7th GRADE
NTI PACKET #21-25

Dear 7th Grade Maroon Parents & Guardians/ Students,

We can't thank you enough for the support, encouragement, and communication from all parents/guardians and students. We, as teachers, can't express how much we miss our students and how we are here for you all whenever you need us. Please feel free to reach out as we charter new territory with NTI Packets #21-25. We are now accepting completed packets in the Front Foyer of Harrison County Middle School. The front foyer is open 24/7.

TEACHER COMMUNICATION- MAROON

We want to highly encourage email during NTI Days. Students can use their google log in and log into google mail to communicate with their teachers.

- Language Arts/ Miranda Johnson- miranda.johnson@harrison.kyschools.us
- Math/ Melinda Persinger- melinda.persinger@harrison.kyschools.us
- Science/ Jaime Chapman- jaime.chapman@harrison.kyschools.us
- Social Studies/ Whitney Criswell- whitney.criswell@harrison.kyschools.us
- Special Education/Taylor Hill- taylor.hill@harrison.kyschools.us

Students can also use the Remind 101 App to communicate to teachers. You can send a text to 81010 and text "@7mharrison" to be added to the Remind 101 reminders. If you download the free app, you can send text messages to teachers for communication. You can also call Harrison County Middle School at (859) 234-7124

TEACHER COMMUNICATION- GOLD

We want to highly encourage email during NTI Days. Students can use their google log in and log into google mail to communicate with their teachers.

- Language Arts/ Carla Fuller- carla.fuller@harrison.kyschools.us
- Math/ Roni Long- roni.long@harrison.kyschools.us
- Science/ Jean Jones- jean.jones@harrison.kyschools.us
- Social Studies/ Jenny Hyatt- jenny.hyatt@harrison.kyschools.us
- Special Education/Carline Ford- carline.ford@harrison.kyschools.us

"WE MISS YOU!"- From: ALL 7th Grade Teachers

Name: Team: G or M

Name:

Team: Gary

Reading NTI Days 21-25:
Fictional Unit:

Day 21:	Day 22:	Day 23:	Day 24:	Day 25:
Assignment: Watch a rated G or PG-13 movie, and complete attached movie guide. Movies must follow the rating requirements. Suggested Movie Titles (suggestions only): Aladdin , Lion King, Harry Potter, Willie Wonka & the Chocolate Factory, The Rugrats Movie, A Little Princess, Mary Poppins. Alternate Assignment: Read the passage attached & questions, read a short story of your choice, OR use any of the internet links on the back to read a fictional passage. You may choose the movie option above OR do the reading.	Assignment: Write a detailed summary of the movie you watched on Day 21. Your summary should explain the following plot details: The Beginning The Rising Action The Climax The Falling Action The Resolution Therefore, the beginning, middle, and end of the movie should be described. The summary should consist of at least 8-10 sentences. Alternate: Write a summary of the passage you read on day 21 following the above details.	Assignment: Complete the following Prompts. Describe the protagonist (the lead/main character of the movie). Be sure to include strengths, weaknesses, physical appearance, and mental state of the character. Describe the antagonist (the character in conflict with protagonist). Be sure to include strengths, weaknesses, physical appearance, and mental state of the character. Which character do you like better? Explain why? Why are they in conflict with each other? Alternate: Do the above based on your reading passage from Day 21.	Assignment: Describe the mood and setting of the movie. Mood is the general feeling a piece of literature or movie gives someone. What was the mood or what were the moods of the movie you watched on Day 21? Describe what techniques were used to create the mood (lighting, music, weather, etc.). Detail the setting of the movie, but please remember, that the setting is made of TIME and PLACE. Alternate: do the above assignments based on the reading passage you read.	Assignment Options: Please pick one of the following options based on the movie or reading passage you did on Day 21. 1. Graphic Novel: turn your movie or passage into a graphic novel. Please use the worksheet provided as a guideline. Also, watch the following clip to help if needed: https://www.youtube.com/watch?v=iPBjrpYU7_0 2. Rewrite the ending! Now is your turn to recreate the movie's end (or passage you read). How would you tell this story? What would you change? 3. Lights, Camera, Action! Film a scene from the movie or create a scene from the reading. Have someone film you (and other actors- social distancing, of course) and email to your ELA teacher. 4. Draw any scene from the movie or passage and color it. Mood & setting must be accurate

Internet Options for Reading Passages:

https://www.mugglenet.com/
https://www.eastoftheweb.com
www.scholastic.com/learnathome
www.mobymax.com
https://login.edmentum.com/
https://www.poemuseum.org/poes-works-and-timeline (Edgar Allan Poe short stories and poems)
https://www.readworks.org/

Websites For Reading Games and Reading Fun:

https://www.roomrecess.com/
https://www.classtools.net/arcade/201604_bYVVY2
https://www.seussville.com/play/
https://www.eastoftheweb.com

Recommendations for Family Reading or Extra Reading:

https://www.commonsensemedia.org/book-lists

Websites for Vocabulary Enrichment:
https://www.classtools.net/arcade/201604_bYVVY2
www.freerice.com

NAME:

Topic: Movie Analysis Guide.

Movies choice must be rated G or PG-13!

1. What is the title of the movie?

2. Who are the main characters in the movie?

3. Where does the movie take place?

4. What is the time period of the movie?

Answer all questions!

6. What type of conflict is presented in this movie (internal conflict = struggle is inside the character or external conflict = struggle is outside of the character)?

7. Who is the protagonist (main/lead character)?

8. Who or what is the antagonist (person or thing in conflict with protagonist)?

Happy Viewing!

9. Describe in detail, your favorite scene/part of the movie.

5. How do you rate this movie on a scale from 1 (horrible) to 5 (best ever)? Explain rating.

Day 25: Please complete work here for options 2 through 4. (Choose 1 only)

Alternate Assignment. Read and do questions. if you do not watch a movie.

Rumpelstiltskin

by The Grimm Brothers

Once there was a miller who was poor, but who had a beautiful daughter. Now it happened that he had to go and speak to the King, and in order to make himself appear important he said to him, "I have a daughter who can spin straw into gold."

The King said to the miller, "That is an art which pleases me well. If your daughter is as clever as you say, bring her tomorrow to my palace, and I will try what she can do."

And when the girl was brought to him he took her into a room which was quite full of straw, gave her a spinning-wheel and a reel, and said, "Now set to work, and if by tomorrow morning early you have not spun this straw into gold during the night, you must die."

Thereupon he himself locked up the room, and left her in it alone. So there sat the poor miller's daughter, and for the life of her could not tell what to do. She had no idea how straw could be spun into gold, and she grew more and more miserable, until at last she began to weep.

But all at once the door opened, and in came a little man, and said, "Good evening, Mistress Miller; why are you crying so?"

"Alas!" answered the girl, "I have to spin straw into gold, and I do not know how to do it."

"What will you give me," said the manikin, "if I do it for you?"

"My necklace," said the girl.

