

Modified NTI Packets

If you are a student of Mrs. Ford or Mr. Hill you will complete the modified packet provided for you. The packet is the same for both Gold and Maroon students receiving support from a special educator.

If you collaborate to regular Math (Long or Persinger) or Reading classes (Fuller or Johnson), you will complete the Reading assignments from Mrs. Ford and/or the Math assignments provided from Mr. Hill. These assignments have been modified to meet your specific needs.

Please follow the guidelines set for you to complete on a daily basis so that you do not get behind in the work expected for completion.

Feel free to call or email if you have questions!

Mrs. Ford

- Email: carline.ford@harrison.kyschools.us
- Cell: 859-588-3744

Mr. Hill

- Email: taylor.hill@harrison.kyschools.us
- Cell: 859-421-5824

NTI #11 - 20 Modified Math

Mr. Hill & Mrs. Ford

Cover Sheet

Parents: If your child is in Mrs. Ford's or Mr. Hill's caseload this is the math packet you do. We have been instructed to introduce "new" material to our students during NTI #11-20. As you can probably guess, doing this remotely will be a challenge. I am going to do my best to make this as plain and straightforward as I can. DO NOT STRESS about this! If you need help, call me and I will walk you or your child through it. We can facetime if I need to see their work.

We are introducing the concept of probability during this time. It is not entirely new to them as they have practiced some during bell-ringers and they were exposed to it on a basic level last year. They should have enough baseline knowledge to get started. Let them use calculators, internet, youtube, whatever they need to get these answers. I will have a website set up to offer additional resources for your child. You can find it at hillnti.weebly.com. I will include my phone number and email on that site as well if you need to contact me!

Students: I miss you guys. But we have work to do. Treat this just like you do any other work you have for Mrs. Ford or myself. It is so important that you work hard to understand this and that you get better each day. I am going to do my best to not trick you with tough questions. This information will be straightforward. If you need help please call me. Have your parents find my number. I don't care if you use your own phones. Use the website above for extra help. Don't stress out about this work. Take your time and do your best!

Daily Description

NTI #11 - Labeling real-world probability based on it's likelihood.

NTI #12 - Using the probability scale to develop a percent value for each probability label and applying it to a "drawing numbers" scenario.

NTI #13 & 14 - Simple Probability and Complements

NTI #15 - Week 1 Quiz

NTI #16 & 17- Experimental and Theoretical Probability

NTI #18 & 19 - Sample Space

NTI #20 - Week 2 Quiz

NTI 11 Practice

Standard - 7.SP.C.5 - Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around $\frac{1}{2}$ indicates an event that is equally likely/unlikely, and a probability near 1 indicates a likely event.

- **Key Point:** Probability is the **likelihood** of an event happening and is expressed as a number between **zero** and **one**.
- Probability of an event can be defined by the labels: **Impossible, Unlikely, Equally Likely/Unlikely, Likely** and **Certain**.

Practice: Read each example and label the situation with one of the terms above (answers will be on website):

Snowing when it's 40 degrees outside.	Burning your dinner if you cook it way too long.	Water boiling at 75 degrees.
Getting a ticket if you are speeding	Getting a silent lunch if you acquire 3 strikes.	A coin landing on heads when it's flipped.

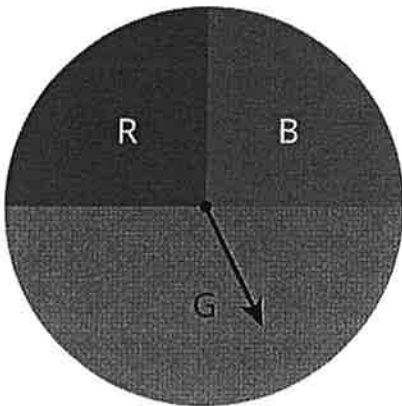
- Think about this: **What does it mean for an event to be impossible? What does it mean for an event to be certain?** If you can imagine events that are impossible or certain, it starts to become clear how different events might be labeled across the spectrum of probability.

NTI 11 Assignment:

Ten events are described below. Write the letter of each event in the column of the table that they **best** belong to:

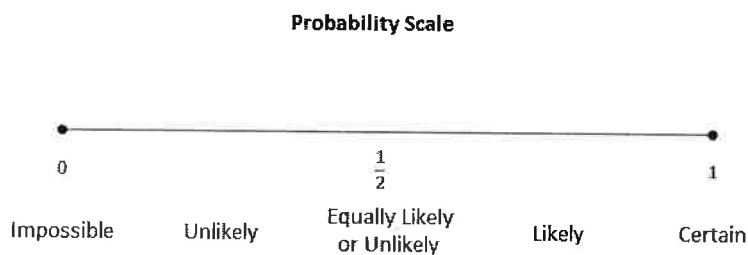
Impossible	Unlikely	Equally Likely/Unlikely	Likely	Certain

- a. You will win the grand prize in a raffle if you purchased 2 of the 100 tickets.
- a. You will wait less than 10 minutes before ordering at a fast-food restaurant.
- b. You will get an even number when you roll a standard number cube.
- c. A four-year-old child is over six feet tall.
- d. No one in your class will be late to class next week.
- e. The next baby born at a hospital will be a boy.
- f. It will snow at our school on July 1.
- g. The sun will set today before 11:00 p.m.
- h. Spinning the spinner shown will result in green.
- i. Spinning the spinner shown will result in yellow.



