Upshur County Snow Packet #3
8th Grade
2018-2019

Just because we're out of school is "sNOw" reason to stop learning!

Instructions: (Read ALL instructions carefully.)

- Packets will be passed out during Advisory.
- Complete Snow Packet #3 when instructed by Parent Link.
- Put the following heading on each assignment:
    - Your Name
    - Teacher's Name for that Subject
    - Class Period
- Return the completed Day 3 assignments to your subject teacher within two days of returning to school.
- Students with an IEP, who are in self-contained classes, will receive their assignments from their Special Education teacher. If they lose their assignments, they will do the packet that is posted on the school's website for their grade level.

Day 3:

Use the list below to check off your assignments:

Day 3:
_____Math: Study Guide and Intervention: Solving Mult. And Div. Equations (1 Pg.)
_____ELA (Reading and English): Harry and His Dog (4 Pages)
_____Science: Sound and Light (8 Pages)
_____Social Studies: Agriculture and Timber (3 Pages)

8th Grade Math

Snow Packet

Day 3

NAME _____ DATE _____ PERIOD _____

Study Guide and Intervention

Solving Multiplication and Division Equations

You can use the following properties to solve multiplication and division equations.

- *Multiplication Property of Equality* — If you multiply each side of an equation by the same number, the two sides remain equal.
- *Division Property of Equality* — If you divide each side of an equation by the same nonzero number, the two sides remain equal.

Example 1 Solve $19w = 114$. Check your solution.

$19w = 114$	Write the equation.
$\frac{19w}{19} = \frac{114}{19}$	Divide each side of the equation by 19.
$1w = 6$	19 ÷ 19 = 1 and 114 ÷ 19 = 6.
$w = 6$	Identity Property; $1w = w$

Check

$19w = 114$	Write the original equation.
$19(6) \stackrel{?}{=} 114$	Replace w with 6.
$114 = 114$ ✓	This sentence is true.

Example 2 Solve $\frac{d}{15} = -9$. Check your solution.

$$\frac{d}{15} = -9$$

$\frac{d}{15}(15) = -9(15)$ Multiply each side of the equation by 15.

$$d = -135$$

Check

$\frac{d}{15} = -9$	Write the original equation.
$\frac{-135}{15} \stackrel{?}{=} -9$	Replace d with −135.
$-9 = -9$ ✓	−135 ÷ 15 = −9

Exercises

Solve each equation. Check your solution.

1. $\frac{r}{5} = 6$
2. $2d = 12$
3. $7h = -21$
4. $-8x = 40$
5. $\frac{f}{8} = -6$
6. $\frac{x}{-10} = -7$
7. $17c = -68$
8. $\frac{h}{-11} = 12$
9. $29t = -145$
10. $125 = 5z$
11. $13t = -182$
12. $117 = -39k$

ELA Snow Packet Directions – 8th Grade

1.) Read the article.
2.) Answer the comprehension questions.
3.) Use the ACE method
   A- Answer and restate the question
   C- Cite evidence and use quotation marks when it is a direct quote
   E- Explain the evidence in your own words
4.) Using the ACE method, answer the short answers in at least 1-2 paragraphs with at least 5-8 sentences.
5.) Return the ELA packet to your English teacher within 2 days of your return.

HARRY AND HIS DOG

by Mary Russell Mitford

"Beg, Frisk, beg," said little Harry, as he sat on an inverted basket, at his grandmother's door, eating, with great satisfaction, a porringer of bread and milk. His little sister Annie sat on the ground opposite to him, now twisting her flowers into garlands, and now throwing them away.

"Beg, Frisk, beg!" repeated Harry, holding a bit of bread just out of the dog's reach. The obedient Frisk squatted himself on his hind legs, and held up his forepaws, waiting for master Harry to give him the tempting morsel.

The little boy and the little dog were great friends. Frisk loved him dearly, much better than he did any one else, perhaps, because he remembered that Harry was his earliest and firmest friend during a time of great trouble.

Poor Frisk had come as a stray dog to Milton, the place where Harry lived. If he could have told his own story, it would probably have been a very pitiful one, of kicks and cuffs, of hunger and foul weather.

Certain it is, he made his appearance at the very door where Harry was now sitting, in miserable plight, wet, dirty, and half starved. There he met Harry, who took a fancy to him, and Harry's grandmother, who drove him off with a broom.

Harry, at length, obtained permission for the little dog to remain as a sort of outdoor pensioner, and fed him with stray bones and cold potatoes and such things as he could get for him. He also provided him with a little basket to sleep in, the very same which, turned up, afterward served Harry for a seat.

After a while, having proved his good qualities by barking away a set of pilferers, who were making an attack on the great pear tree, he was admitted into the house, and became one of its most vigilant and valued inmates. He could fetch or carry either by land or water; would pick up a thimble or a ball of cotton, if little Annie should happen to drop them; or take Harry's dinner to school for him with perfect honesty.