The little man took the necklace, seated himself in front of the wheel, and "whirr, whirr, whirr," three turns and the reel was full. Then he put another on, and whirr, whirr, whirr, three times round, and the second was full too. And so it went on until the morning, when all the straw was spun, and all the reels were full of gold. By daybreak the King was already there, and when he saw the gold he was astonished and delighted, but his heart became only more greedy. He had the miller's daughter taken into another room full of straw, which was much larger, and commanded her to spin that also in one night if she valued her life.

The girl knew not how to help herself, and was crying, when the door again opened, and the little man appeared and said, "What will you give me if I spin that straw into gold for you?"

"The ring on my finger," answered the girl. The little man took the ring, again began to turn the wheel,

and by morning had spun all the straw into glittering gold.

The King rejoiced beyond measure at the sight, but still he had not gold enough. He had the miller's daughter taken into a still larger room full of straw, and said, "You must spin this, too, in the course of this night; but if you succeed, you shall be my wife."

"Even if she be a miller's daughter," thought he, "I could not find a richer wife in the whole world."

When the girl was alone the manikin came again for the third time, and said, "What will you give me if I spin the straw for you this time also?"

"I have nothing left that I could give," answered the girl.

"Then promise me, if you should become Queen, your first child."

"Who knows whether that will ever happen?" thought the miller's daughter. Not knowing how else to help herself in this strait, she promised the manikin what he wanted, and for that he once more span the straw into gold.

And when the King came in the morning and found all as he had wished, he took her in marriage, and the pretty miller's daughter became a Queen.

A year after, she had a beautiful child, and she never gave a thought to the manikin. But suddenly he came into her room, and said, "Now give me what you promised." The Queen was horror-struck, and offered the manikin all the riches of the kingdom if he would leave her the child. But the manikin said, "No, something that is living is dearer to me than all the treasures in the world." Then the Queen began to weep and cry, so that the manikin pitied her. "I will give you three days' time." said he. "If by that time you find out my name, then shall you keep your child."

So the Queen thought the whole night of all the names that she had ever heard, and she sent a messenger over the country to inquire, far and wide, for any other names that there might be. When the manikin came the next day, she began with Caspar, Melchior, Balthazar, and said all the names she knew, one after another. But to every one the little man said, "That is not my name."

On the second day she had inquiries made in the neighborhood as to the names of the people there, and she repeated to the manikin the most uncommon and curious. "Perhaps your name is Shortribs, or Sheepshanks, or Laceleg?" but he always answered, "That is not my name."

On the third day the messenger came back again, and said, "I have not been able to find a single new name, but as I came to a high mountain at the end of the forest, where the fox and the hare bid each other good night, there I saw a little house, and before the house a fire was burning, and round about the fire quite a ridiculous little man was jumping: he hopped upon one leg, and shouted-'Today I bake, tomorrow brew / The next I'll have the young Queen's child / Ha! glad am I that no one knew / That Rumpelstiltskin I am styled.'"

You may think how glad the Queen was when she heard the name! And when soon afterwards the little man came in and asked, "Now, Mistress Queen, what is my name?"

At first she said, "Is your name Conrad?"

"No."

"Is your name Harry?"

"No."

"Perhaps your name is Rumpelstiltskin?"

"The devil has told you that! The devil has told you that!" cried the little man, and in his anger he plunged his right foot so deep into the earth that his whole leg went in. Then in rage he pulled at his left leg so hard with both hands that he tore himself in two.

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We support educators, families, and districts
As schools close across the country due to COVID-19, and we work to keep each other safe and healthy, educators, districts, and families are facing an unprecedented teaching challenge. Here at ReadWorks, we are even more dedicated to our nonprofit mission than ever before: to support the effective teaching and learning of reading. In this ever-changing situation, we wanted to be sure to clarify some of our policies and update you on what we'll be doing going forward.

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Name: _____ Date: _____

1. Who spun the straw into gold?

A. the miller

B. the miller's daughter

C. the king

D. the little man

2. What problem does the miller's daughter face at the beginning of the story?

A. She does not love the king, but her father has threatened to kill her if she does not marry the king.

B. She does not know how to spin straw into gold, but the king has threatened to kill her if she does not spin his straw into gold.

C. She wants her necklace and ring back, but she has already given them to the little man in exchange for his help.

D. She is afraid of the little man, but he is the only one who can spin straw into gold for her.

3. The little man is positive that nobody knows his name. What evidence from the text best supports this conclusion?

A. "'I will give you three days' time,' said he. 'If by that time you find out my name, then shall you keep your child.'"

B. "'Ha! glad am I that no one knew / That Rumpelstiltskin I am styled.'"

C. "'Perhaps your name is Shortribs, or Sheepshanks, or Laceleg?' but he always answered, 'That is not my name.'"

D. "And when soon afterwards the little man came in, and asked, 'Now, Mistress Queen, what is my name?'"

4. Why might Rumpelstiltskin have been jumping and shouting in his house?

A. He was panicking because he thought his house had caught on fire.

B. He was celebrating, thinking he was going to get the Queen's child.

C. He was performing a magical spell to get the Queen's child.

D. He was upset because he knew that the Queen knew his name.

5. What is a theme of this story?

A. It's important to keep one's promises.

B. One should not be greedy.

C. It's important to forgive others.

D. One should pity the less fortunate.

6. Read these sentences from the text:

"[The manikin said,] 'What will you give me if I spin the straw for you this time also?'

"'I have nothing left that I could give,' answered the girl.

"'Then promise me, if you should become Queen, your first child.'

"'Who knows whether that will ever happen?' thought the miller's daughter; and, not knowing how else to help herself in this strait, she promised the manikin what he wanted, and for that he once more span the straw into gold."

What does the phrase "not knowing how else to help herself in this strait" mean based on these sentences?

A. not knowing how to act like a Queen

B. not knowing how to spin straw into gold

C. not knowing how to break a promise

D. not knowing how else to solve her problem

7. Choose the answer that best completes the sentence:

The miller's daughter gave the manikin her necklace, _____ he spun the straw into gold.

A. but

B. yet

C. so

D. like

8. The first time the little man comes to the miller's daughter, she gives him her necklace. What does she give to the little man the second time he appears?

9. Why did the little man make the miller's daughter promise to give him her first child?

Support your answer with evidence from the text.

10. Rumpelstiltskin is greedy.

Using evidence from the text, form an argument for or against this description of Rumpelstiltskin.

NTI Completion Sheet: Please review ALL assignment details from the front page!

Day 22: Summary of movie or reading.

Day 23: Character descriptions.
Protagonist Description:

Antagonist Description:

Which character do you like best? Explain your answer.

Why are the characters in conflict?

Day 24: Mood and Setting.
Describe the mood of the movie or story you read. Please give good descriptions as you explain the mood.

If you watch the movie, what film techniques were used to create the mood? Think about weather, lighting, and music.

If you read a story, what elements were used to create the mood? (word choice, dialogue, etc.)

