

6th Grade Maroon and Gold - NTI Day 12 Checklist

Required Assignments: The following assignments should be completed for NTI Day 12. These assignments are required for all students!

_____ MATH - Types of Data

_____ ENGLISH LANGUAGE ARTS - Complete Bell Work. Read the play: "The Birthmark." Do the Vocabulary: The Birthmark. Answer the Critical Thinking Questions 1-5 using the RACE method

_____ SOCIAL STUDIES - Review the charts "Democracy in Athens," "Legislative, Executive, Judicial" and "Rights and Responsibilities of US Citizens". Use these charts to complete the Venn Diagram and questions 1-2 on the back of the Venn Diagram.

_____ SCIENCE - Continue the moon phase calendar. Read the "Phases, Eclipses, and Tides" Section Summary and complete the Section 1.2 Review and Reinforcement.

_____ EXPLORE - See explore packet for directions and assignments.

Optional Assignments: The following assignments are optional. We encourage you to complete at least some of these assignments each day.

_____ Read for 20 minutes - either to yourself or to a younger sibling!

_____ Complete lessons in Edmentum

Account: HCBOE2

Login: Lightspeed username (for example, kwhalen2026)

Password: Lightspeed password

_____ Join the NEW NTI Day Google Classrooms and complete the supplemental activities posted there.

Social Studies code: qzaivku

Science code: dadch3d

ELA code: p6yh3ma

{Most Important Contact List}

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6th Grade Maroon Team

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Lesson 7.1 Asking Statistical Questions

A **statistical question** has answers that will vary.

"How old are students in my school?" is a statistical question because not every answer will be the same.

"How old am I?" is not a statistical question because there is only one answer.

Read each question and write *statistical* or *not*.

a

1. How tall are the students in my class?

2. What grades did students score on the test?

3. How many marbles are in the jar?

4. What was the difference in rainfall between March and April?

5. Will I score a basket in the game tonight?

b

What does this apple cost?

How fast can dogs run 100 yards?

Does a chocolate bar weigh more than a pack of jelly beans?

How many miles can cars travel on a gallon of gas?

How often do adults eat breakfast?

Example 3: Types of Data

Read Carefully

We use two types of data to answer statistical questions: numerical data and categorical data. If you recorded the ages of 25 baseball cards, we would have numerical data. Each value in a numerical data set is a number. If we recorded the team of the featured player for each of 25 baseball cards, you would have categorical data. Although you still have 25 data values, the data values are not numbers. They would be team names which you can think of as categories.

Exercises 6–7

6. Identify each of the following data sets as categorical (C) or numerical (N).
- Heights of 20 sixth graders _____
 - Favorite flavor of ice cream for each of 10 sixth graders _____
 - Hours of sleep on a school night for each of 30 sixth graders _____
 - Type of beverage drunk at lunch for each of 15 sixth graders _____
 - Eye color for each of 30 sixth graders _____
 - Number of pencils in the desk of each of 15 sixth graders _____

Warm Up #226

6.SP.A1

What is a *statistical question*? It's a question that can be answered by *collecting data*, and you expect to collect a *variety of answers*.

Check all that are statistical questions:

- How many students are in Mrs. Smith's class?
- How many calories did each student have for breakfast today?
- Who won the women's gold medal in figure skating last year?
- What are the heights of the trees on the playground?

Jared wants to know how fast each student in his gym class can run the 40-yard dash.

6.SP.B.5.B

How could he collect the data to answer this question?

What units would he use to label the data?

What other units can be used to represent time?

Lesson Summary

Statistics is about using data to answer questions. In this module, the following four steps summarize your work with data:

- Step 1: Pose a question that can be answered by data.
- Step 2: Determine a plan to collect the data.
- Step 3: Summarize the data with graphs and numerical summaries.
- Step 4: Answer the question posed in Step 1 using the data and summaries.

A statistical question is one that can be answered by collecting data and where there will be variability in the data.

Two types of data are used to answer statistical questions: numerical and categorical.