"Beg, Frisk, beg!" said Harry, and gave him, after long waiting, the expected morsel. Frisk was satisfied, but Harry was not. The little boy, though a good-humored fellow in the main, had turns of naughtiness, which were apt to last him all day, and this promised to prove one of his worst. It was a holiday, and in the afternoon his cousins, Jane and William, were to come and see him and Annie; and the pears were to be gathered, and the children were to have a treat.

Harry, in his impatience, thought the morning would never be over. He played such pranks—buffeting Frisk, cutting the curls off of Annie's doll, and finally breaking his grandmother's spectacles—that before his visitors arrived, indeed, almost immediately after dinner, he contrived to be sent to bed in disgrace.

Poor Harry! There he lay, rolling and kicking, while Jane, William and Annie were busy gathering the fine, mellow pears. William was up in the tree, gathering and shaking. Annie and Jane were catching them in their aprons, or picking them up from the ground, now piling them in baskets, and now eating the nicest and ripest, while Frisk was barking gaily among them, as if he were catching pears, too!

Poor Harry! He could hear all this glee and merriment through the open window, as he lay in bed. The storm of passion having subsided, there he lay weeping and disconsolate, a grievous sob bursting forth every now and then, as he heard the loud peals of childish laughter, and as he thought how he should have laughed, and how happy he should have been, had he not forfeited all his pleasure by his own bad conduct.

He wondered if Annie would not be so good-natured as to bring him a pear. All on a sudden, he heard a little foot on the stair, "pitapat," and he thought she was coming. "Pitapat" came the foot, nearer and nearer, and at last a small head peeped, half-afraid, through the half-open door.

But it was not Annie's head; it was Frisk's—poor Frisk, whom Harry had been teasing all the morning, and who came into the room wagging his tail, with a great pear in his mouth; and, jumping upon the bed, he laid it in the little boy's hand.

1. Frisk came to Harry as a

   a. gift from Milton.
   b. gift from his mother.
   c. stray dog.
   d. gift from his grandmother.

2. Frisk won acceptance by

   a. chasing away pear thieves.
   b. picking up a thimble for Annie.
   c. picking up a ball of cotton for Annie.
   d. taking Harry's dinner to school.

3. Harry was excited about all of the following **except** that

   a. it was a holiday.
   b. his cousins were coming to visit.
   c. his mother and father were home.
   d. he was going to eat some pears.

4. Of the following which was **not** part of Harry's misbehavior that morning?

   a. hitting Frisk
   b. disfiguring Annie's doll
   c. breaking his grandmother's spectacles
   d. breaking Annie's doll

5. In the story, at what time is dinner probably served?

   a. at breakfast time
   b. midday
   c. in the evening
   d. late at night

6. Do you think someone told Frisk to bring Harry a pear, or did Frisk do it on his own initiative? What makes you think so?

7. Where do you think Harry's mother and father are? Why do you think so? Why do you think the writer of this story made you think so?

Day 3

Sound and Light

Mirrors, Lenses, and the Eye

Before You Read

What do you think? Read the two statements below and decide whether you agree or disagree with them. Place an A in the Before column if you agree with the statement or a D if you disagree. After you've read this lesson, reread the statements to see if you have changed your mind.

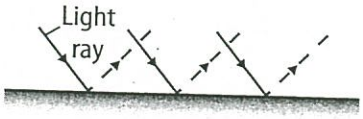
Before	Statement	After
	5. All mirrors form images that appear identical to the object itself.	
	6. Lenses always magnify objects.	

Read to Learn

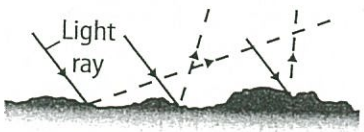
Why are some surfaces mirrors?

When you look at a smooth lake, you can see a sharp image of yourself reflected off the water's surface. If you look at the lake on a windy day, you do not see a sharp image. Why are these images different? A smooth surface reflects light rays traveling in the same direction at the same angle. This is called regular reflection, as shown in the figure below. Because the light rays travel parallel to each other before and after they reflect from the surface, the reflected light rays form a sharp image.

When a surface is not smooth, light rays still follow the law of reflection. When light rays traveling in the same direction hit the rough surface, they hit at different angles. The reflected light rays travel in many different directions. This is called diffuse reflection. Diffuse reflection does not form a clear image. Light rays in diffuse reflection are shown in the figure above.



Regular reflection



Diffuse reflection

Key Concepts

- What is the difference between regular and diffuse reflection?
- What types of images are formed by mirrors and lenses?
- How does the human eye enable a person to see?

Mark the Text

Summarize Write a phrase beside each paragraph that summarizes the main point of the paragraph. Use the phrases to review the lesson.

Visual Check

1. Explain In diffuse reflection, why are light rays reflected in different directions?

Think it Over

2. Predict How would the word *pen* appear if you looked at it in a plane mirror? Write the word as it would appear in the mirror.