NTI 12 Practice

- Review from Day 11: Probability of an event can be defined by the labels: **Impossible, Unlikely, Equally Likely/Unlikely, Likely** and **Certain**.
- These labels can be shown on a probability scale like the one pictured below:



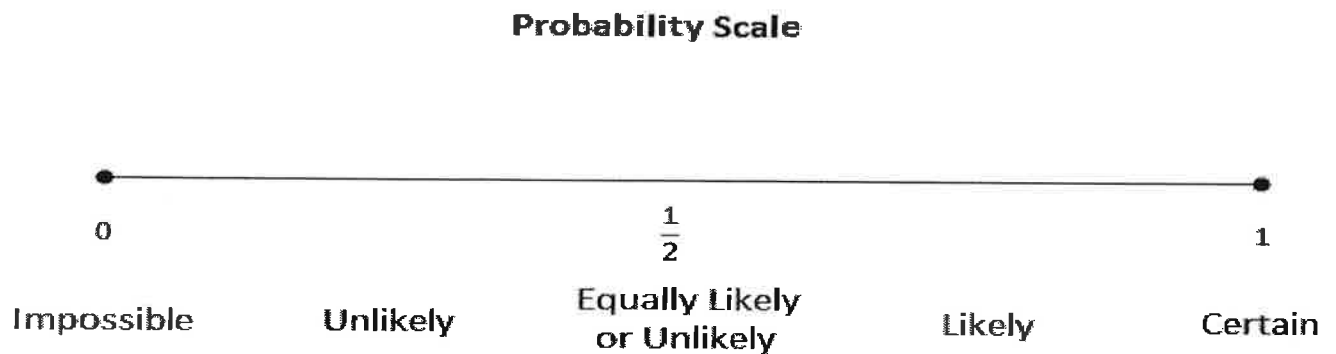
- This year we have used number lines when dealing with integers and have learned about the relationship between fractions, decimals and percents.
- **HINT:** You can use your knowledge about money, specifically quarters, to help you give each probability label a percent value!

*Practice: Using your background knowledge and the probability scale above, give each probability label a percent value. *I filled one in for you to get you started (answers will be on my website).*

Impossible	Unlikely	Equally Likely/Unlikely	Likely	Certain
		50%		

NTI 12 Assignment

Decide where each of the following events would be located on the scale below. Place the letter for each event on the appropriate place on the probability scale.



The numbers from 1 to 10 are written on small pieces of paper and placed in a bag. A piece of paper will be drawn from the bag.

- a) A piece of paper with a 5 is drawn from the bag.
- b) A piece of paper with an even number is drawn.
- c) A piece of paper with a 12 is drawn.
- d) A piece of paper with a number other than 1 is drawn.
- e) A piece of paper with a number that is divisible by 5 is drawn.

NTI 13 & 14 Practice

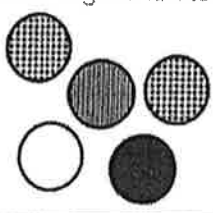

Standard - 7.SP.C.6 - Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability.

- KEY POINT:**

Simple Probability	Simple probability is the ratio of specific outcomes to the total number of outcomes. It is represented by the variable P .
Complement	The probability of the event not occurring is the complement. It is represented by the variable P' .


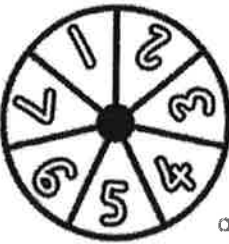
- The probability of the event and its complement have a sum or **1 or 100%**.
- Simple probability can be written as a fraction where the **top number is the specific outcomes** and the **bottom number is the total number of outcomes**.

Practice: Answer the following probability situations. (Check website for answers).

<p>7. What is the probability of choosing a marble with stripes? What is the complement of choosing a marble with diamonds?</p> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: right;"> <p>$P(\text{stripes})$ _____</p> <p>$P'(\text{diamonds})$ _____</p> </div> </div>	<p>8. What is the probability of spinning a W? What is the complement of spinning a vowel?</p> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: right;"> <p>$P(W)$ _____</p> <p>$P'(\text{vowel})$ _____</p> </div> </div>
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NTI 13 Assignment

Read each of the problems below and determine the probability of each outcome.

<p>9. A standard number cube is rolled. What is the probability of rolling...</p> <div style="text-align: center;">  </div> <p style="text-align: right;">a 6? _____</p> <p style="text-align: right;">a 5? _____</p> <p style="text-align: right;">an odd number? _____</p>	<p>10. A laundry basket has 24 socks in it. Six were navy, 10 were black, and the remaining were white. What is the probability of drawing...</p> <p style="text-align: right;">a black sock? _____</p> <p style="text-align: right;">a white sock? _____</p> <p style="text-align: right;">a navy sock? _____</p>
<p>11. The spinner below is spun. What is the probability of spinning...</p> <div style="text-align: center;">  </div> <p style="text-align: right;">not a 6? _____</p> <p style="text-align: right;">a 3 or a 4? _____</p> <p style="text-align: right;">an odd number? _____</p>	<p>12. The letters in the word SOCGER are put into a bag and drawn randomly. What is the probability of choosing...</p> <p style="text-align: right;">a vowel? _____</p> <p style="text-align: right;">a consonant? _____</p> <p style="text-align: right;">the letter C? _____</p>
<p>13. At the pediatrician's office, patients are able to draw a toy from the toy bin. The toy bin has 12 puzzles, 16 boxes of crayons, and 2 bouncy balls. What is the probability of drawing...</p> <p style="text-align: right;">anything but a bouncy ball? _____</p> <p style="text-align: right;">a box of crayons? _____</p> <p style="text-align: right;">a puzzle? _____</p>	<p>14. In the movie drawer, there are seven action movies, five comedies, and three dramas. What is the probability of choosing...</p> <p style="text-align: right;">a drama? _____</p> <p style="text-align: right;">anything but a comedy? _____</p> <p style="text-align: right;">an action? _____</p>

Answer the question below.

15. Students standing in line for lunch were surveyed about their favorite meal. Their responses are shown below. If one student is picked randomly, then which of the following is true?

Meal	Number of Students
Pizza	26
Spaghetti	8
Fajitas	16

A. The student's favorite meal is half as likely to be pizza than spaghetti.

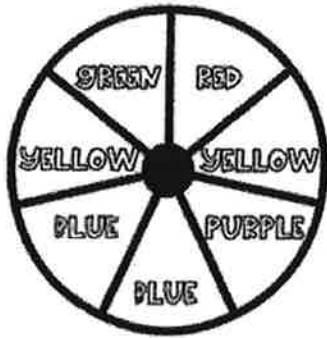

B. The student's favorite meal is more likely to be fajitas than pizza.

C. The student's favorite meal is twice as likely to be spaghetti than pizza.

D. The student's favorite meal is twice as likely to be fajitas than spaghetti.

NTI 14 Assignment

Use the spinners below to determine the the probability of each of the events.

	1. $P(\text{red})$	2. $P(\text{green})$	3. $P(\text{blue or red})$
	4. $P(\text{yellow or blue})$	5. $P'(\text{green})$	6. $P'(\text{purple})$
	7. $P(\text{odds})$	8. $P(\text{evens})$	9. $P(3)$
	10. $P(4 \text{ or } 6)$	11. $P'(7)$	12. $P(1)$

Answer the question below.