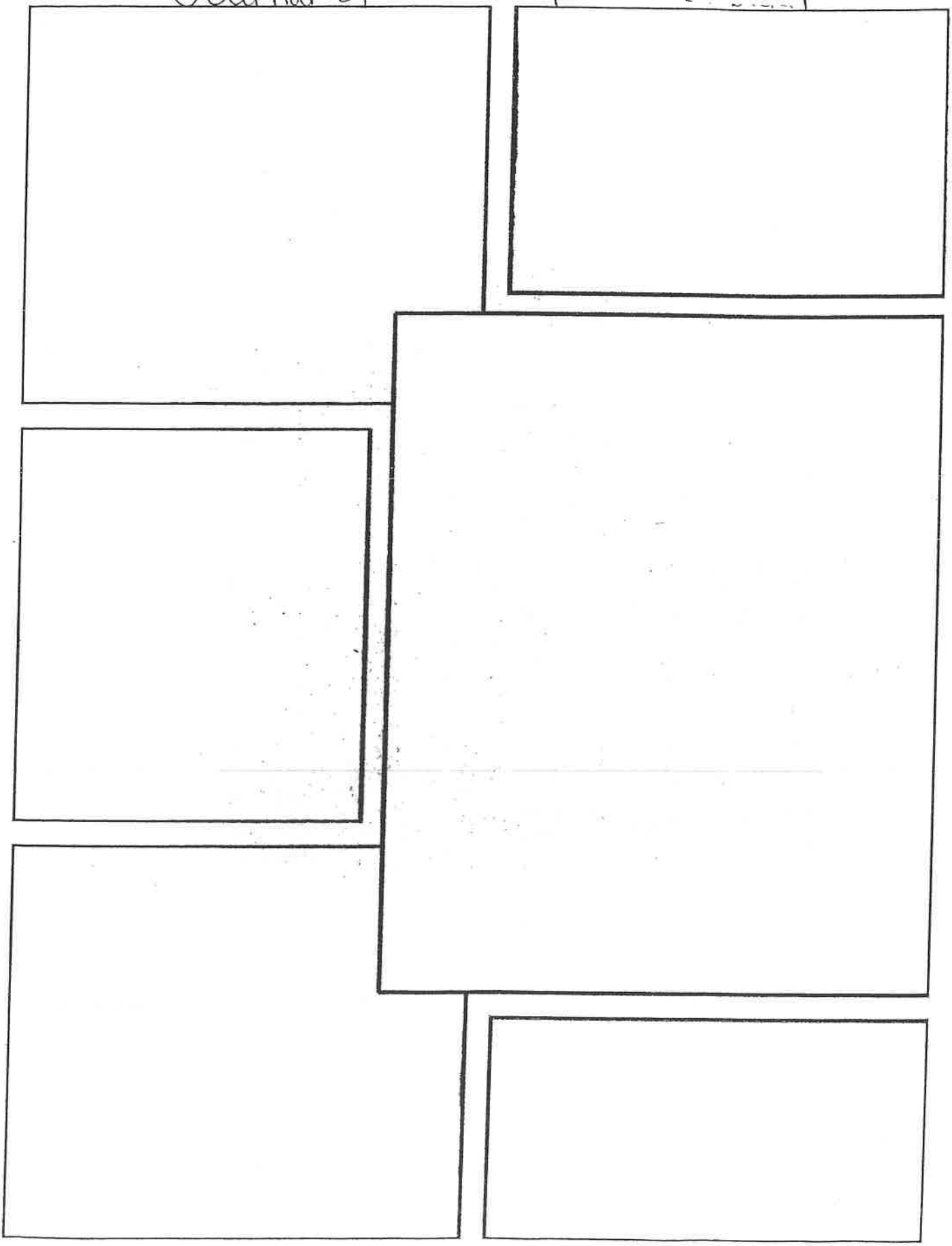
Give a detailed description of the setting. Be sure to include BOTH time and place, please.

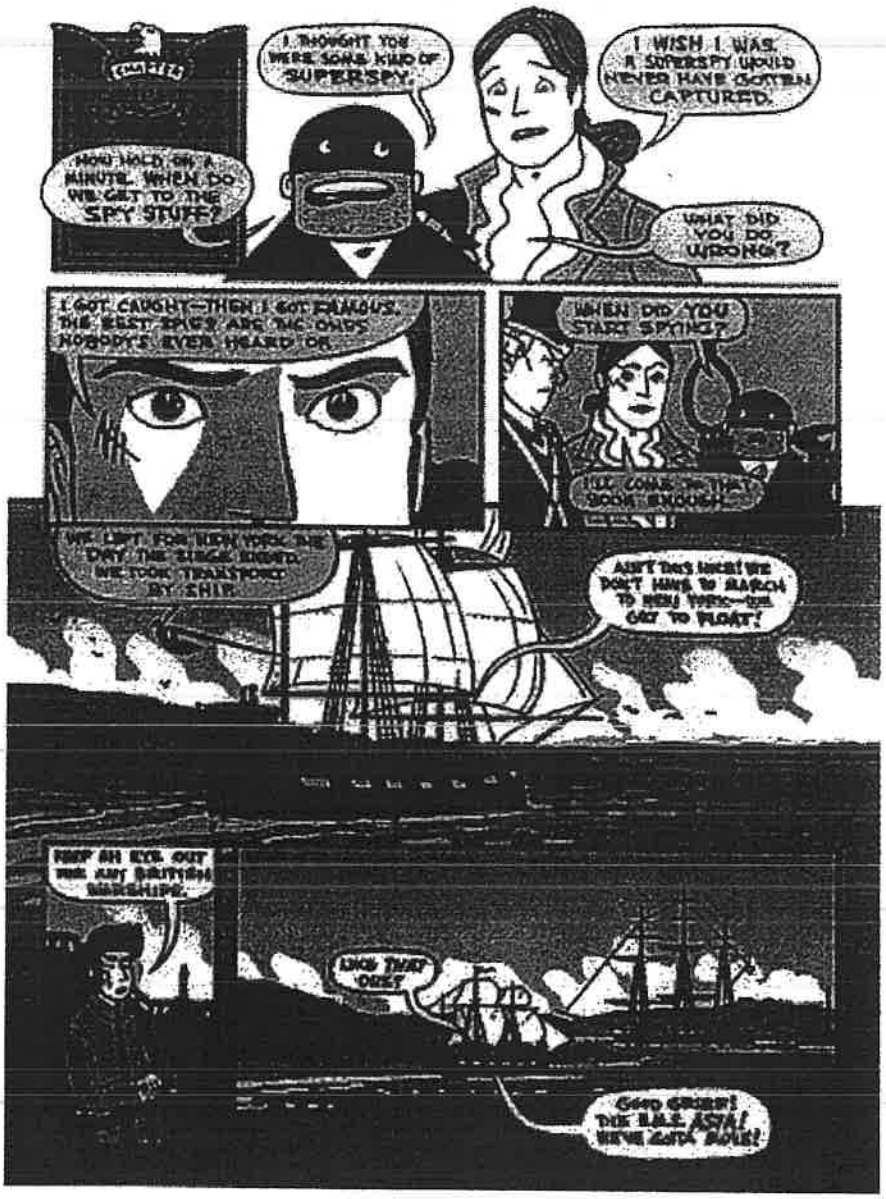
Day 25: You need to complete one of the following options:

Option1: Graphic Novel Clip of movie or reading. There is a handout attached for that option.
Option 2: Rewrite the ending of the movie or story.
Option 3: Film a scene of any part of the movie or story.
Option 4: Draw a scene.