_____

Visual Check

3. Recognize Look at the toy penguin in the middle figure. Where is the toy penguin in relation to the focal point?

_____

_____

Think it Over

4. Apply The focal length of a concave mirror is 3 m. If you place an object 3 m from that mirror, how will this object appear in the mirror?

_____

_____

_____

Types of Mirrors

When you look at a wall mirror, the image you see is about the same size that you are and right-side up. *A* **mirror** *is any reflecting surface that forms an image by regular reflection.* The shape of the mirror's surface determines how the image in the mirror looks.

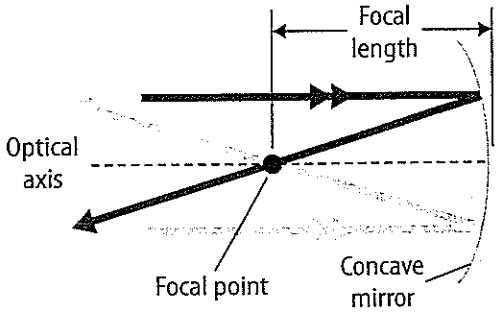
Plane Mirrors

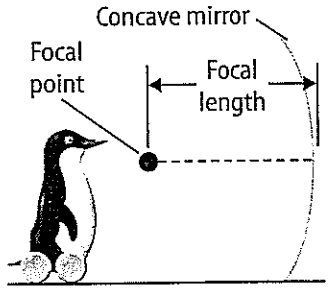
A plane mirror has a flat reflecting surface. The reflected image looks just like the object, except that the reflection is reversed left to right.

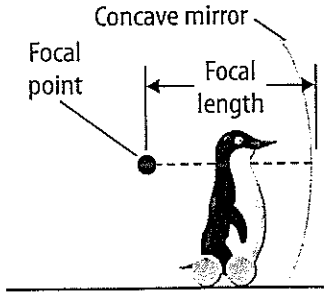
The size of the image in a plane mirror depends on how far the object is from the mirror. The image gets smaller as the object gets farther from the mirror.

Concave Mirrors

Concave mirrors, shown in the figures on the right, are reflecting surfaces that are curved inward. Notice the optical axis in the top figure. Light rays that are parallel to the optical axis reflect through one point—the focal point. The distance from the mirror to the focal point is the focal length.







The type of image that forms in a concave mirror depends on where the object is. If an object is more than one focal length from the mirror, as in the middle figure, the image will be upside down. If an object is closer than one focal length to the concave mirror, as in the bottom figure, the image will be right-side up. If the object is exactly at the focal point, no image will form.

Convex Mirrors

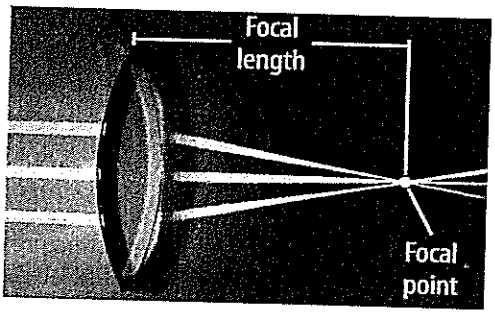
A convex mirror has a reflecting surface that is curved outward. The image in a convex mirror is always right-side up and smaller than the object itself. Store security mirrors and passenger-side car mirrors are usually convex mirrors.

Types of Lenses

Magnifying lenses, eyeglasses, and binoculars all use lenses to change the way an image of an object forms. *A* **lens** *is a transparent object with at least one curved side that causes light to change direction.* The more curved the sides of a lens, the more the light changes direction as it passes through the lens.

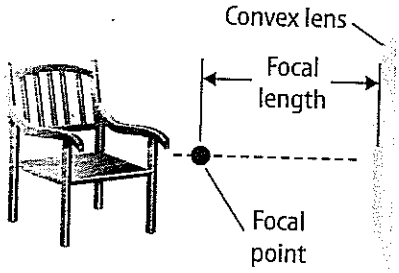
Convex Lenses

A convex lens is curved outward on at least one side. It is thicker in the middle than at its edges.

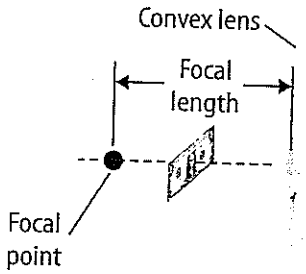


Like a concave mirror, a convex lens has a focal point and a focal length. The more curved the lens is, the shorter the focal length. A convex lens is shown in the figure above.

The image formed by a convex lens depends on where the object is, just like it does for a concave mirror. See the figure to the right. When an object is farther than one focal length from a convex lens, the image is upside down. When the chair in the figure is viewed through the lens, it will appear upside down.



When an object is closer than one focal length to a convex lens, the image is larger and right-side up. The image of the dollar bill in the figure to the right will appear larger and right-side up in the lens. Both a magnifying lens and a camera lens are convex lenses.