13. A refrigerator has a variety of drinks. The contents are shown below. If one drink is picked randomly, then which of the following is **not** true?

Drink	Quantity
Water	14
Cola	28
Lemonade	7

- A. You are twice as likely to select a cola than a water.
- B. You are half as likely to select a lemonade than a water.
- C. You are more likely to select a cola than a water or a lemonade.
- D. You are twice as likely to select a water than a cola.

NTI 15 - Week 1 Quiz

(Answers will be placed on website in the future)

Order the following events from least likely to most likely to occur:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____

- a) Twelve out of 20 students in your class are wearing glasses. The probability that your teacher randomly calls on a student who is wearing glasses.
- b) The weather indicates a 90% chance of snow.
- c) The probability that Brand X batteries are still working after 100 hours of use is 0.2.
- d) You enter your name in a raffle for basketball tickets with 75 other people. If each person only gets one entry, what is the probability that you will win?
- e) A mouse running through a maze can turn either left or right. What is the probability that the mouse turns left?

Brainstorm one scenario on your own that could be described by our probability labels:

Impossible	Unlikely	Equally Likely/Unlikely	Likely	Certain

For each event, draw a spinner or cubes to describe what the proposed probability would be:

The probability of picking a red cube is 0.5 (50%)	
The probability of spinning an even number is unlikely.	
The probability of spinning a number greater than 3 is certain.	
The probability of picking a yellow cube is very likely.	
The probability of spinning the color blue is 0.	

Write a 2-3 sentence summary of what you've learned about probability this week:

NTI 16 & 17 Practice

Standard - 7.SP.7 - Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.

Experimental Probability	<ul style="list-style-type: none"> The <u>fraction</u> of the number of times an event <u>actually</u> occurs to the <u>total</u> number of trials. “What <u>actually</u> happened.”
Theoretical Probability	<ul style="list-style-type: none"> The <u>prediction</u> of an event happening based on the possible outcomes. “What <u>should</u> happen.”

- Imagine you are flipping a coin. We know that the coin has 2 sides, heads and tails. The **theoretical probability** of flipping heads or tails is $\frac{1}{2}$. However, we know that these flips don't always turn out that way. You may flip a coin and land on tails 7 out of 10 times. What actually happens when you do an experiment is the **experimental probability**.

Practice: Get any coin with a heads and tails side. Flip the coin 10 times and record your results below. Use H for heads and T for tails.

Flip #	Result	Flip Number	Result
1		6	
2		7	
3		8	
4		9	
5		10	

What was your theoretical probability of flipping heads? _____

What was your experimental probability of flipping heads? _____

NTI 16 Assignment

A four sided spinner has the following **equal** sections: Red, Green, Yellow & Blue.

What is the theoretical probability that you would land on each section?

Red: _____ Green: _____ Yellow: _____ Blue: _____

A class spun the spinner to see what happened. The results are as follows:

Spin #	Result	Spin #	Result
1	Red	11	Yellow
2	Green	12	Yellow
3	Green	13	Yellow
4	Yellow	14	Green
5	Blue	15	Red
6	Yellow	16	Red
7	Red	17	Yellow
8	Yellow	18	Green
9	Green	19	Red
10	Red	20	Yellow

What are the experimental probabilities of each color?

Red: _____ Green: _____ Yellow: _____ Blue: _____


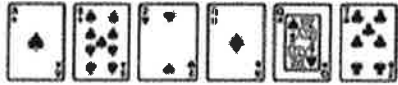
How are your theoretical and experimental probabilities different?

*Hint: if you have a calculator, you can simplify your fractions to help you compare your theoretical and experimental probabilities.

NTI 17 Assignment

Read and answer each of the questions below. Use the number bank to help you check your solutions. Not all numbers will be used.

$\frac{4}{15}$	$\frac{1}{4}$	$\frac{8}{15}$	$\frac{1}{3}$	$\frac{1}{6}$	$\frac{1}{2}$	$\frac{4}{5}$	$\frac{1}{3}$	$\frac{7}{20}$
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<p>1. In the media cabinet of Jacquelyn's house, there are 7 comedy DVDs, 4 mystery DVDs, and 4 documentary DVDs. What is the probability of randomly selecting a mystery DVD from the cabinet?</p> <p style="margin-top: 40px;">DVDs: _____</p>	<p>2. Ms. Mitchells' coin purse has 20 coins. There are 6 pennies, 4 quarters, 3 dimes, and the remainder are nickels. What is the theoretical probability of randomly selecting a nickel from Ms. Mitchells' coin purse?</p> <p style="margin-top: 40px;">coins: _____</p>
<p>3. The spinner below is spun 10 times. If the experimental probability of landing on a 3 is $\frac{1}{2}$, then what is the difference between the experimental and the theoretical probabilities?</p> <div style="text-align: center; margin: 10px 0;">  </div> <p style="margin-top: 10px;">spinner: _____</p>	<p>4. The following cards are used in a game. If each of the cards is turned over and shuffled, then how much of a greater chance is there in drawing a spade over drawing a 7?</p> <div style="text-align: center; margin: 10px 0;">  </div> <p style="margin-top: 10px;">cards: _____</p>
<p>5. A fair coin is tossed in the air four times. If the experimental probability of landing on tails is $\frac{1}{2}$, then what is the difference between the experimental and theoretical probability?</p> <p style="margin-top: 40px;">coins: _____</p>	<p>6. During a team building game, participants reach into a bag and randomly select a colored flag, which determines their team. If there are 7 green flags, 5 red flags, and 3 yellow flags, then what is the theoretical probability of selecting a red flag?</p> <p style="margin-top: 40px;">flags: _____</p>