**Options 2-4 can be completed on the back of the Movie Analysis Worksheet.
****Please read your assignment sheet again, page one of packet, for more information on the options above!

Day 25: Journal Option Graphic Novel Template





Day 25:
Graphic Novel Option.
This is an example from Nathan Hale to help guide you as you make a graphic novel of the movie you watched or the story you read.

Day 21 GUIDED PRACTICE

❑ I can convert decimals to percent.

To convert a decimal to a percent *move the decimal two places to the right* because you are multiplying by 100. Don't forget your percent sign.

CONVERT DECIMAL TO PERCENT

0.343 = 34.3% 1.55 = 155% 0.05 = 5%

1.09 = 109% 0.171 = 17.1% 1.9 = 190%

❑ I can convert percents to decimals.

To convert a percent to a decimal *move the decimal two places to the left* because you are dividing by 100 which removes the percent.

★ If you do not see a decimal, it is always at the end.

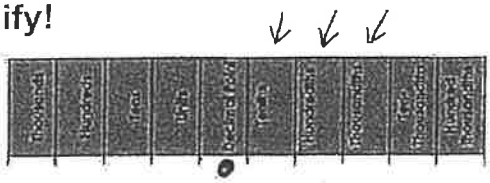
CONVERT PERCENT TO DECIMAL

24.6% = 0.246 193% = 1.93 5% = 0.05

13% = 0.13 16% = 0.16 189% = 1.89

❑ I can convert a decimal to a fraction.

To convert a decimal to a fraction you have to know place value. Say the decimal using correct place value and write it in fraction form. Don't forget to simplify!



say ↓

CONVERT DECIMAL TO FRACTION

0.64 = $\frac{64}{100} = \frac{16}{25}$
Sixty-four hundredths

0.12 = $\frac{12}{100} = \frac{3}{25}$
twelve hundredths

0.874 = $\frac{874}{1000} = \frac{437}{500}$
Eight hundred seventy-four thousandths

0.3 = $\frac{3}{10}$
three tenths

0.878 = $\frac{878}{1000} = \frac{439}{500}$
Eight hundred seventy-eight thousandths

1.92 = $1\frac{92}{100} = 1\frac{23}{25}$
one and ninety two hundredths

Name : _____ Score : _____

Teacher : _____ Date : _____

YOU TRY IT :)

Converting Between Percents, Decimals, and Fractions

Convert Decimal to Percent

1.89 =	0.524 =	1.44 =
0.162 =	0.95 =	0.3 =
1.24 =	0.53 =	0.597 =
1.74 =	0.53 =	0.74 =

Convert Percent to Decimal

65.9 % =	74 % =	151 % =
16 % =	42.6 % =	88 % =
147 % =	5 % =	193 % =
53.3 % =	182 % =	61.8 % =

Convert Decimal to Fraction

1.48 =	1.71 =	0.386 =
1.59 =	0.26 =	0.992 =
0.477 =	1.06 =	1.82 =
0.35 =	0.738 =	1.91 =

Day 22 GUIDED PRACTICE

❑ I can convert a fraction to a decimal.

To convert a fraction to a decimal just divide the numerator by the denominator OR if the fraction is easy to convert to tenths or hundredths, you can use an equivalent fraction.

CONVERT FRACTION TO DECIMAL

$\frac{6}{50} \overset{\times 2}{=} \frac{12}{100} = 0.12$ OR $6 \div 50 = 0.12$

$\frac{7}{10} \overset{\times 10}{=} \frac{70}{100} = 0.7$ OR $7 \div 10 = 0.7$

$\frac{27}{40} = 0.675$ OR $27 \div 40$

$\frac{14}{50} = 0.28$

$\frac{7}{40} = 0.175$

$\frac{27}{20} = 1.35$

❑ I can convert a fraction to a percent.

To convert a fraction to a percent you can make it a decimal first by dividing and then make it a percent by moving the decimal.

You can also make an equivalent fraction out of 100 and write the numerator as a decimal.

CONVERT FRACTION TO DECIMAL

$\frac{7}{20} = 0.35 = 35\%$ $\frac{1}{8} = 0.125 = 12.5\%$ $\frac{8}{10} = 0.8 = 80\%$

$\frac{51}{50} = 1.02 = 102\%$ $\frac{11}{20} = 0.55 = 55\%$ $\frac{9}{25} = 0.36 = 36\%$

❑ I can convert a percent to a fraction.

To convert a percent to fraction you can make it a decimal first and then change it to a fraction. Don't forget to simplify.

CONVERT PERCENT TO FRACTION

$18\% = 0.18 = \frac{18}{100} = \frac{9}{50}$ $83\% = 0.83 = \frac{83}{100}$ $78\% = 0.78 = \frac{78}{100} = \frac{39}{50}$

★ Sometimes the percent is already decimal but you still have to get rid of the percent.

$84.4\% = 0.844 = \frac{844}{1000} = \frac{211}{250}$ $88.9\% = 0.889 = \frac{889}{1000}$ $0.5\% = 0.005 = \frac{5}{1000} = \frac{1}{200}$

★ Sometimes the percent is larger than 100.

$130\% = 1.3 = 1\frac{3}{10}$ $110\% = 1.1 = 1\frac{1}{10}$ $107\% = 1.07 = 1\frac{7}{100}$

Name : _____ Score : _____

Teacher : _____ Date : _____

YOU TRY IT!

Converting Between Percents, Decimals, and Fractions

Convert Fraction to Decimal

$\frac{36}{25}$ =

$\frac{14}{20}$ =

$\frac{23}{40}$ =

$\frac{12}{25}$ =

$\frac{15}{16}$ =

$\frac{1}{16}$ =

$\frac{14}{25}$ =

$\frac{7}{20}$ =

$\frac{22}{50}$ =

$\frac{7}{20}$ =

$\frac{11}{50}$ =

$\frac{22}{20}$ =

Convert Fraction to Percent

$\frac{21}{20}$ =

$\frac{85}{50}$ =

$\frac{29}{20}$ =

$\frac{1}{16}$ =

$\frac{31}{20}$ =

$\frac{78}{50}$ =

$\frac{6}{50}$ =

$\frac{28}{20}$ =

$\frac{38}{25}$ =

$\frac{35}{20}$ =

$\frac{13}{20}$ =

$\frac{10}{25}$ =

Convert Percent to Fraction

12.6 % =

108 % =

95 % =

112 % =

17 % =

51.7 % =

90 % =

24.3 % =

142 % =

82.2 % =

128 % =

73.9 % =

Taxing Problems

Day 23 I can calculate sales tax and tip.

Tips

Example

Find the amount of sales tax and the total cost.

Price: $30 Sales Tax: 4%

- To find the sales tax, multiply the tax rate by the price.
  4% of $30 = Sales tax
  0.04 × 30 = 1.2
  So, the sales tax is $1.20.