Problem Set *These are not Multiple Choice Questions. Answer Each letter.*

1. For each of the following, determine whether the question is a statistical question. Give a reason for your answer.

Example a. How many letters are in my last name? Not Statistical. IKTB the question is about 1 per

- b. How many letters are in the last names of the students in my sixth-grade class?
 - c. What are the colors of the shoes worn by students in my school?
 - d. What is the maximum number of feet that roller coasters drop during a ride?
 - e. What are the heart rates of students in a sixth-grade class?
 - f. How many hours of sleep per night do sixth graders usually get when they have school the next day?
 - g. How many miles per gallon do compact cars get?
2. Identify each of the following data sets as categorical (C) or numerical (N). Explain your answer.
- a. Arm spans of 12 sixth graders
 - b. Number of languages spoken by each of 20 adults
 - c. Favorite sport of each person in a group of 20 adults
 - d. Number of pets for each of 40 third graders
 - e. Number of hours a week spent reading a book for a group of middle school students
3. Rewrite each of the following questions as a statistical question.
- a. How many pets does your teacher have?
 - b. How many points did the high school soccer team score in its last game?
 - c. How many pages are in our math book?
 - d. Can I do a handstand?

6th grade Language Arts Assignments

Day 12:

Bell Work:

1. Define “dynamic character”
2. Which literary element is the point in a work at which the conflict reaches its greatest intensity and is then resolved?
3. Underline the prepositions in the sentence:

The mouse crawled up the dresser and went under the jewelry box.

Agenda:

1. Read for 10 minutes (book of your choice)
2. Read the play: "The Birthmark"
3. Do the Vocabulary: The Birthmark
4. Answer the Critical Thinking Questions 1-5 **using the RACE method**

Google classroom code: p6yh3ma

Drama

The Birthmark

MASTERPIECE
a great work of literature

HOW FAR
WOULD YOU
GO TO BE
PERFECT?

BASED ON THE STORY BY
NATHANIEL HAWTHORNE
ADAPTED BY
LUCY KAPLAN
ILLUSTRATED BY
JAMES HENNING

CHARACTERS

***AYLMER**, a distinguished scientist
***GEORGIANA**, his wife
***JAMES**, the professor's friend
AMINADAB, the professor's assistant
LADY 1
LADY 2

GENTLEMAN 1

GENTLEMAN 2

***STAGE DIRECTION READERS 1, 2, 3, 4**
(SDR1, SDR2, SDR3, SDR4)

Circle the character you will play.

*Starred characters are major roles.



AS YOU READ, THINK ABOUT:

What does this play say about the quest for perfection?

ACT I

SCENE 1

SDR1: The curtain rises on a man standing center stage, staring into the audience. Behind him is an elegant dining room. Guests chat and sip fancy drinks.

JAMES (to audience): Join me, won't you? My friend Aylmer, one of the most brilliant scientists of our day, is having a party to celebrate his engagement.

SDR2: James turns and joins the party.

AYLMER: James, old friend! Welcome!

JAMES: Ah, Aylmer, what an **enlightened** age we live in! Electricity, vaccines, and now you are to be married. What miracles! I can scarcely believe it.

AYLMER: And why is that?

JAMES: A man so dedicated to his work—in love?

AYLMER: Oh, James, when you see her, you will understand. She is so nearly perfect that perhaps only a scientist could fully appreciate her.

JAMES: Aylmer, you old dog. Let us meet her.

AYLMER: Very well. Everyone, your attention, please. Allow me to introduce my fiancée, my dearest Georgiana.

SDR3: A young woman steps into the room.

JAMES (to audience): The guests reacted with oohs and ahs . . . at first.

GENTLEMAN 1: Her many admirers will be heartbroken. Her beauty is perfect.

LADY 1: Except for that birthmark. It's shaped like a tiny human hand.



Nathaniel Hawthorne wrote this story in 1843. We think it's still relevant today. The story reminds us that it's OK to have flaws!

GENTLEMAN 2: It's as if the tiniest of fairies has impressed its magic upon her cheek.

LADY 2: Don't be silly. It's a mortal flaw.

GENTLEMAN 1: But don't our flaws make us human?

SDR4: The lights go dark.

SCENE 2

SDR1: Aylmer, Georgiana, and James sit in a parlor.

JAMES (to audience): A few weeks later, I came back for a visit. When I stepped into the parlor, I found my friend staring oddly at Georgiana.

AYLMER: Georgiana, has it ever occurred to you that your birthmark could be removed?

GEORGIANA: Why, no. It has often been called a charm.

AYLMER: Upon another face it might be charming, but not on yours. No, you are so nearly perfect that this slight defect shocks me.

GEORGIANA: Shocks you? Then why did you marry me? You can't love what shocks you!

SDR2: Georgiana bursts into tears and runs offstage.

JAMES: You hurt her feelings. How hard can it be to ignore such a small thing?

AYLMER: Small thing? It's all I see. But thanks to science, it can be removed.

JAMES (to audience): For the next year, that birthmark was all he thought about. I watched Georgiana's happiness wither away.