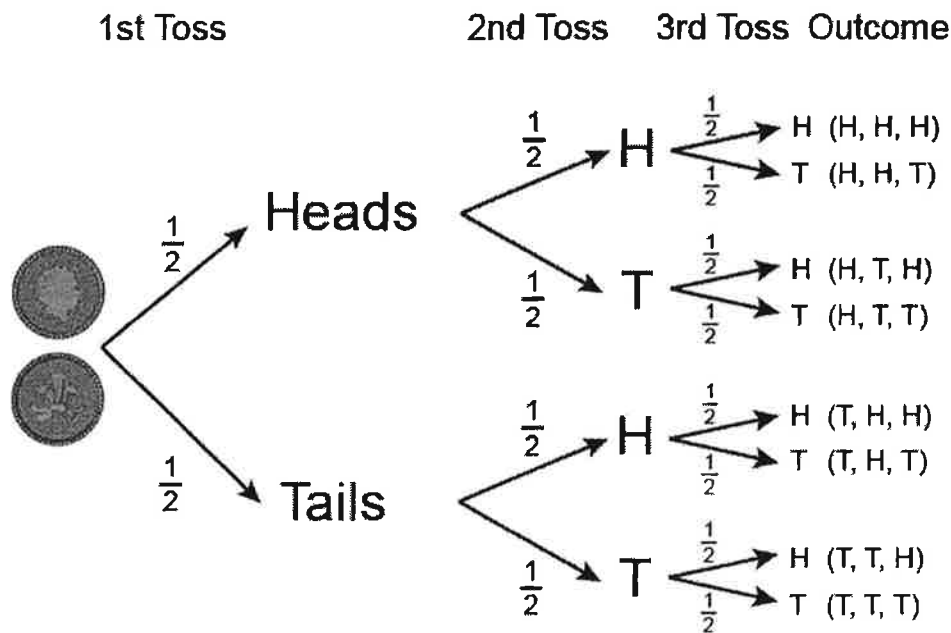
NTI 18 & 19 Practice

Standard - 7.SP.8 - Find probabilities of compound events using organized lists tables, tree diagrams and simulation.

- Key Point**

Sample Space	<ul style="list-style-type: none"> The sample space describes all of the possible outcomes of an event. Sample space can be represented by a list, table or tree diagram. These organized lists, tables or diagrams can be used to determine the probability of one or multiple events.
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- I'm sure you know what a list or table looks like. The one that may give you difficulty is the tree diagram. I have included an example below.
- The following is a Tree Diagram for tossing a coin three times:



NTI 18 Assignment

- 1) For breakfast Jamie can choose from cereal eggs or a muffin. She also can drink coffee orange juice or milk. What are all the possible outcomes? Use a tree diagram to show these.

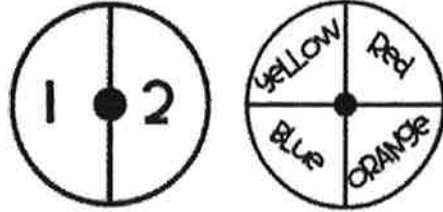
- 2) At registration a student can select from Spanish or German class, as well as, art, music or theater. What are all the possible outcomes? Use a list or table to show these.

NTI 19 Assignment

Create a list. Then, use the information to answer the question.

6. Amanda will roll a number cube and flip a coin. If Amanda rolls the number cube once and flips the coin once, then what are the possible outcomes in which the number cube lands on an odd number?

7. The two spinners below are spun at the same time. What are all the possible outcomes of the two spins?



Create a tree diagram. Then, use the information to answer the question.

8. A clothing line has shirts in red, blue, or white and pants in gray or khaki. How many different combinations can be made with the clothing line?

9. When buying a car, Esther can choose a 2-door or 4-door car with leather or cloth interiors in black, silver, or white. How many different combinations can be made with the car options?

NTI 20 - Week 2 Quiz

(Answers will be placed on website in the future)

Question 1: A laundry basket has 24 t-shirts in it. Four are navy, twelve are red and the remaining are white.

- 1) What is the probability of selecting a red shirt?
- 2) What is the probability of NOT selecting a white shirt?
- 3) What is the probability of selecting a green shirt?

Question 2: Ms Irons places the names of each of her four children in a hat at one time. She randomly draws a name, puts it back in the hat, and draws again. The results are in the table:

Draw 1	Draw 2	Draw 3	Draw 4	Draw 5	Draw 6	Draw 7	Draw 8	Draw 9	Draw 10
Ella	Jake	Alex	Alex	Jake	Joey	Alex	Ella	Alex	Jake

- 1) What is the theoretical probability of selecting the name Joey?
- 2) What is the experimental probability of selecting the name Alex?
- 3) If this experiment was repeated 1,000 times, how many times would you expect to draw Ella's name?

• Do WKU for question # 7 and 10!

Answer the questions below. Be sure to show work and justify your thinking.

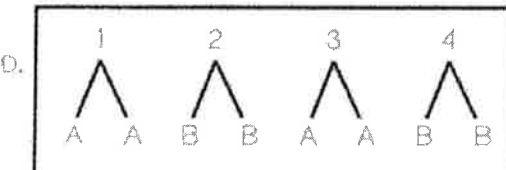
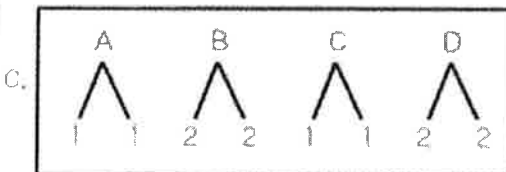
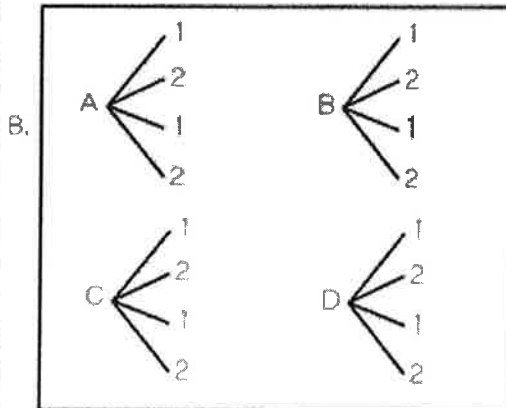
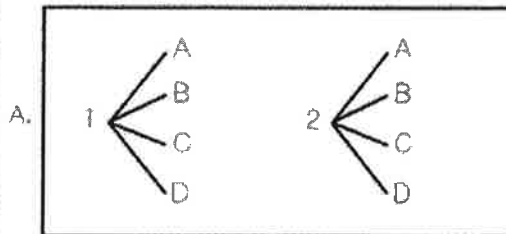
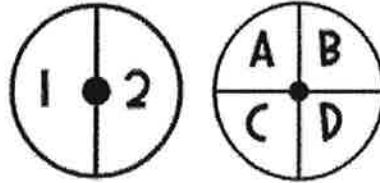
7. At a school assembly four out of the first 10 students were wearing spirit wear. Based on this information, if 500 students were at the assembly, then how many students could be expected to be wearing spirit wear?