> change the percent to a decimal before multiplying

- To find the total cost, add the sales tax to the price.
  $30.00 + $1.20 = $31.20
  So, the total cost is $31.20.

Find the amount of sales tax.

	Price	Sales Tax
❶	$84	4%
❷	$54	6%
❸	$20	8%
❹	$640	2.5%
❺	$96	4.5%
❻	$864	5%

Find the total cost.

	Price	Sales Tax
❼	$52	7.5%
❽	$892	2.5%
❾	$44	3%
❿	$42	9.5%
⓫	$864	5%
⓬	$54	6%

Answer Box

A $907.20	B $4.32	C $45.99	D $55.90	E $914.30	F $57.24
G $45.32	H $1.60	I $3.36	J $16.00	K $3.24	L $43.20

Ex 1: 84 × .04 = 3.36

Ex 2: 54 × .06 = 3.24

SHOW WORK

Sales tax

3.20 × .08 =

4.640 × .025 =

Total cost

7.52 × 0.075 = ____ +52 = ____

8.892 × 0.025 = ____ +892 = ____

SALES TAX AND TIP WORD PROBLEMS

13. Makensi and Thomas' lunch bill came to $13.79. They plan to leave a 15% tip. How much tip will they leave?

14. Lincoln bought a video game console for $129. The sales tax in his state is 6%. How much tax did Lincoln pay for the video game console?

15. Carson bought himself some new boots for $98.99. (6% sales tax)

    A. How much tax would he pay?

    B. What is his final price?

ACT CHALLENGES (OPTIONAL but I dare you to try ☺)

1. The price of a family dinner was $48.00. A sales tax added 5% to the final bill. The family then left a $10.08 tip. If the family included the sales tax when calculating the tip, what percent tip did the family leave?

   A) 2% B) 10% C) 18% D) 20% E) 24%

2. Reece and Austin each ordered a sandwich at a restaurant. The price of Reece's sandwich was x dollars, and the price of Austin's sandwich was $1 more than the price of Reece's. If Reece and Austin split the cost of the sandwiches evenly and each paid a 20% tip, which of the following expressions represents the amount, in dollars, each of them paid? (Assume there is no tax.)

   A) $0.2x + 0.2$ B) $0.5x + 0.1$ C) $1.2x + 0.6$ D) $2.4x = 1.2$

Sale Time!

Day 24 I can calculate discount.

Example

Find the dollar amount saved and the sale price.

Original price: $65 . Discount: 15%

- To find the amount saved, multiply the discount rate by the original price.
  15% of $65 = Discount
  0.15 × $65 = 9.75
  So, the amount saved is $9.75.

> Change the percent to a decimal before multiplying

- To find the sale price, subtract the discount from the original price.
  $65.00 − $9.75 = $55.25
  So, the sale price is $55.25.

Find the dollar amount saved.

1. Original price: $79 Discount: 50%
2. Original price: $102 Discount: 20%
3. Original price: $52 Discount: 25%
4. Original price: $135 Discount: 10%
5. Original price: $298 Discount: 40%
6. Original price: $409 Discount: 5%

Find the sale price.

7. Original price: $135 Discount: 10%
8. Original price: $102 Discount: 20%
9. Original price: $409 Discount: 5%
10. Original price: $52 Discount: 25%
11. Original price: $119 Discount: 30%
12. Original price: $725 Discount: 45%

Answer Box

A $398.75	B $20.40	C $119.20	D $388.55	E $121.50	F $39.50
G $20.45	H $81.60	I $13.00	J $83.30	K $13.50	L $39.00

SHOW WORK

2. 102 × .20 = _____ discount

8. 102 × .20 = _____ discount
102 − _____ = _____
discount sale price

Ex 1: 79 × .50 = 39.50 saved

Ex 7: 135 × .10 = 13.50 saved

135 − 13.50 = 121.50 sale price

DISCOUNT WORD PROBLEMS

13. A table is advertised for $299 with a discount of 20% off.
    A. How much is the discount?

    B. What is the cost of the table after the discount?

14. At a clearance sale, Olivia bought a jacket that was marked down 60%. The regular price of the jacket was $89. What is the sale price Olivia paid for the jacket?

15. Isabella needs a new washing machine. During the Memorial Day sale she finds a nice one that is marked down 20%. It was originally $850.

    A. How much money will Isabella save?

    B. What is the sale price of the washing machine?

    C. If there is a 6% sales tax on the washing machine, how much will the final cost be for Isabella?

ACT CHALLENGES (OPTIONAL but I dare you to try☺)

1. Martha gets a 20% discount at the clothing store. If the retail price of a shirt is $21.00 and sales tax is 5% how much would 3 shirts cost Martha?

A) $17.43 B) $17.89 C) $47.25 D) $52.92 E) $53.55

2. Bailey bought a pair of jeans for $28.56. The sale was 30% off the regular price. What was the regular price of the jeans?

A) $19.99 B) $22.85 C) $37.13 D) $40.80 E) $58.56

Day 25 I can calculate simple interest.

Simply Interesting!

Find the simple interest. Use the formula $I = prt$, where t is in years.

	Principal (P)	Rate (R)	Time (T)
❶	$2,400	6.5%	2 years
❷	$6,400	9%	3 months
❸	$900	18%	3 years
❹	$5,000	11.5%	$1\frac{1}{2}$ years
❺	$1,250	14%	1 years
❻	$1,600	5.5%	9 months
❼	$12,000	7.5%	5 years
❽	$3,400	4%	6 months
❾	$2,700	8%	$2\frac{1}{2}$ years
❿	$6,400	9%	3 years
⓫	$22,500	10%	$2\frac{1}{4}$ years
⓬	$9,500	15%	$1\frac{1}{2}$ years

Answer Box

A $68	B $2,137.50	C $4,500	D $1,728	E $5,062.50	F $175
G 2 $144	H $66	I $862.50	J 1 $312	K $540	L $486

SHOW WORK

3. $900 * .18 * 3 =

4.

5.

6. $1,600 * .055 * \frac{3}{4} =$

or

$1,600 * .055 * .75 =$

Ex 1: P * R * T

$2,400 * .065 * 2 =$ $312 Interest

Ex 2: $6,400 * .09 * \frac{1}{4} =$ $144 Interest

or

$1,600 * .09 * 2.5 =$ $144 Interest

SIMPLE INTEREST WORD PROBLEMS

13. Eric took out a 3-year loan for $1600. He has to pay 5% simple interest on the loan. How much interest will Eric pay?

14. Lexie earns 3% simple interest on the balance of her savings account. Her account has a balance of $3500. How much simple interest will she earn on the balance after 6 months?

15. Ethan took out a 4-year loan for $32,500 to help pay his college tuition. He has to pay a 4% simple interest on the loan.

    A. How much interest will Ethan have to pay?

    B. At the end of the 4 years, what is the total that Ethan will have paid back?

ACT CHALLENGES (OPTIONAL but I dare you to try☺)

1. Logan and Mason are starting their own furniture business. In order to build their shop, they borrow $150,000 from their neighborhood bank. The interest rate on the loan is 6%. How much interest do they have to pay?