Key Concept Check

5. Describe How do the images formed by plane mirrors, concave mirrors, and convex mirrors depend on the distance of an object from the mirror?

Visual Check

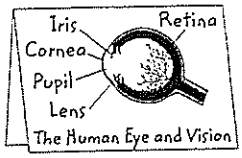
6. Describe Look at the bottom two figures to the left. Circle the object that will appear right-side up in the lens.

Key Concept Check

7. Consider How does the image formed by a convex lens depend on the distance of the object from the lens?

FOLDABLES

Make a half book to identify the parts of the eye and their function.



ACADEMIC VOCABULARY

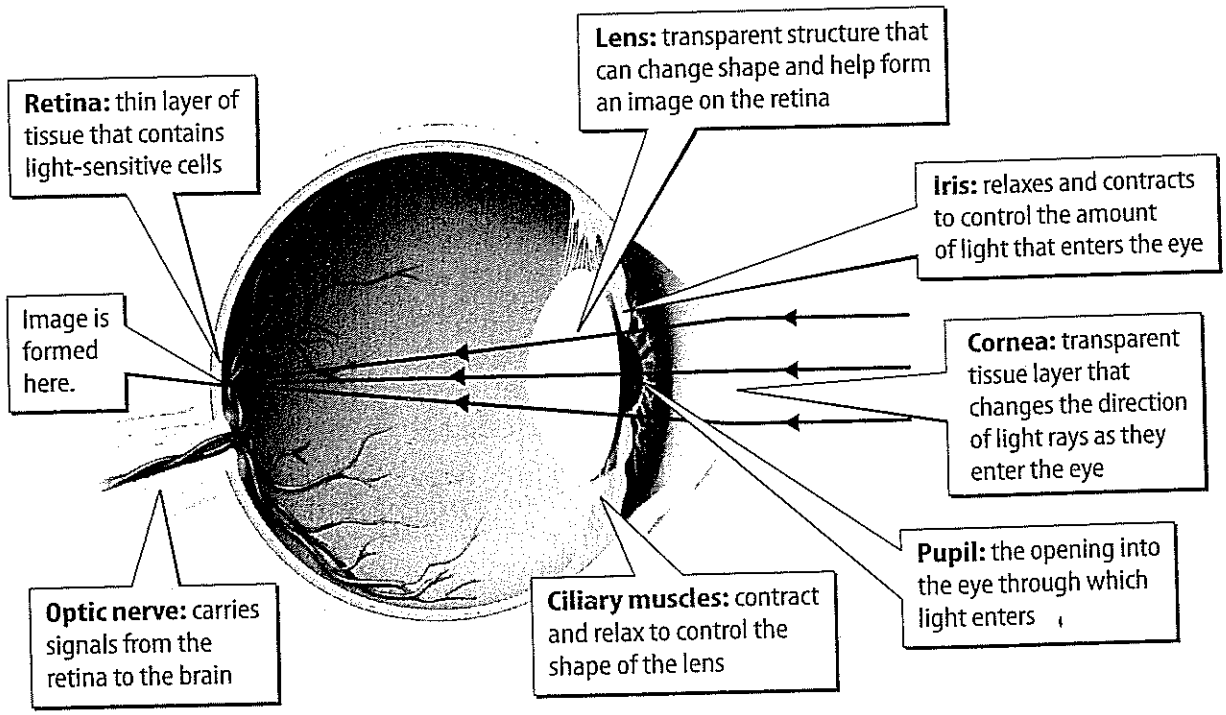
convert
(verb) to change from one form into another

Concave Lenses

A concave lens is curved inward on at least one side. It is thicker at its edges than it is in the middle. A concave lens forms an image that is upright and smaller than the object. Concave lenses along with other lenses are usually used in microscopes and telescopes.

Light and the Human Eye

The human eye contains lenses, as well as other parts, that enable a person to see. The structure of the human eye is shown in the figure below. To see an object, light waves from the object must travel through two convex lenses in the eye. The first lens is called the cornea. The second is simply called the lens. At the back of the eye is a thin layer of tissue called the retina. The lenses form an image of the object on the retina. Special cells in the retina convert the image into electrical signals. Nerves carry these signals to the brain.



Visual Check

8. Identify On which part of the eye is an image formed?

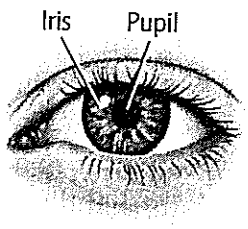
Cornea

Light waves first travel through the cornea (KOR nee uh). *The* **cornea** *is a convex lens made of transparent tissue located on the outside of the eye.*

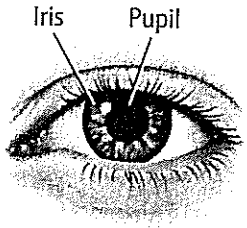
Most of the change of direction in light rays occurs in the cornea. Doctors can correct some vision problems by changing the cornea's shape. Locate the cornea in the figure above.