9. Joy can choose to ride the bus, the subway, or take a taxi to travel to work on Monday and Tuesday. Which list shows all the possible outcomes of one day and one method of travel?

- | | |
|--|---|
| A. Monday, Bus
Tuesday, Taxi
Monday, Subway
Tuesday, Bus
Monday, Subway
Tuesday, Taxi | B. Monday, Bus
Monday, Subway
Monday, Taxi
Tuesday, Bus
Tuesday, Subway
Tuesday, Taxi |
| C. Bus, Taxi
Bus, Subway
Taxi, Bus
Taxi, Subway
Subway, Taxi
Subway, Bus | D. Monday, Bus
Monday, Subway
Monday, Tuesday
Tuesday, Bus
Tuesday, Subway
Tuesday, Monday |

10. The airport security randomly selected 24 suitcases from in the security line. Of these bags, they screened 7 suitcases. Based on this information, what is the most reasonable prediction for the number of suitcases they will screen in a group of 144?

8. Each spinner shown below will be spun one time. Which of the following tree diagrams shows all of the possible outcomes when each spinner is spun once?





Welcome to
(6th, 7th, 8th Gr.)

Explore




Fine Dining Restaurant for a Well-Rounded Mind.

NTI DAYS 11-20

Choose 2 of the following to complete before returning to school!

Do one assignment during the first week, and the second during the second week.

**Every Student in the School Must do this assignment.*

Appetizer	Main Course	Dessert
<p>Health and PE</p> <p>Experience the great feeling of health and fitness through the partnership of food and exercise!</p> 	<p>Music</p> <p>Experience the music of getting to know family and friends and more about generational music trends!</p> 	<p>Art and Agriculture</p> <p>Explore nature through investigating plants and recreating their beauty with art!</p> 

**See next page for details on contacting teachers!

Middle School Phone Number: (859) 234-7123

Team Leader: Julie Lucky (Band and Music)

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 Email: Julie.Lucky@harrison.kyschools.us
 Google Classroom Code: 44fyxp7

Emily Eastman (Chorus)

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 Remind 101 code: Text @hcmschor to 81010

Debbie Pulliam (Art)

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 NTI Google Classroom Code: vxv5b47
 Webpage: <https://sites.google.com/harrison.kyschools.us/hcmsart/home>

Morgan Farrow (Agriculture)

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 NTI Google Classroom Code: tp4wdkx
 Remind 101 code: Text @d66484 to 81010 → FFA ONLY

Glenn Lonaker (Health)

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<https://sites.google.com/harrison.kyschools.us/mi-ionaker-s-health-class/>

Chelsea Hill (Physical Education)

Phone Extension: 4608
 Email: Chelsea.Hill@harrison.kyschools.us
 Google Classroom Code: liscsig ** If this code does not work, try 4xlysbp
 Remind 101 codes: Text the appropriate code to 81010
 6th grade: @hill6hcm
 7th grade: @hill7hcm
 8th grade: @hill8hcm

login with student email address to access google information.

First.Last@stu.harrison.kyschools.us

How Time & Age Affects Music Popularity

Music has changed and morphed through time and at some point a specific style of music has been popular for a specific time period. (1920's, 1930's, 1950's Rock, Disco, Country, Pop, Heavy Metal, Jazz, Classical, Folk, Rock, Rhythm & Blues) are just a few.

Your assignment for the week is to interview one person from each of these age groups. You may call grandparents, ask family members at your house and include friends. You don't need to physically see these people to do the assignment. A phone call will do.

Questions to ask in the interview:

- Identify the person and their age.
- What type of music do you enjoy most? Examples Country, Jazz, 1950's Rock
- What is their favorite song or artist?
- Why do they enjoy that type of music or artist?
- Did anything happen historically to make them feel more attached to that type of music or artist?

**Listen to the song or songs of that artist if possible. Choose two styles of music that you have learned about and compare and contrast those two styles in the box at the end.

Tell me what type of music you like and answer the questions that you have asked your family and friends. Tell me why you like your style of music.

Age Group 12-19

Age Group 20-29

Dessert!

Agriculture and Art

If you selected the “dessert” as one of your two assignments for March 23rd-April 3rd, follow the instructions below for completion!

The Cake (Part 1): Using the provided Plant Parts and Functions Document, fill in the Plant Parts Guided Notes worksheet. Make sure that you read all of the directions before writing down your answers. After you have finished this first part of the assignment, you will move on to part two. **You must use these notes to help you complete the second part of the assignment.**

The Icing on Top (Part 2): After completing the Plant Parts Guided Notes, you will now get to create a variety of illustrations in a mini plant booklet and create a 3-D sculpture of a plant to show what you learned about the plants and their parts. You will be using your notes to help you do this. You will also get to explore different plants outside and draw them in their natural environment. When creating your sculpture, you will be using everyday items found around your home.

**** For additional art and agriculture assignments, feel free to visit Mrs. Farrow and Mrs. Pulliam’s NTI Google Classrooms. (Codes can be found on the front of the Explore NTI Packet.)**

Fruit

- **Helps seeds spread.**
- Birds and animals eat the seeds or carry off the fruit.
- Some seeds cling to fur and hair.
(Think burrs)

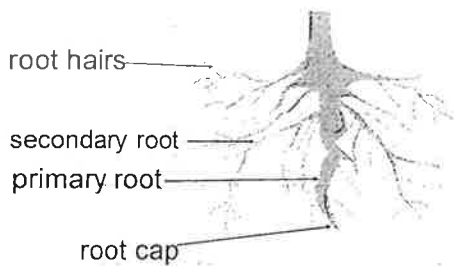


Seeds

- **Will become the new plant.**
- Are spread by birds, animals, wind, and water



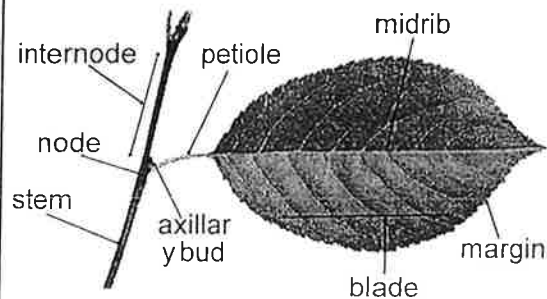
Parts of the Root



Root Part Functions

- **primary root:** the thickest part, grows down
- **secondary roots:** not as thick as primary, grow out to the side
- **root hairs:** thin, fine roots that absorb water and nutrients
- **root cap:** on the end, protects and guides the tip