   A) $12,000 B) $9000 C) $6000 D) $3000 E) $1500

2. Ashlee recently opened a new credit card. In her first month, expenditures totaled $500 and she was not charged any interest. Ashlee paid $80 from her first month's bill. The second month, she spent another $60 on her credit card. This time, she was charged 5% interest on her total unpaid balance. How much interest was Ashlee charged?

   A) $12.00 B) $4.80 C) $24.00 D) $48.00 E) $32.00

7th Grade Days 21-25 Social Studies
NTI Assignments

Days 21-25

This week the focus is reviewing map skills. You will review map elements, latitude and longitude, how to read various maps, and even have the opportunity to put your skills to use for creating your own amusement park map!

Day 21: You will complete "Reviewing Basic Skills- Part 1". Use the maps provided (40-41, and 8-9 respectively) to complete the directions and longitude/latitude review.

Day 22: Today you will continue to review basic map skills. Use the attached "Middle America" and "South America" maps to practice using map scales for distance and relative location on the second page of the "Reviewing Basic Skills-Part 1" worksheet.

Day 23: Investigate how geographers show information on maps by completing the constructed response exercise (Exploring the Essential Question). Follow the steps and use the map given to complete the question on notebook paper. You are practicing using a road map for this activity.

Day 24: Practice using a historical map of Ancient Greece today. Use the map to answer the questions on the "A History Map: Ancient Greece" worksheet. Please answer all eleven questions, including the "Challenge".

Day 25: Design your own amusement park map, following the map skills challenge instructions. There is a piece of grid paper (each square is 1 cm by 1 cm) if you wish to use it for help with your scale drawing.

Additional Resources to enhance your learning:

*Check Mrs. Criswell's Google Classroom or Class Website (https://sites.google.com/harrison.kyschools.us/criswell/) for additional resources throughout the next couple of weeks.
*Students on either team can access NTI resources, help, and communicate using the 7th Grade Social Studies NTI Google Classroom (classroom.google.com). The code is xxedzpd.

You can access BrainPop videos on Google Classroom or by the links below.
Use the following login information:
Username: hcmscolts
Password: harrison20
Map Skills: https://www.brainpop.com/socialstudies/geography/mapskills/

Latitude and Longitude:
https://www.brainpop.com/socialstudies/geography/latitudeandlongitude/
Continents: https://www.brainpop.com/socialstudies/geography/continentsoftheworld/

Online Games for Geography Review
https://online.seterra.com/en/vgp/3188 (Continents and Ocean Map Quiz Game)
https://online.seterra.com/en/vgp/3252 (Latitude and Longitude)
https://online.seterra.com/en/qz/5010 (Cardinal Directions: US States)
http://www.sheppardsoftware.com/World_Continents.htm (World Continent Games)
https://world-geography-games.com/us_states/index.html (U.S. States Review)

Name _____

GEO-THEMES™

Reviewing Basic Skills

Part 1

DIRECTIONS

1. Turn to the political map of the United States on pages ~~34~~ 40 and ~~35~~ 41 in your atlas. Find the direction arrows near the bottom of the map. The only direction labeled is north (N).

   Now find Kansas on the map. (Look in the center of the country.) Locate its capital, Topeka.

   Tell in what general direction you would travel to get from Topeka to each of the following cities. Use the directions shown on the arrows below.

