways to do it that will help you to lower your anxiety level.

more to do

Look back over the answers to your relatives' interview questions. Describe any patterns you see in the answers.

How do your relatives' answers compare to your answers?

What, if anything, do you better understand about yourself in relation to anxiety by having learned about your relatives?

CLAUDE MONET

[1840–1926]

Claude Monet was a French artist, best known for helping to start what is known as "Impressionism": a style of painting that uses thick, fast brush strokes and vibrant colors to show outdoor scenes.

Monet grew up in the French province of Normandy. As a young man he moved to Paris, where he began his career as an artist. Like many others at the time, Monet made many artist friends while in Paris and found it an excellent place to develop his skills and ideas. At the time, art schools in Europe were generally teaching very realistic painting. Most of the students would go to famous museums like the Louvre and try to copy the style of the Renaissance paintings there. Monet admired the old painters, but felt he could develop his own style and preferred to paint outdoor scenes of gardens and people. He became friends with the artist Édouard Manet, who liked to paint the same things, and together they would help invent Impressionism.

One of Monet's favorite ways of painting was to find a scene outside that he liked, then set up his easel and paints and spend the whole day making several paintings of the one scene. Each painting would look different because it was painted at a different time of day, with different light. The term "impressionism" came from one of the paintings Monet did like this, on a river bank in Paris, called "Impression of a Sunrise." The trees and figures in the painting are only sketched; the colors are what Monet thought were the most important part of the scene.

Monet's ideas about color and brush strokes, capturing what was happening in front of him at the very moment the picture was painted, caught on with many painters. Many artists used Monet's ideas to create their own styles, including Vincent Van Gogh. Monet's influence helped to change the way art was understood in Europe from that point on.

Impression of a Sunrise

Waterlilies on a Pond

Haystack at Sunset

MONET EXERCISE

Look outside in the afternoon, at sunset and at night. Notice what color the sky is at these times and color it in each box. Why are the colors different? If you were to doing a panting at each of these times of the day, how would they look different?

Morning or Afternoon

Sunset

Night

SCHOOLHOUSE NEWS
The Purcell Register
High School

GEORGIA O'KEEFFE [1887–1986]

Georgia O'Keeffe was an American painter. She was best-known for her paintings of the American Southwest.

Her career began in New York City, after mailing some of her drawings to an art dealer there. The dealer loved the drawings, calling them the most sincere things he had seen in a long time, and invited her to move to New York. Her early works were often abstract drawings, sometimes based on nature. In one of her paintings, she drew the inside of an iris flower. The rest of the flower couldn't be seen so the patterns and shapes of its inside appear to be a completely abstract design.

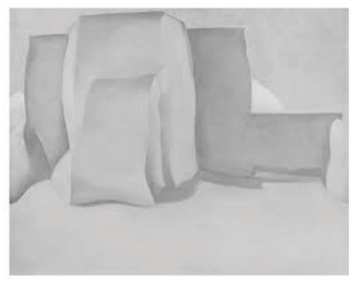
Later on, she relocated to New Mexico. She was fond of being alone and found the desert landscape beautiful and a great place to explore on her own. Her paintings became less abstract at that time, and she began to paint many desert scenes with smooth brush strokes and gentle colors. Some of her paintings had elements of surrealism in them, such as one where a ram's skull hovers above a New Mexico landscape. When asked what she was trying to show in her paintings and what the Southwest meant to her, she said "Such a beautiful, untouched lonely-feeling place, such a fine part of what I call the 'Faraway'. It is a place I have painted before … even now I must do it again."

O'Keeffe's work in the Southwest brought her into contact with the famous photographer Ansel Adams. Adams spent much of his career photographing the stark landscapes of the desert. There are a few scenery's that both O'Keeffe and Adams captured in similar ways; one with painting, and one with photography.

Georgia O'Keeffe had a long and successful career. She died at a very old age in Santa Fe. Her work has become an important part of American art.

Light of Iris

Ram's Head White Hollyhock Little Hills



Taos Church

GEORGIA O'KEEFFE EXERCISE

Georgia O'Keeffe's career was very long and she made many different kinds of paintings. Her relationship with the Southwest was always very important to her, though. Is there a place you have been that is meaningful to you? Try to draw a picture of it, and write a paragraph about where it is and what it was like.

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FRANCISCO GOYA [1746 –1828]

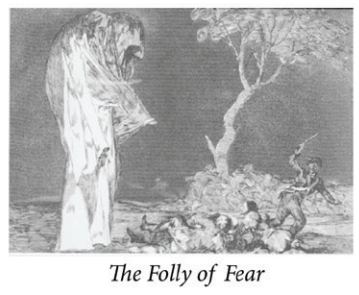
Francisco Goya was a Spanish painter and illustrator during the Romantic period in Europe. He was the court painter for the Spanish monarchy, and produced paintings and drawings that used images of horror to criticize his culture and the violent parts of human nature.

During the 17th and 18th centuries, a movement called the Enlightenment took hold of Europe. During that time, people became interested more in science than art. The Romantic period in Europe was a reaction against the Enlightenment: Many artists and citizens felt that the strict science of the Enlightenment had taken all the emotion out of art, and all the mystery out of nature. Romantic painters tried to create images that were mystical, strange and often disturbing. They often used horror as a way to show that emotion and human nature is more complex than the scientific thinkers of the Enlightenment gave it credit for.

In his work, Goya would sometimes create monsters and strange mythological creatures. In his drawing, *The Folly of Fear,* an enormous creature in a robe is sending a group of soldiers into a panic. His print, *The Sleep of Reason Produces Monsters*, shows a man sleeping at his desk surrounded by creatures from a nightmare. Goya often used horror in his paintings to criticize war and violence. He felt that war was wrong, and if people would not listen to their conscience then large-scale violence and war would always be a part of life. Later in his life, Goya printed a book of illustrations called *The Disasters of War*. In it were 80 drawings of extremely violent scenes showing the horror of war and what he thought were the causes of it. The book was not published until 35 years after his death because the government did not want it to be sold.

Goya's style of painting was much different than the painters that had come before him. He used thicker brush strokes and strong colors instead of fine detail. The Impressionist painters, Manet and Monet, would be inspired by this later on to create their own style.

Witches' Sabbath



The Folly of Fear

The Sleep of Reason Produces Monsters

Francisco Goya Exercise

Goya often used monsters to symbolize emotions like fear and horror. Many of his ideas for what a monster should look like came from images from The Bible and from Greek mythology. Using your own inspiration, draw your own monster in the box below. Write a paragraph about what it symbolizes on the back of this page.

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