Parts of the Leaf



Leaf Part Functions

- **bud:** undeveloped shoot (stem and leaves)
- **terminal bud:** the bud at the tip of the stem
- **internode:** part of the stem between buds or leaves
- **node:** place where leaves or buds are attached
- **blade:** the flat part of the leaf
- **petiole:** the part of the leaf that attaches to the stem
- **midrib:** center vein of the leaf
- **margin:** edge of the leaf

Plant Parts Guided Notes

Name _____

Class _____

Date _____

1. List the six parts of the plant and describe the function of each.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

2. Label each of the six plant parts below.



Plant Parts Guided Notes

Name _____

Class _____

Date _____

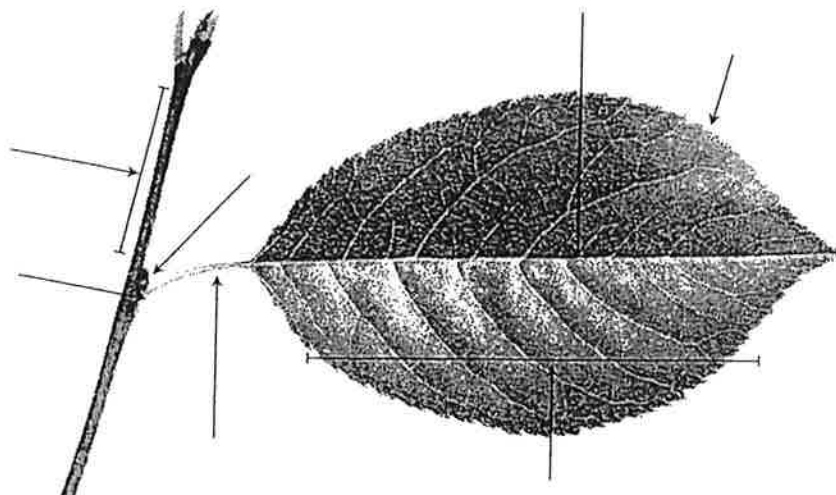
6. What are the functions of the stem?

7. What is the main function of the leaves?

8. List the parts of the leaf and stem and describe each.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

9. Label each of the leaf and stem parts below.



Agriculture & Art Combined Lesson (This is the Art part of this lesson)

***If you have access to the internet: Please join my special NTI-ART google classroom by using this code wwb5b47 click the + in the upper right corner on your google classroom account. I will be adding art related resources throughout our closure to do while you are at home learning. These are meant to be both educational and fun. For additional resources and directions please follow the link at www.harrison.kyschools.us and go to the HCMS page and teacher websites. Thank you , Mrs. Pulliam*

NTI LESSON DIRECTIONS: You will have 2 art activities with this lesson a booklet & a sculpture. As you proceed through your agriculture lesson about plants-you will create an illustrated book (picture book) that shows the parts of a plant from what you have learned. This booklet is to be created from the template in your packet. You will first fold along the dotted and solid lines. After you do this use scissors to cut along the broken line. (if you do not have scissors you can tear along the broken line if you fold the paper very crisply). Accordion fold (back and forth fold) and the page #s will be in order. You will add words & an image to the front cover of the book, the inside cover, back cover & back of the book will be left blank. Preferably draw with a pencil. You may use whatever other art media you have to add color (colored pencil, crayon or marker). If you use marker, be reminded it may bleed through so may not be your best choice. You can add shading with your pencil if you don't have anything to add color.

On the back side of this page you will find art related vocabulary & information that you will use with the lesson. Please take time to read over this information before you begin the booklet & sculpture projects. (please read all directions before you begin)

Art Activity #1: Plant Part booklet

Directions: you will be illustrating a book. Follow these directions for each page.

- Cover Design: Create a cover which includes the title "Plant Parts", a simple image of a plant, and the words illustrated by: and your name
- Page #1- draw a whole plant which includes these six parts: flowers, leaf, fruit, stem, root and seed)
- Page #2-draw the roots showing the parts: root hairs, secondary root, primary root and root cap
- Page #3-draw a leaf including the blade, petiole, node, margin and midrib.
- Page #4-draw the flower showing the sepal, petals, pistil and stamen diagramed.
- Page #5-draw a picture of three things a plant needs to live (refer to your notes)
- Page #6-go outside and find a plant and draw the plant as realistically as you can. Pay attention to all of the parts you studied and make sure you include these in the drawing.

Art Activity #2: Plant 3D sculpture from found materials (more info on back of this page)

Directions: You will now create a three dimensional (3D) sculpture of a plant. This sculpture must be free standing/in the round (which means it is to be viewed from all sides & it stands on



fold

fold

fold



cut

fold

fold

cut



cut

fold

fold

7th Grade Modified Social Studies

NTI Assignments 11 – 20

In Social Studies, you will be learning about the geography, development, and impact of ancient civilizations in the Americas. Each day you will practice historical thinking skills as you investigate the Maya, Inca, and Aztec cultures.

Day 11: Read the article “Aztecs” and locate the name and location of their civilization, what food is grown, traded items, and any interesting facts about the Aztecs. Fill out the Graphic organizer for Aztecs.

Day 12: Read the article “Mayans” and locate the name and location of their civilization, what food is grown, traded items, and any interesting facts about the Mayans. Fill out the Graphic organizer for Mayans.

Day 13: Read the article “Incas” and locate the name and location of their civilization, what food is grown, traded items, and any interesting facts about the Mayans. Fill out the Graphic organizer for Incas.

Day 14: Create a poster using the blank paper provided that illustrates the Aztecs. Be sure to include pictures of the type of food grown and items they traded. Make sure your poster includes the name of the civilization and five interesting facts about the Aztecs.