   a. Omaha, Nebraska _____

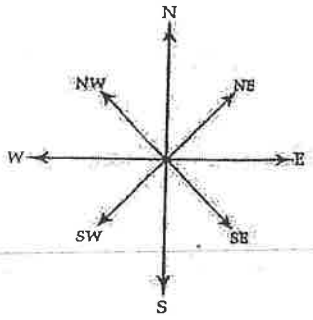
   b. Tulsa, Oklahoma _____

   c. Independence, Missouri _____

   d. Des Moines, Iowa _____

   e. Amarillo, Texas _____

   f. Little Rock, Arkansas _____



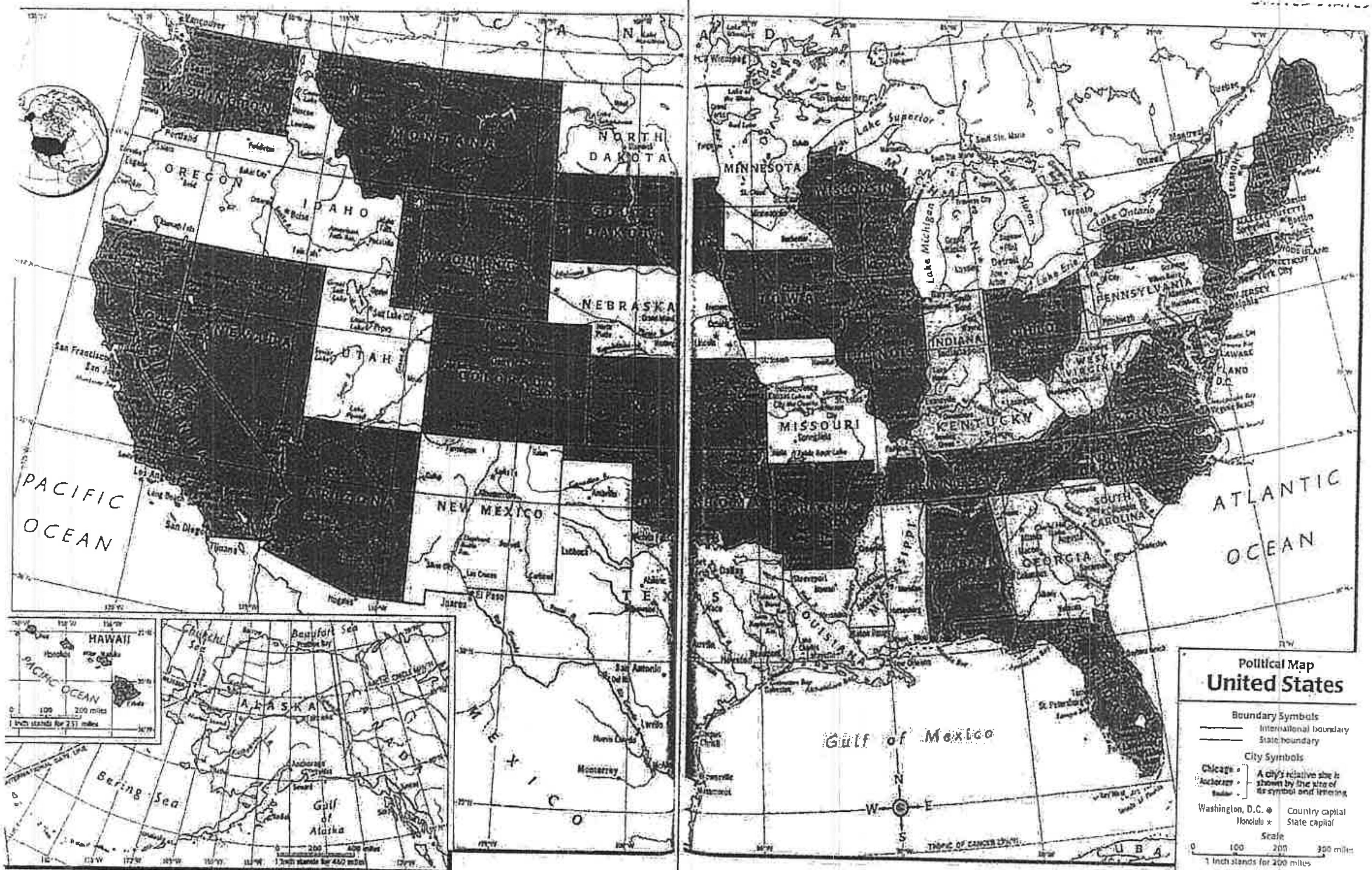
LOCATION: LATITUDE AND LONGITUDE

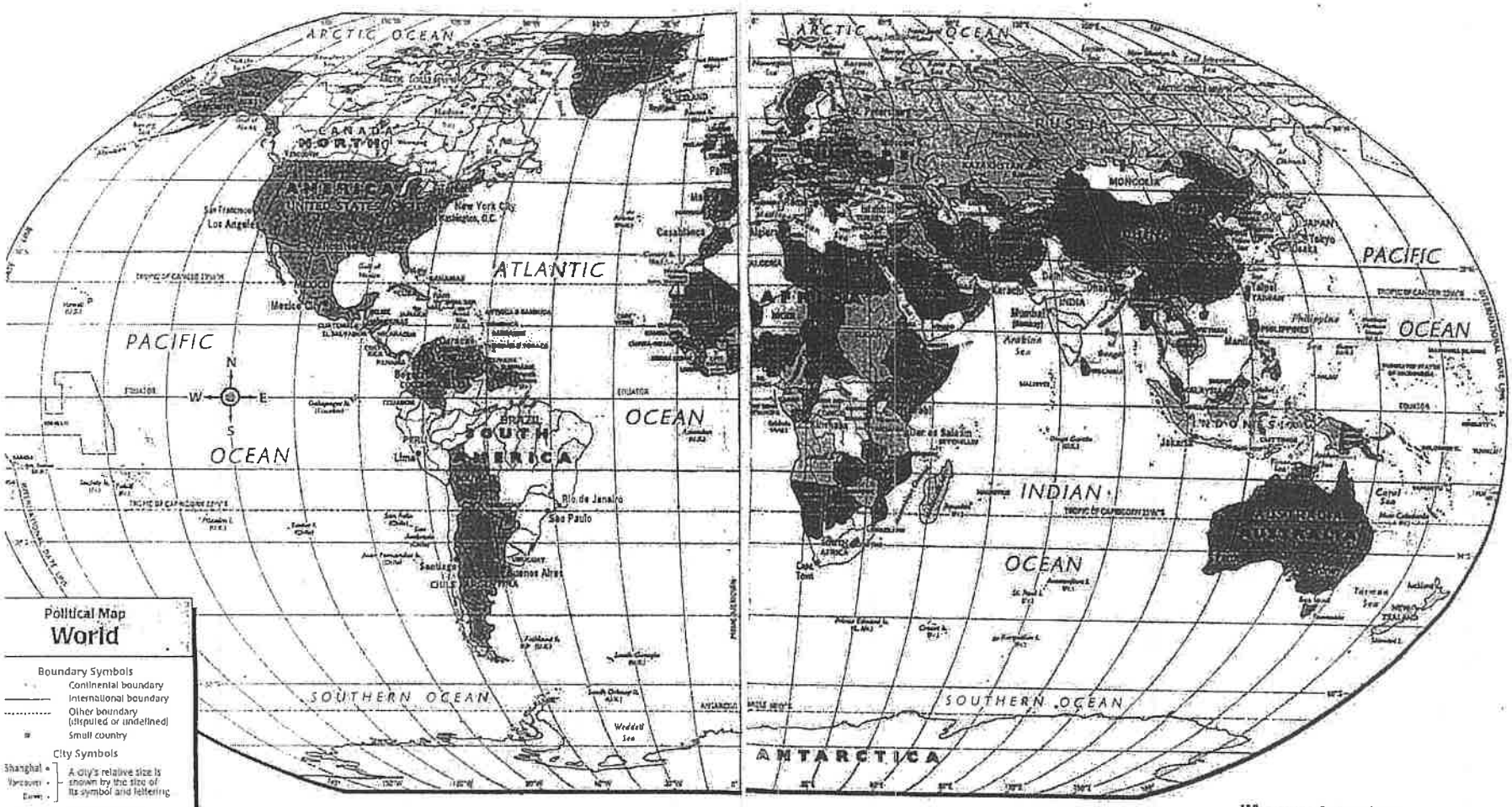
2. Latitude and longitude can help you locate places on a map. Turn to the World Political map on pages 8 and 9.

   - Lines of latitude run across the map, east and west. Look at the right edge of the map. Notice that each line is labeled in degrees (°). Latitude shows the distance north or south of the Equator (0°).
   - Longitude lines run north and south and meet at the poles. Numbering starts at the Prime Meridian (0°). Longitude lines are also numbered by degrees. They are labeled according to their distance east or west of the Prime Meridian.

   Draw a line to connect each line of latitude or longitude listed below with a city near it. (Hint: Run your finger along each line of latitude or longitude to find the city.)

Latitude/Longitude	City
a. 150°W	Sydney, Australia
b. 30°N	Anchorage, Alaska
c. 150°E	Cairo, Egypt
d. 60°W	Buenos Aires, Argentina


WASHINGTON
OREGON
IDAHO
MONTANA
WYOMING
NORTH DAKOTA
NEBRASKA
NEVADA
UTAH
COLORADO
NEW MEXICO
MINNESOTA
IOWA
MISSOURI
INDIANA
OHIO
KENTUCKY
WEST VIRGINIA
PENNSYLVANIA
VERMONT
NEW JERSEY
SOUTH CAROLINA
GEORGIA
PACIFIC OCEAN
ATLANTIC OCEAN
Gulf of Mexico
Lake Michigan
Lake Superior
Lake Huron
Lake Ontario
Lake Erie
MEXICO
San Francisco
Portland
Toronto
Detroit
El Paso
HAWAII
ALASKA
Bering Sea
Gulf of Alaska
Beaufort Sea
N
S
E
W
Political Map
United States
Boundary Symbols
International boundary
State boundary
City Symbols
A city's relative size is shown by the size of its symbol and lettering
Washington, D.C. ⊕ Country capital
Honolulu × State capital
Scale
0 100 200 300 miles
1 inch stands for 200 miles
Detailed legend on page 3



Who owns Antarctica?

No one does, although seven nations claim parts of it. The United States and many other countries reject these claims. Since Antarctica is not owned by any country, it is not shown in any of the map's political colors.