SDR3: The stage goes dark. A spotlight reveals Georgiana handing Aylmer a present.

GEORGIANA: Merry Christmas, husband!

SDR4: Aylmer doesn't respond. He just stares at her cheek, his eyes wide in disgust.

GEORGIANA: What is the matter?

AYLMER: How can I be merry? All I see is *that!*

SDR1: The spotlight goes off. Another spotlight appears to reveal Georgiana and Aylmer standing.

GEORGIANA: Happy first anniversary, my darling.

SDR2: Aylmer stares at her birthmark.

AYLMER: It's like a **crimson** stain upon the snow.

SDR3: The spotlight goes off. When it returns, Georgiana is sitting on a chair, drinking a cup of tea. Aylmer sits next to her, still staring at the mark.

SDR4: The spotlight goes off. When it returns, Aylmer is closer to Georgiana, inspecting the mark.

SDR1: The spotlight goes off again. When it returns, Aylmer is slowly rising from behind a couch where Georgiana is reading. He holds a magnifying glass.

SDR2: The spotlight goes off. Another spotlight appears center stage. James stands in the light.

JAMES (to audience): Through all the times that should have been their happiest, Aylmer thought only of Georgiana's imperfection.

SDR3: The lights go dark.

SCENE 3

SDR4: In the parlor sit James, Georgiana, and Aylmer. Moonlight streams through the window, casting an eerie blue glow on the stage.

GEORGIANA: I give in. Remove this thing you hate.

AYLMER: Aminadab! Prepare Georgiana for surgery.

SDR1: Aylmer's assistant walks onstage. He is short and **brutish**.

AMINADAB: Heh, heh, heh. So be it. But if she were my wife, I'd never part with that birthmark.

AYLMER: But she is not your wife. Now do as I say!

SDR2: Aminadab and Georgiana exit.

Moments later, Aminadab returns, pushing a table with Georgiana on top.

AYLMER: Strap her firmly.

JAMES: Is that really necessary?

SDR3: Aminadab hands Aylmer a small scalpel. Aylmer leans over the table, his back to the audience.

AYLMER: Hmm. It is less **superficial** than I thought. Aminadab, mop up this blood.

AMINADAB: Heh, heh, heh!

AYLMER: This is odd. The mark is in her heart now. We must have it out!

JAMES: Stop it! You're killing her!

SDR4: James lunges forward, but Aminadab stops him.

AMINADAB: Heh, heh, heh!

AYLMER: Here it is at last!

SDR1: Aylmer holds up a still-pulsing heart.

SDR2: The stage goes dark. When the lights come up, we are in Georgiana and Aylmer's bedroom. James stands in the corner, holding the heart.

GEORGIANA: Wake up, husband! You were dreaming!

AYLMER: Oh, Georgiana, it was so horrible.

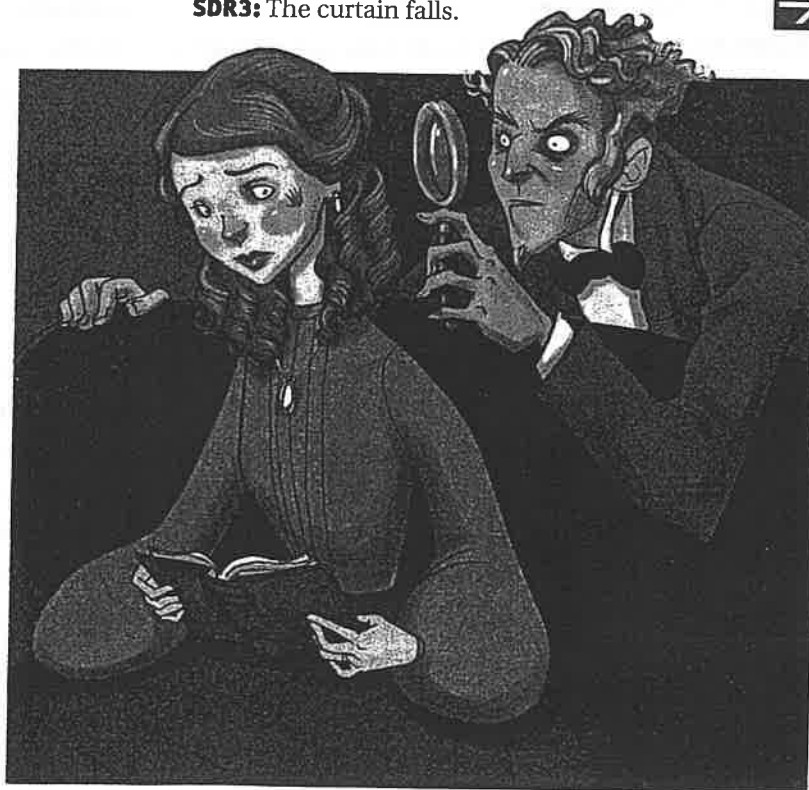
JAMES (to audience): Aylmer **recounted** every gory detail of the nightmare.