Day 15: Create a poster using the blank paper provided that illustrates the Mayans. Be sure to include pictures of the type of food grown and items they traded. Make sure your poster includes the name of the civilization and five interesting facts about the Mayans.

Day 16: Create a poster using the blank paper provided that illustrates the Incas. Be sure to include pictures of the type of food grown and items they traded. Make sure your poster includes the name of the civilization and five interesting facts about the Incas.

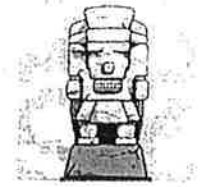
Day 17: Compare and contrast the three ancient civilizations Aztec, Mayan, and Incas. Complete the chart with the three circles to show how they are alike and how they are different.

Day 18: Complete the Open Response Question. Remember to use R.A.C.E when writing. Use the resources I have provided to prove what you write. Remember, you can ask an adult in your home to write for you if you receive a scribe.

Day 19: Read the article “Mesoamerican Ball Game”. Complete the graphic organizer comparing Mayan Ball to Modern Sports.

Day 20: Write a paragraph to answer the following question.
Would you want to play in a Mesoamerican Ball Game? Why or Why Not? (Write your response on the notebook paper provided)

Name _____



Early Civilizations Graphic Organizer

Aztecs

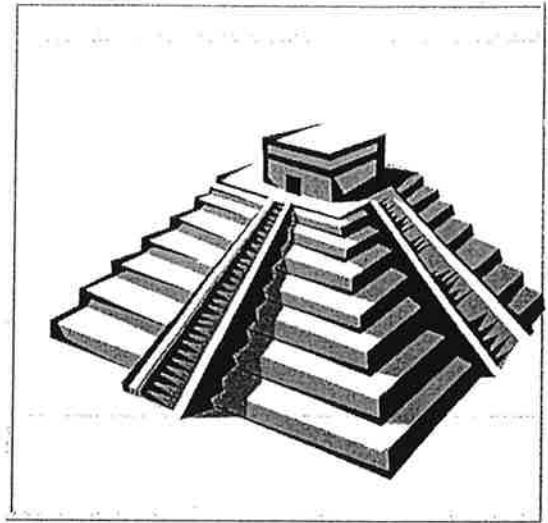
Mayans

Incas

Name of Civilization	Aztecs	Mayans	Incas
Location of Civilization			
Food grown			
Trade items			
Interesting facts			

Aztecs

This great civilization was located in Mesoamerica (current day Mexico). The capital of Aztec culture was Tenochtitlan. Farming was very important to the Aztecs. They used to irrigate with canals and used terraced slopes to prevent erosion. The Aztecs grew crops in chinampas or floating gardens. These floating gardens were islands of land built in swampy lakes.



Some of their main crops included maize (corn), pumpkins, tomatoes, squash, sweet potatoes, avocados, beans, and chili peppers. Aztecs also grew cocoa beans which was a special drink for the rich people and rulers. It was believed to be the food of the gods.

Aztecs developed many roads which they used for trade. They were able to trade gold, silver, gems, feathers, wood, and cocoa. They also created huge pyramids from stone. These pyramids were used to record the movements of the solar system and for religious purposes.

The Aztec empire was at constant war with other tribes. Aztec warriors were brave and noble and went to war to honor their gods. They were cruel to their enemies that lost in battle.

Men in the Aztec civilization were responsible for taking care of their family by working hard and paying taxes. Women were responsible for taking care of the children and running the household. The Aztecs had free public schools for all of their children.

Mayans

This great civilization was located in Mesoamerica (current day central and southern Mexico, the Yucatan Peninsula, Guatemala, Belize, El Salvador, and the westernmost part of Honduras). The Mayan civilization did not have a capital city or one main ruler. Each city governed itself and had its own ruler. They did share a common religion. One of the major accomplishments of the Mayan was to



create huge temples or buildings to honor their gods. Chichen Itza was an important trade center for the Mayans. They were able to trade pots, gems, seashells, feathers, and cocoa beans with other travelers.

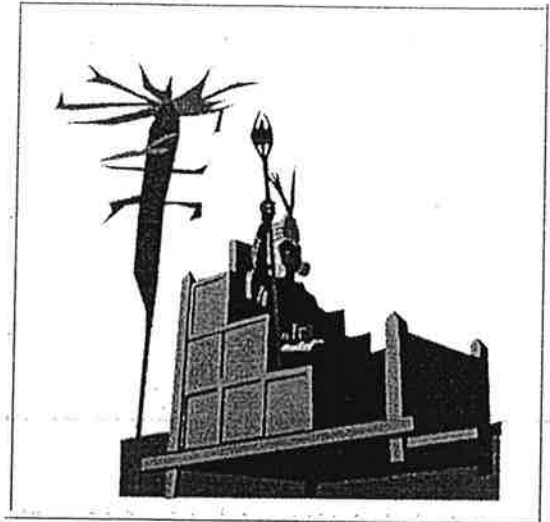
The Mayan culture had an interesting method of farming called slash and burn. This method cleared the land by cutting down (slashing) plants and burning them. They then planted corn, sunflowers, chili peppers, bananas, beans, and cotton. They would dig holes to collect rain to water their crops.

The Mayans were very interested in keeping track of time. They had three different calendars: a religious one (260 days), one based on the movement of the earth around the sun (365 days), and one that counted long periods of time. They also created a number system that used a series of dots and lines. They were the first to use a zero in counting. Mayans used glyphs (pictures) to write down important information.

The Mayans also participated in sports. They had a ball court and used a solid rubber ball to aim through rings that were 27 feet off of the ground. No one is sure how the game was played exactly, but we do know that it was probably dangerous.

Incas

This great civilization was located in South America (present day Peru, parts of Ecuador, Bolivia, Argentina, and the greater part of Chile). The capital of Incan culture was Cuzco. The Incan empire stretched over 2500 miles from high mountains to low jungle areas. The Incas developed gardens that were cut into the side of mountains. This prevented the water from running down the steep slopes. They also created aqueducts to carry water far distances. Incan farmers were able to grow a variety of crops, such as peppers, avocados, strawberries, peanuts, corn, potatoes, and beans. The llama was a popular animal used by the Incas. The llama was used for meat, transportation, and clothing.