Iris and Pupil

The **iris** *is the colored part of the eye. The* **pupil** *is an opening into the interior of the eye at the center of the iris.* See the figure below. When the iris changes size, the amount of light that enters the eye changes. In bright light, the iris relaxes. The iris gets larger and the pupil gets smaller. Then less light enters the eye. In dim light, the iris contracts, or gets smaller, and the pupil becomes larger. Then more light enters the eye.



The iris relaxes in bright light.



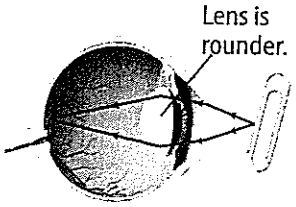
The iris contracts in dim light.

Visual Check

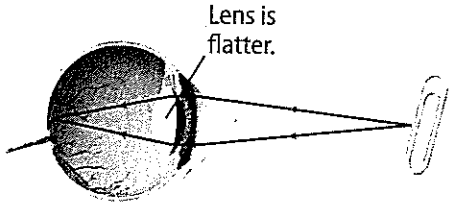
9. Highlight the part of the eye that controls the amount of light that enters the pupil.

Lens

Behind the iris is the lens. The lens is flexible, transparent tissue. The lens enables the eye to form a sharp image of nearby and distant objects. The muscles surrounding the lens change the lens's shape. To focus on nearby objects, these muscles relax and the lens becomes more curved. To focus on distant objects, these muscles pull on the lens and make it flatter. The figure below shows how the lens in the eye changes shape.



Lens becomes rounder and a sharp image forms of a nearby object.



Lens becomes flatter and a sharp image forms of a distant object.

Visual Check

10. Describe How does the shape of the lens change when the muscles relax?

Retina

The **retina** *is a layer of special light-sensitive cells in the back of the eye.* After light travels through the lens, an image forms on the retina.

On the retina, chemical reactions produce nerve signals. The optic nerve sends these signals to the brain. The retina has two types of light-sensitive cells—rod cells and cone cells.

Key Concept Check

11. Identify the parts of the eye that form a sharp image of an object and the parts that convert an image into electrical signals.

Think it Over

12. Contrast How are cone cells different from rod cells?

_____

_____

_____

Think it Over

13. Identify What property of light waves determines the type of cone that will respond to the light?

_____

Key Concept Check

14. Explain Why do you experience the sensation of color?

_____

_____

_____

Rod Cells There are more than 100 million rod cells in a human retina. Rod cells are sensitive to low levels of light. These cells enable you to see objects in dim light. However, the signals that rod cells send to the brain do not enable you to see colors.

Cone Cells A retina contains over 6 million cone cells. Cone cells make it possible for you to see colors. However, cone cells need brighter light to work than rod cells do. In dim light, only rod cells function. For this reason, objects seem to have no color in very dim light.

The responses of cone cells to light waves with different wavelengths enable you to see different colors. The retina has three types of cone cells. Each type responds to a different range of wavelengths. This means that different wavelengths of light cause each type of cone cell to send different signals to the brain. Your brain interprets the different combinations of signals from the three types of cone cells as different colors.

In some people, not all types of cone cells work properly. These people cannot detect certain colors. This condition is commonly known as color blindness.

The Colors of Objects

The objects you see around you are different colors. Why do you see a banana as yellow instead of red? Most objects do not give off, or emit, light. Instead, they reflect light. When an object is not a light source, its colors depend on the wavelengths of the light waves it reflects.

Reflection of Light and Color

When light waves of different wavelengths strike an object, the object absorbs some light waves and reflects others. The materials that make up the object determine the wavelengths of light that the object absorbs or reflects.

For example, a red rose reflects light waves with certain wavelengths and absorbs all other wavelengths of light. When the reflected light waves enter your eye, they cause cone cells in your retina to send certain nerve signals to your brain. These signals cause you to see the rose as red.

A banana absorbs and reflects different wavelengths of light than a red rose does. The reflected wavelengths cause cone cells to send different signals to your brain. These signals cause you to see the banana as yellow instead of red.

Light waves have no color. Color is a sensation produced by your brain when light waves enter your eyes.

The Color of Objects that Emit Light

Some objects, such as the Sun, lightbulbs, and neon lights, emit light. The color of an object that emits light depends on the wavelengths of the light waves it emits. For example, a red neon light emits light waves with wavelengths that you see as red.

White Light—A Combination of Light Waves

You might have noticed at a concert that the colors of objects on stage depend on the colors of the spotlights. A shirt might appear blue when a blue or white spotlight shines on it. The same shirt might appear black when a red spotlight shines on it.

Light that you see as white is actually a combination of light waves of many different wavelengths. When white light travels through a prism, light waves with different wavelengths spread out after passing through the prism and form a color spectrum. They spread out because the different wavelengths of light change direction by different amounts when they move into and out of the prism.