GEORGIANA: Enough, Aylmer, enough! What will it take to rid me of this fatal birthmark? Surely this stain can't go as deep as life itself!

AYLMER: I can correct what nature left imperfect.

GEORGIANA: As long as this mark makes me the object of your disgust, life is a burden. So do it!

SDR3: The curtain falls.



ACT II

SCENE 1

SDR4: The curtains rise on an elegant study. Aylmer sits behind a desk, scribbling notes. James and Georgiana wander in and inspect the mysterious vials that line the shelves.

GEORGIANA: What is this gold-colored liquid?

AYLMER: Be careful, my dear. It is the most precious poison ever concocted.

JAMES: Why do you keep such a terrible drug?

AYLMER: Don't mistrust me. A few drops in a basin of water will wash away freckles as easily as one cleanses his hands.

GEORGIANA: Do you intend to use this lotion on me?

AYLMER: Oh, no. Your case demands a deeper remedy. Wait here while I prepare the lab.

SDR1: Aylmer exits. Georgiana sits down. Then she stands. She sits. Stands. Paces.

GEORGIANA: I must see what's taking him so long.

JAMES: You know his rule: No one but he and his assistant may enter that lab without permission.

GEORGIANA: I can bear it no longer!

SDR2: She runs offstage.

JAMES (to audience): If only I could have stopped her; if only I could have stopped *him* . . .

SDR3: James shakes his head. The lights fade out.



The character of James does not appear in the original story. We invented him! What do you think his purpose is in the play?

me, my formula cannot fail. Watch what it does to this plant.

SDR3: Aylmer pours a few drops from a vial onto the rose.

AYLMER: See how the marks disappear?

GEORGIANA: I needed no proof.

SDR4: Georgiana lies down on a small couch. She drinks the liquid and falls asleep.

JAMES (to audience): Aylmer watched her with the investigative eye of a scientist.

AMINADAB: The mark grows faint.

AYLMER: It's nearly gone!

AMINADAB: Heh, heh, heh!

JAMES: She's waking up.

AMINADAB: Heh, heh, heh!

AYLMER: Aminadab, show her the mirror.

SDR1: Georgiana gazes into the mirror, smiling faintly.

GEORGIANA: My poor Aylmer.

AYLMER: Poor? No, richest, happiest! You are perfect!

GEORGIANA: My poor Aylmer, you aimed so high.

You've rejected the best the earth could offer.

JAMES (to audience): It was then I noticed the rose.

AMINADAB: It's withering.

GEORGIANA: Dear Aylmer, I am dying.

JAMES (to audience): That mark was the bond between body and soul. As the birthmark faded from her cheek, her last breath faded into the air.

SDR2: The lights go dark.

SCENE 2

SDR4: The lights come up on a messy laboratory.

SDR1: At center stage Aylmer and Aminadab stare at a rose on a table. Georgiana bursts in, followed by James.

GEORGIANA: Look how pale he is, James. So absorbed in his work.

SDR2: Noticing Georgiana, Aylmer rushes toward her.

AYLMER: Why are you here? Do you not trust me?

GEORGIANA: No, Aylmer, you mistrust me. You did not tell me how worried you are about this experiment.

AYLMER: To spare you the grief of knowing its danger.

GEORGIANA: Danger? There is only one danger—that this horrible thing shall be left upon my cheek! Remove it, or we shall both go mad!

AYLMER: Very well then. Unless science has deceived

SCENE 3

SDR3: We see again the elegant dining room from Act I. This time, though, the guests are dressed in black.

SDR4: Aylmer stares at a painting of Georgiana. In the painting, she has the birthmark.

LADY 1: She was such a lovely thing.

LADY 2: Aylmer never knew how lucky he was.

GENTLEMAN 2: Had he been wiser, he wouldn't have thrown away his happiness.

SDR1: James walks to Aylmer's side.

JAMES (to audience): What folly it is to worry about life's little imperfections. What folly, what folly, what folly . . .

SDR2: The curtain falls. ●

Vocabulary: *The Birthmark*

Directions: Read the definitions and example sentences below. Then add two words of your own to the list.