The Incan civilization developed “freeze-dried food.” Typically, they would freeze-dry potatoes or meat. They left the food out overnight to freeze. The next day it would dry in the sun. They would repeat the process over and over. This freeze-dried food could last up to a year!

They created roads that went to the different villages for communication and trade. Important messages were sent by using runners. Some popular trading items were handmade clothes and pots.

In the Incan society, it was the job of the father to work and pay the taxes. The mother worked in the house and took care of the children. It was left up to the families to educate their own children.

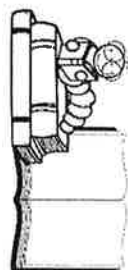
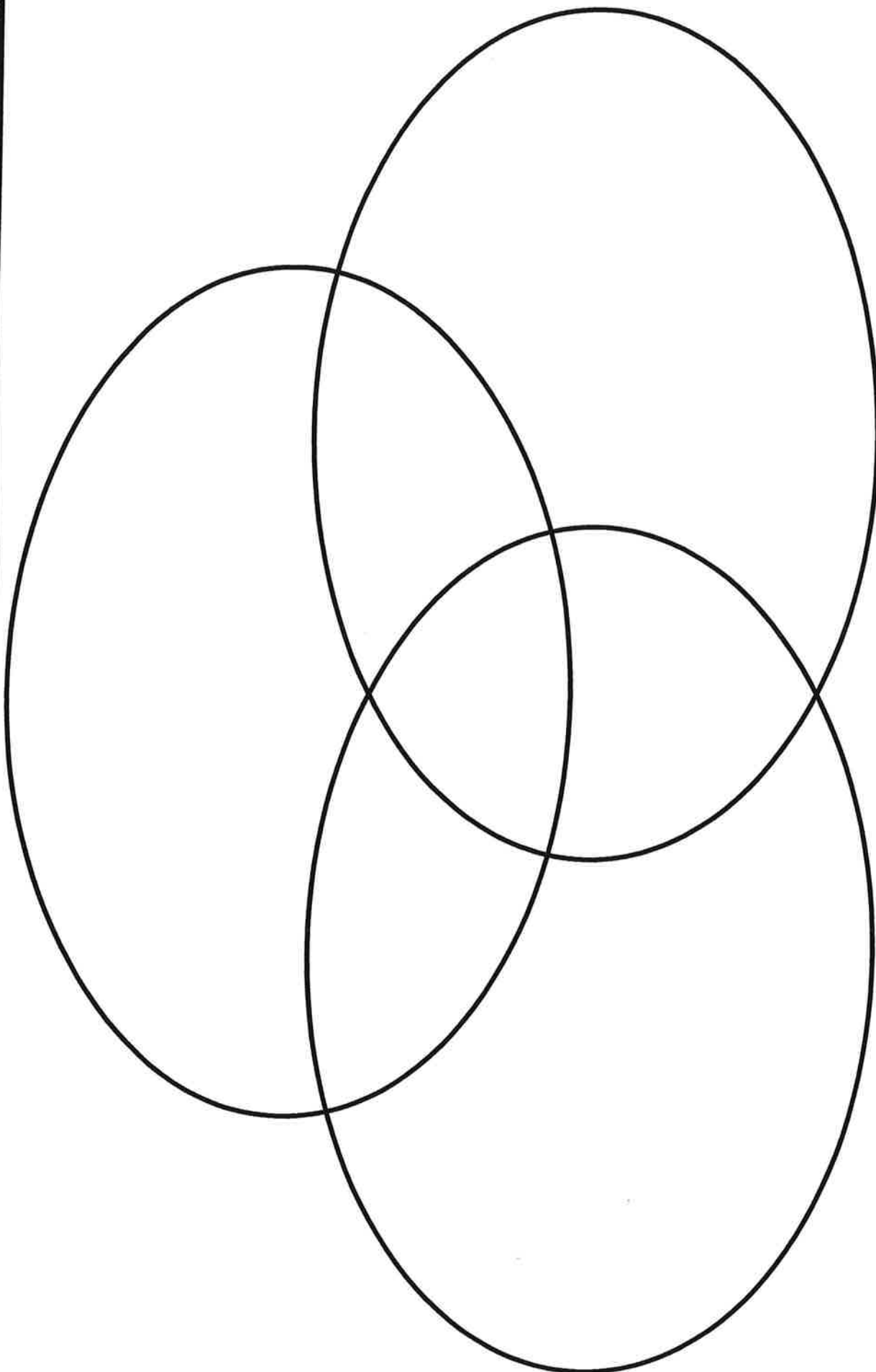
Machu Picchu was an Incan village that was rediscovered in 1911. This site still contains great examples of granite buildings, temples, and houses.

Aztec

Maya

Inca

NAME _____



SOCIAL STUDIES OPEN-RESPONSE QUESTION


Read all parts of each open-response question before you begin. Write your answers to the open-response questions in the space provided in this test booklet.

Write your answer to the question in the space provided on the next page.

Impact of the Maya, Inca, Aztec

Choose one of the ancient civilizations, Maya, Inca, or Aztec.

- A. Explain how geography influenced the way of life of the civilization you chose.
- B. Using sources from this unit, identify two achievements of the civilization you chose and explain their lasting impact on the world today.

Do not write on this page. Please write your answer to this open-response question on the next page. 

PLEASE GO ON TO THE NEXT PAGE →

MESOAMERICAN BALL GAME

The game the Maya and other Mesoamerican peoples played on a court like this one was much more than a game. It was often a matter of life and death. The captain of the losing Maya team probably climbed the temple steps to be sacrificed to the gods.

Players weren't allowed to touch the ball with their hands. They could only bounce the ball off their knees, hips, and elbows.

The solid ball was hard enough to break bones, so the players wore some heavy padding.

The goal of the game was to launch the ball through a stone ring. Since this wasn't easy, a game could go on for days.

REVIEW & ASSESS

1. **READING CHECK** What was the layout of most of the great Maya cities?

2. **INTEGRATE VISUALS** Based on the illustration and what you have learned about the Mesoamerican ball game, what qualities were probably necessary to play the game?

3. **MAKE INFERENCES** How do you think the Maya reacted as they witnessed a religious ceremony performed at the top of a towering pyramid?

Ancient vs. Modern Sports

Name: _____

Date: _____