Changing Colors

The color of an object depends on the wavelengths of light it reflects. A blue shirt will appear to be different colors when different spotlights shine on it. When white light strikes the shirt, the shirt reflects only the wavelengths that you see as blue. It absorbs all other wavelengths of light. The shirt appears blue under a blue spotlight because the shirt reflects the blue light.

But when red light strikes the same shirt, the shirt absorbs nearly all of the light. Almost no light is reflected. This causes the shirt to appear black. An object appears black when it absorbs almost all light waves that strike it.

Think it Over

15. Contrast How is light that is white different from light that is red or blue?

_____

_____

_____

Think it Over

16. Describe If an object absorbs all the wavelengths of light that strike it, how does the object look?

_____

Mini Glossary

cornea (KOR nee uh): a convex lens made of transparent tissue located on the outside of the eye

iris: the colored part of the eye

lens: a transparent object with at least one curved side that causes light to change direction

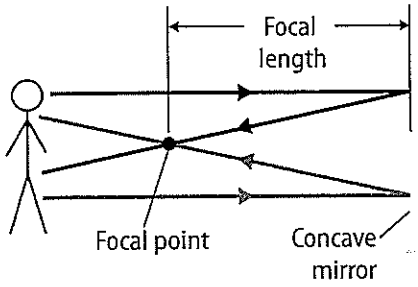
mirror: any reflecting surface that forms an image by regular reflection

pupil: an opening into the interior of the eye at the center of the iris

retina: a layer of special light-sensitive cells in the back of the eye

1. Review the terms and their definitions in the Mini Glossary. Write one or two sentences that describe where light waves go after they enter your eye.

2. The diagram below shows the path of reflected light from a concave mirror. How will this person appear in the mirror? Explain why.



3. Contrast regular and diffuse reflection.

What do you think NOW?

Reread the statements at the beginning of the lesson. Fill in the After column with an A if you agree with the statement or a D if you disagree. Did you change your mind?

Connect ED

Log on to ConnectED.mcgraw-hill.com and access your textbook to find this lesson's resources.

END OF LESSON

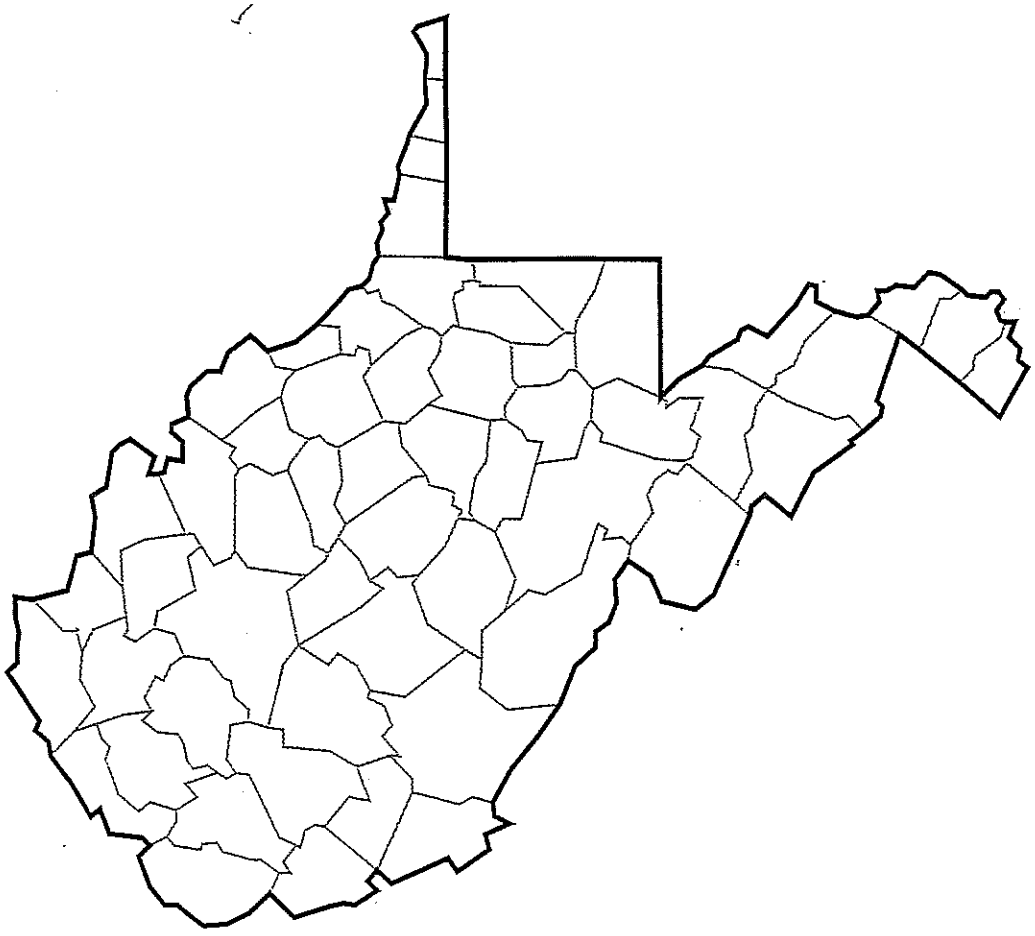
8th Grade WV History
Snow Day #3
Complete front and back.