1. **brutish (BROO-tish)** *adjective*; resembling or characteristic of a brute (a brute is an animal); brutal; showing little intelligence
example: At first, Shrek appears to be a brutish ogre, but he is actually a charming fellow.
2. **concoct (kon-KOKT)** *verb*; 1. to create by combining ingredients; 2. to invent or think up
example 1: Jessica marveled at her mother's ability to concoct delicious meals from whatever happened to be in the refrigerator.
example 2: Unable to concoct an excuse for his tardiness, Justin found himself in detention.
3. **crimson (KRIM-zuhn)** *adjective*; deep purplish-red
example: Nathan's Superman costume was topped off by a long, crimson cape.
4. **enlightened (en-LAHY-tuhnd)** *adjective*; well-informed and guided by rational thought
example: Although he fancied himself an enlightened leader, the king actually had a tendency to make impulsive decisions about matters he did not understand.
5. **folly (FOL-ee)** *noun*; a foolish action, practice, or idea
example: "You think that sleeping with your book under your pillow is going to help you pass the test?" asked Jane. "Who put such folly into your head?"
6. **recount (re-KOWNT)** *verb*; to tell about in detail; narrate
example: After returning home from a camping trip in Yellowstone National Park, Cynthia was eager to meet up with her friends and recount her exciting encounter with a black bear.
7. **superficial (soo-per-FISH-uhl)** *adjective*; 1. being at, on, or near the surface; 2. concerned with only the obvious or apparent
example 1: Aside from a few superficial scratches, Tommy was not hurt when his bicycle crashed.
example 2: "Don't be so superficial!" said Noah. "You can't judge people by their shoes."

8. _____ (_____) _____ ; _____

example: _____

9. _____ (_____) _____ ; _____

example: _____

Critical-Thinking Questions

The Birthmark

1. In Scene 1, how do the two gentlemen guests regard Georgiana's birthmark? Do they think it ruins her beauty? Support your answer with details from the play.
2. How does Aylmer's obsession with Georgiana's birthmark affect their relationship? Support your answers with details from the play.
3. Georgiana tells Aylmer, "You've rejected the best the earth could offer." What does she mean?
4. This story is not realistic—the chances of dying from having a birthmark removed are very slim. By having Georgiana die, what is Hawthorne saying about perfection? Explain.
5. What can you infer about how Julia Bluhm would like teens to see themselves? In what ways are Aylmer's and Julia's views of perfection different?

What is the RACE strategy?

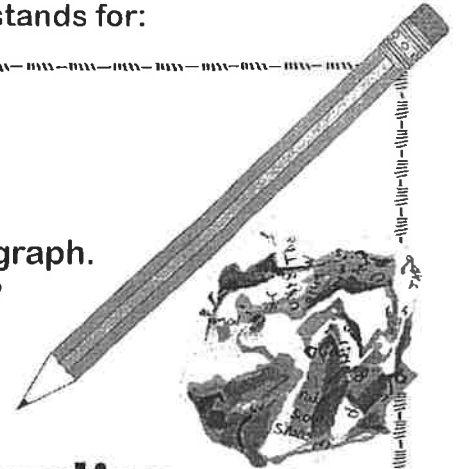
The RACE strategy teaches you to do what good writers do naturally, and can help you answer short-response questions. It helps you maintain a formal style and make sure you are answering all parts of the question with lots of detail. Using the RACE strategy will almost guarantee your answer is complete. RACE stands for:

R Re-state the question

Turn the question into a statement to introduce your paragraph.

Example: How can students improve their study skills?

Students can improve their study skills by...



A Answer all parts of the question

Keep in mind that there may be more than one part to the question.

C Cite the text to support your answer

Support your answer evidence from the text. If you use a direct quotation, use quotation marks. Make sure to introduce your evidence with a phrase like:

"For example," "According to the text," "The author states that..." etc.

E Explain your citation

Elaborate on why your textual evidence helps you prove your point. *Use phrases like: "this example shows how...", "this quotation proves that...", etc.*

Tips:

- ✓ While you read, circle and underline important sentences so they're easier to find later
- ✓ Check off each part of the RACE strategy as you write
- ✓ Always re-read your work to check for mistakes and make corrections



DEMOCRACY IN ATHENS

THE ASSEMBLY

- The Assembly was made up of all citizens of Athens (at least 18 years old, male, completed military service).
- The Assembly had four main duties: issue decrees (official orders, such as going to war), elect officials, make the laws, and preside over the courts.
- The Assembly needed at least 6,000 citizens to hold a vote.
- All members could vote on all laws and other decisions.

COUNCIL OF 500

- Set the agenda for the Assembly
- Carried out and oversaw the actions of the Assembly
- 500 members were chosen by lottery for 1 year terms
- No one could serve more than 2 times in their life.
- Terms could not be successive.
- Had to be at least 30 years of age to be on the Council.

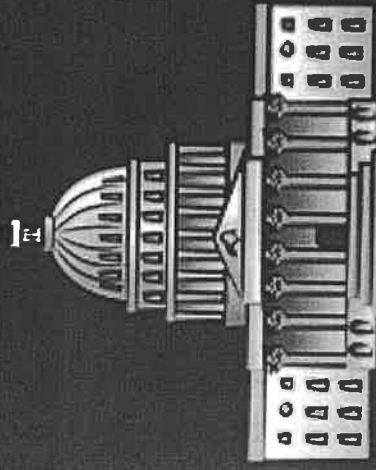
ADMINISTRATION

- The most prestigious positions were elected by the Assembly (Board of Ten Generals, City Architect, Priests and Sacred Treasurers).
- Elected positions were not compulsory, but those who wanted them had to nominate themselves.
- Numerous other board positions were chosen by lottery.

COURTS

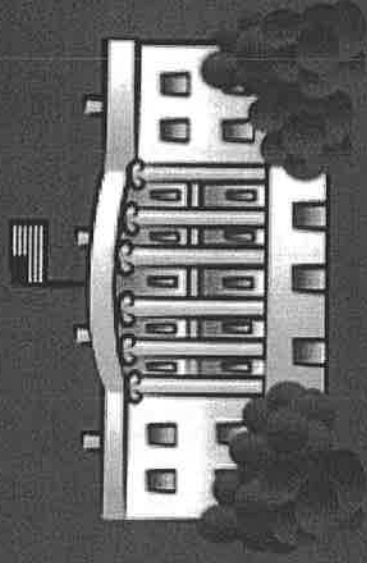
- 6000 potential jurors were selected by lottery every year from citizens over 30 years of age.
- Each individual case could be heard by a jury of anywhere from 200-2000 members.
- Trials lasted no longer than 1 day.
- Verdicts were decided right away with no time to deliberate or argue.

LEGISLATIVE



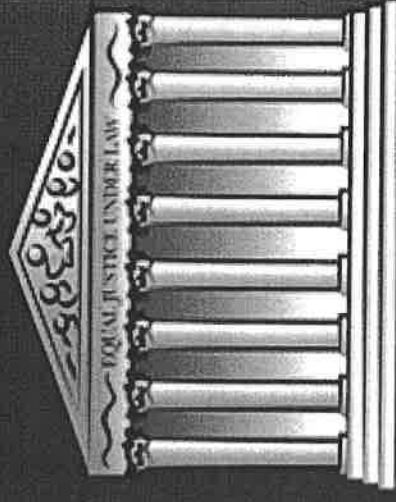
- ★ Makes laws
- ★ Approves presidential appointments
- ★ Two senators from each state
- ★ The number of congressmen is based on population

EXECUTIVE



- ★ Signs laws
- ★ Vetoes laws
- ★ Pardons people
- ★ Appoints federal judges
- ★ Elected every four years

JUDICIAL



- ★ Decides if laws are constitutional
- ★ Are appointed by the president
- ★ There are 9 justices
- ★ Can overturn rulings by other judges

RIGHTS & RESPONSIBILITIES of U.S. Citizens

Rights

- ★ Freedom of speech & media
- ★ Freedom of religion
- ★ Freedom of assembly
- ★ Freedom to petition the government
- ★ Right to bear arms
- ★ Right to a prompt, fair trial by jury
- ★ Freedom of "life, liberty, & the pursuit of happiness"
- ★ Right to vote in local, state & federal elections
- ★ Right to apply for federal employment
- ★ Right to run for elected office