Name:_____

Agriculture and Timber

Directions: Label the counties on the outline map. Create a symbol for each of the products identified in the chart. Place each symbol in the counties where the item is found. (See attached map.)

Product	Symbol	Where Found
Apples		Berkeley, Hampshire, Jefferson, Morgan
Corn		Berkeley, Hardy, Jefferson, Mason, Monroe
Hay		Berkeley, Greenbrier, Hampshire, Harrison, Jefferson, Mason, Monroe, Pendleton, Preston, Randolph
Peaches		Berkeley, Hampshire, Jefferson, Morgan
Timber		Braxton, Pocahontas, Randolph, Upshur
Tobacco		Cabell, Jackson, Lincoln, Mason, Monroe, Putnam
Wheat		Berkeley, Hardy, Jefferson, Mason, Monroe, Morgan



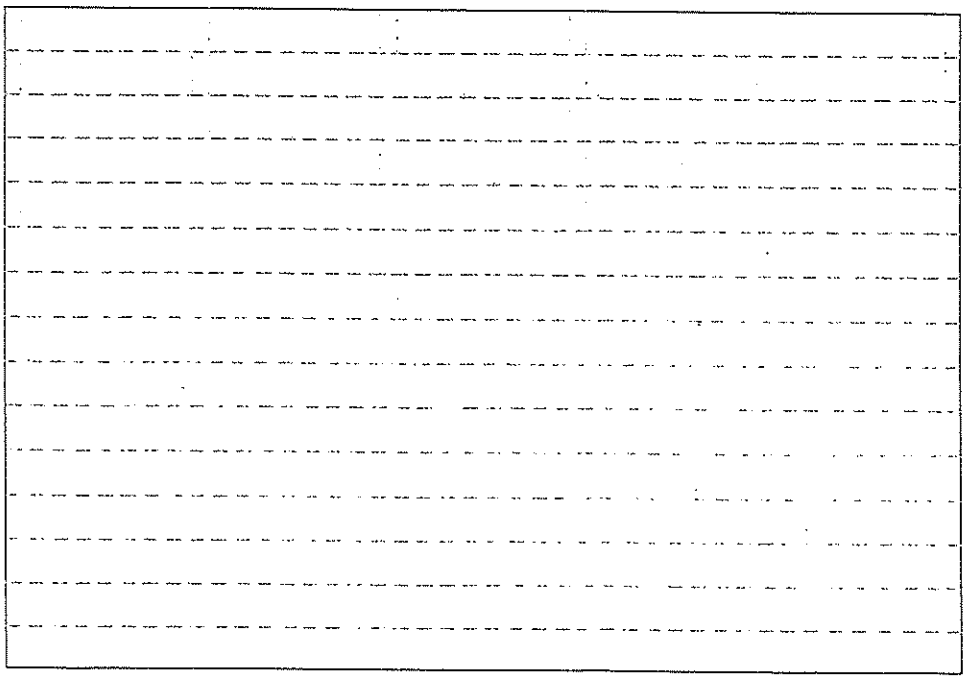
Name:_____

Using the Census

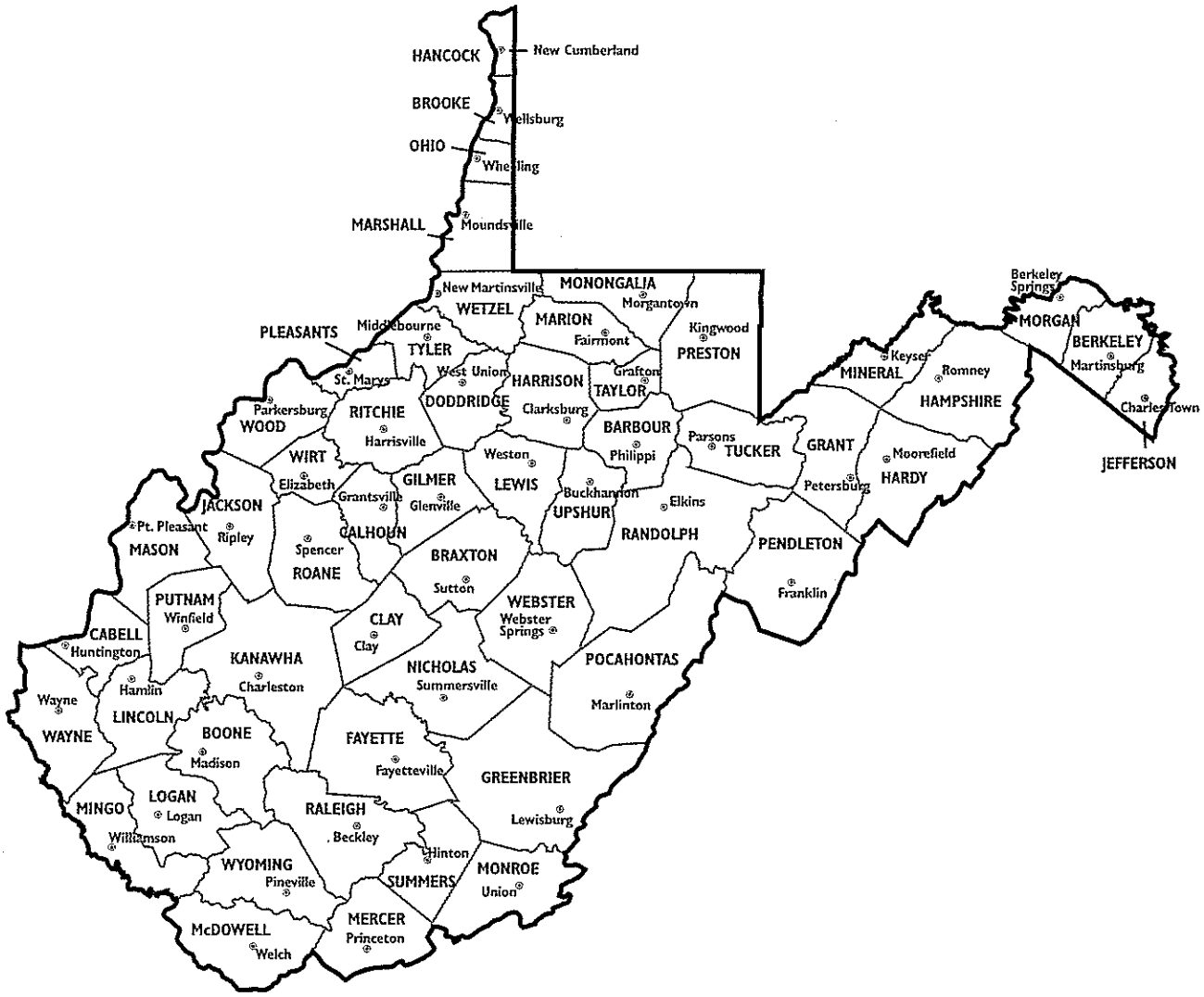
Directions: Every ten years, the United States Census provides population figures and other information about our citizens. According to the 2000 Census, West Virginia has a population of 1,808,344. The chart shows the breakdown of the state's population by ethnic group.

White	1,718,777
African American	57,232
American Indian and Alaska Native	3,606
Asian Indian	2,856
Chinese	1,878
Japanese	887
Korean	857
Vietnamese	379
Filipino	1,495
Other Asian	977
Native Hawaiian and other Pacific Islander	400
Mexican	4,347
Puerto Rican	1,609