Register

to

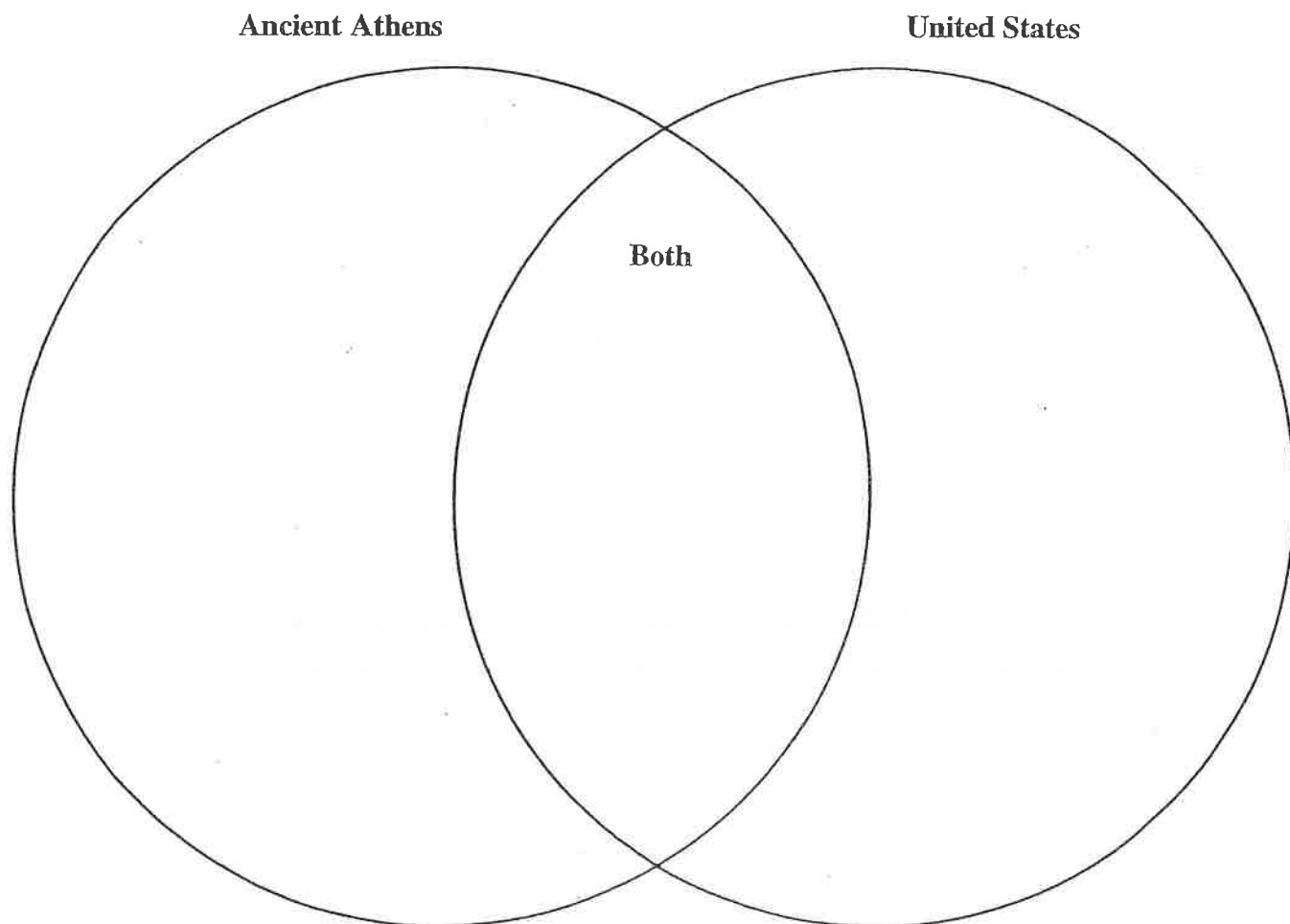
VOTE

Responsibilities

- Serve on a jury ★
- Be aware of community issues ★
- Participate in the democratic process ★
- Support and defend the Constitution ★
- Respect and obey federal, state, and local laws ★
- Respect other's rights, beliefs, and opinions ★
- Pay income and other taxes honestly, and on time, to federal, state, and local authorities ★
- Register for the Selective Service at age 18 ★
- Defend the country if the need should arise ★

Comparing Democracy

Use the Venn diagram to show similarities and differences between Ancient Athens and the United States today. Write the letter of each phrase in the appropriate place on the diagram.



- | | |
|---|---|
| <ul style="list-style-type: none"> A. women can work and own property B. women are politically active C. over 100 jurors per trial D. everyone is protected by the law E. both sides in a trial are allowed to speak F. women cannot vote G. foreigners cannot vote H. women not politically active I. foreigners can become citizens and vote | <ul style="list-style-type: none"> J. an accused person represents himself at trial K. women can vote L. citizens can speak out freely M. women cannot work or own property N. judge and lawyers at trial O. citizens must be born in the area P. any citizen can hold a government position Q. opportunity to better your position in life R. jury of 12 people |
|---|---|

Comparing Democracy Questions

Directions: use the charts and Venn Diagram to answer the following questions using complete sentences.

1. Identify one part of Athenian democracy that you think would be beneficial to have in the US system. Explain why you think it would be good for the US.

2. What part of the US democratic system do you think is the most important? Why do you think this is the most important component?

Phases, Eclipses, and Tides

Guide for Reading

- ◆ What causes the phases of the moon?
- ◆ What causes solar and lunar eclipses?
- ◆ What causes the tides?

As the moon moves, the positions of the moon, Earth, and the sun change in relation to each other. **The positions of the moon, Earth, and the sun cause the phases of the moon, eclipses, and tides.**

The moon revolves around Earth about once every 27.3 days. It also rotates on its own axis about once every 27.3 days. The same side of the moon always faces Earth. The different shapes of the moon you see from Earth are called **phases**. Phases are caused by changes in the relative position of the moon, Earth, and sun. **The phase of the moon you see depends on how much of the sunlit side of the moon faces Earth.**

When the moon's shadow hits Earth or Earth's shadow hits the moon, an eclipse occurs. An **eclipse** occurs when an object in space comes between the sun and a third object, and casts a shadow on that object. There are two types of eclipses: solar and lunar.

A **solar eclipse** occurs when the moon passes between Earth and the sun, blocking the sunlight from reaching Earth. The moon's shadow then hits Earth. The darkest part of the moon's shadow is called the **umbra**. From any part of the umbra, the moon completely blocks light from the sun. Only people in the umbra see a total solar eclipse. Another part of the shadow is less dark and larger than the umbra. It is called the **penumbra**. From within the penumbra, people see a partial eclipse, because part of the sun is still visible.

A **lunar eclipse** occurs at a full moon when Earth is directly between the moon and the sun. During a lunar eclipse, Earth's shadow falls on the moon. Earth's shadow also has an umbra and a penumbra. When the moon is completely within Earth's umbra you see a total lunar eclipse. A partial lunar eclipse happens when the moon moves partly into Earth's umbra.

Tides are the rise and fall of the ocean's water every 12.5 hours or so. The force of **gravity** pulls the moon and Earth toward each other. **Tides occur mainly because of differences in how much the moon pulls on different parts of Earth.** As Earth rotates, the moon's gravity pulls water toward the point on Earth's surface closest to the moon. The moon pulls least on the side of Earth farthest away. Two tides occur each day because of this difference in the pull of the moon's gravity.

Twice a month, the moon, Earth, and the sun are in a straight line. The combined forces of the gravity of the sun and moon produce an especially high tide—called a **spring tide**—and an especially low tide. Also twice a month, the pull of gravity of the sun and moon are at right angles to each other. At those times the high tide is lower than usual, and is called a **neap tide**. The low tides then are higher than usual.

SECTION 1-2 REVIEW AND REINFORCE

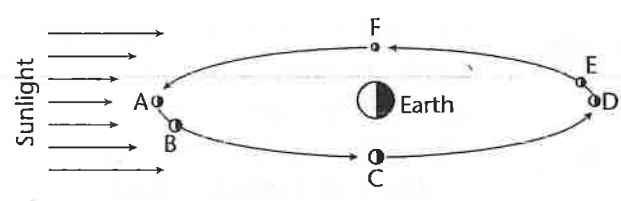
Phases, Eclipses, and Tides

◆ Understanding Main Ideas

Use the following figure to answer questions 1 and 2. Write your answers on the back of this page or on a separate sheet of paper.

1

1. What phases of the moon would someone on Earth see when the moon is at positions A through F?
2. What kind of tide will occur when the moon is at positions A, C, D, and F?



◆ Building Vocabulary

From the list below, choose the term that best completes each sentence.

- | | | | | |
|---------|-------|---------|-------|----------|
| phase | tides | gravity | lunar | penumbra |
| eclipse | umbra | spring | solar | neap |

3. A(n) _____ tide occurs when the sun is at right angles to the line between Earth and the moon.
4. A(n) _____ occurs when the moon's shadow hits Earth-or Earth's shadow hits the moon.
5. A person standing in the moon's _____ would see a partial solar eclipse.
6. Differences in the moon's pull on different parts of Earth cause _____.
7. A person standing in the moon's _____ would see a total solar eclipse.
8. The _____ of the moon you see depend on how much of the sunlit side of the moon faces Earth.
9. A(n) _____ tide occurs when the sun, moon, and Earth line up.
10. A(n) _____ eclipse occurs at a full moon when Earth is directly between the moon and the sun.
11. A(n) _____ eclipse occurs when the moon passes between Earth and the sun.
12. The force of _____ pulls the moon and Earth toward each other.

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