Cuban	453
Other Hispanic	5,870

1. What percentage of the state's population is white?
2. Excluding African American and the "other" categories, what are the two largest ethnic groups?
3. Create a bar graph showing the numbers of specific minorities living in West Virginia in 2000, exclude White and African American and "Other."



Map 11


HANCOCK
New Cumberland
BROOKE
Wellsburg
OHIO
Wheeling
MARSHALL
Moundsville
MONONGALIA
Morgantown
New Martinsville
WETZEL
MARION
Fairmont
Kingwood
PRESTON
PLEASANTS
Middlebourne
TYLER
West Union
HARRISON
Clarksburg
TAYLOR
Grafton
St. Marys
Parkersburg
WOOD
RITCHIE
Harrisville
DODDRIDGE
BARBOUR
Philippi
Parsons
TUCKER
WIRT
Elizabeth
Weston
GILMER
Grantsville
Glenville
LEWIS
Buckhannon
UPSHUR
Elkins
RANDOLPH
JACKSON
Pt. Pleasant
Ripley
MASON
CALHOUN
Spencer
ROANE
BRAXTON
Sutton
PUTNAM
Winfield
CLAY
Clay
WEBSTER
Webster Springs
CABELL
Huntington
KANAWHA
Charleston
NICHOLAS
Summersville
POCAHONTAS
Marlinton
Wayne
Hamlin
LINCOLN
WAYNE
BOONE
Madison
FAYETTE
Fayetteville
GREENBRIER
Lewisburg
MINGO
Williamson
LOGAN
Logan
RALEIGH
Beckley
Hinton
WYOMING
Pineville
SUMMERS
MONROE
Union
McDOWELL
Welch
MERCER
Princeton
Berkeley Springs
MORGAN
BERKELEY
Martinsburg
Keyser
Romney
MINERAL
HAMPSHIRE
Charles Town
JEFFERSON
GRANT
Moorefield
Petersburg
HARDY
PENDLETON
Franklin