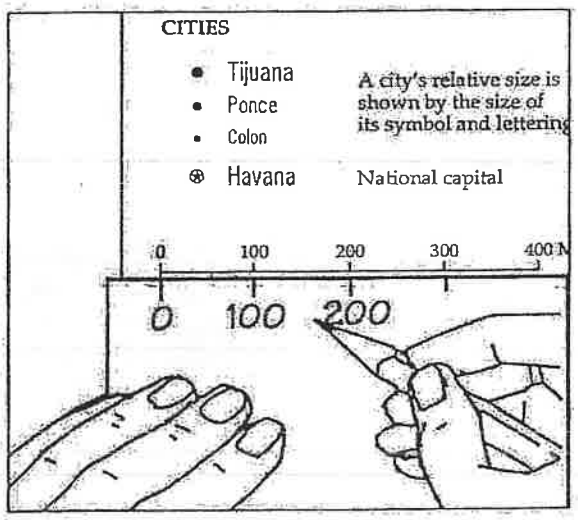
MAP SCALE

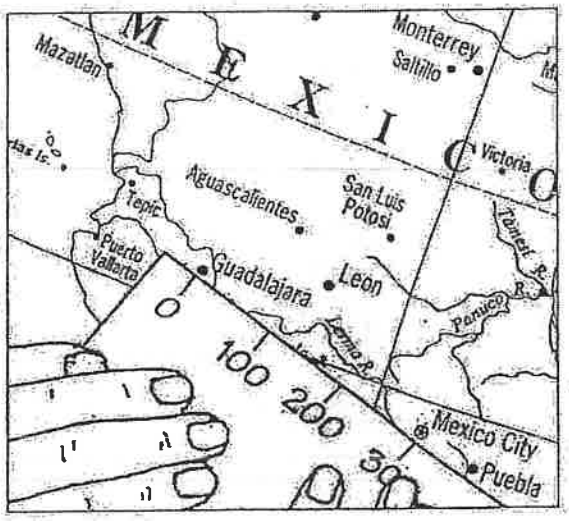
52. 53

3. Turn to the political map of Middle America on pages ~~44~~ and ~~46~~. At the bottom of the map legend is the *scale*. This scale shows how distances on the map represent actual distances on the earth. The scale relates map distances to kilometers and to miles.

Here's a way to use the map scale:

- Place a small piece of paper along the scale so you can see the miles just above the edge of the paper.
- On the edge of the paper, mark the map distances in hundreds of miles. Mark the miles on your scale up to 600. (To get distances greater than 400 miles, slide the edge of the paper along the scale and keep marking at 100-mile intervals.)





The edge of your paper should now look like a map scale. Use it to measure the distance between each of the following pairs of cities in Mexico. Write each approximate distance in a multiple of 100 miles.

a. Guadalajara to Mexico City (both near the center of Mexico) _____ miles

b. Morelia to Puebla (both near Mexico City) _____ miles

c. Campeche to Merida (both in the eastern part of Mexico) _____ miles

d. Tijuana to Juarez (both at the U.S.–Mexico border) _____ miles

LOCATION: GENERAL AND RELATIVE

57

4. Turn to the political map of South America on page ~~49~~. Find the city of Caracas, Venezuela. Its location is near 10°N latitude.

Using latitude and longitude is one way to describe the location of a place The following questions will help you see some other ways of describing a location.

a. Along what body of water is Caracas located? _____

b. Is Caracas in the northern or southern part of Venezuela? _____

c. In what direction is Caracas from Bogota, Colombia? _____


Political Map
Middle America
Boundary Symbols
International boundary
State boundary
City Symbols
Tijuana
A city's relative size is shown by the size of its symbol and lettering.
Havana
National capital
Scale
0 100 200 300 miles
1 inch stands for 242 miles
Mexican States not named on map
1 AGUASCALIENTES
2 GUANAJUATO
3 QUERETARO
4 HIDALGO
5 MEXICO
6 FEDERAL DISTRICT
7 MORELOS
8 TLAXCALA
UNITED STATES
NORTH AMERICA
MEXICO
PACIFIC OCEAN
Gulf of Mexico
ATLANTIC OCEAN
Caribbean Sea
Bay of Campeche
Gulf of Tehuantepec
BAJA CALIFORNIA
BAJA CALIFORNIA SUR
SONORA
CHIHUAHUA
COAHUILA
DURANGO
San Diego
Phoenix
El Paso
Dallas
Houston
Memphis
Laredo
Brownsville
Tampico
Acapulco
GUATEMALA
Guatemala City
EL SALVADOR
NICARAGUA
Managua
HAITI
Port-au-Prince
DOMINICAN REPUBLIC
Santo Domingo
JAMAICA
Kingston
BAHAMAS
Caracas
VENEZUELA
COLOMBIA
Bogota
SOUTH AMERICA
BRAZIL
ST. KITTS & NEVIS
ANTIGUA & BARBUDA
DOMINICA
ST. LUCIA
ST. VINCENT & THE GRENADINES
GRENADA
TRINIDAD & TOBAGO
N
S
E
W


Political Map
South America
Boundary Symbols
International boundary
City Symbols
Sao Paulo
Tucuman
Cusco
A city's relative size is shown by the size of its symbol and lettering.
Caracas
National capital
Scale
0 250 500 750 1000 mi
1 inch stands for 594 miles
Detailed legend on page 3
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ATLANTIC OCEAN
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ECUADOR
CHILE
URUGUAY
Havana
Barranquilla
Maracaibo
Caracas
Georgetown
Paramaribo
Cayenne
Quito
Guayaquil
Manaus
Belem
Sao Luis
Fortaleza
Natal
Recife
Salvador
Brasilia
Goiania
Lima
Arequipa
Belo Horizonte
Rio de Janeiro
Sao Paulo
Curitiba
Porto Alegre
Montevideo
Mar del Plata
Santiago
Rio Gallegos
Falkland Is. (U.K.)
EQUATOR
TROPIC OF CAPRICORN 23½°S
N
S
E
W

Exploring the Essential Question

How do geographers show information on maps?

In Chapter 1, you explored a variety of ways that geographers show information on maps. Now you will use what you learned. Use the information on the map below and your knowledge of geography to complete this task.

The Task: Writing Directions from a Map of Washington, D.C.

This map is a large-scale map of Washington, D.C. It shows streets and landmarks that are found in our nation's capital. Your task is to help someone find the way from the National Aquarium to the National Portrait Gallery.

Step 1. On the map, locate the National Aquarium. Draw a route a person could use to walk from there to the National Portrait Gallery.

Step 2. Use the route you marked to write directions for this walk. Write your directions on another piece of paper using complete sentences. In your directions, be sure to do these four things:

A. Give your directions a title.
B. Describe the relative location of the National Aquarium compared to the National Portrait Gallery using the map's scale and compass rose.
C. Describe your route street by street. At each turn, indicate which way the person should be walking. Use cardinal directions (north, south, east, or west).
D. Describe the location of the National Portrait Gallery at the end of your route.

Writing Tips: Giving Directions

Every sentence should have a subject and a verb. Directions usually use "you" as the subject. Often, however, "you" is not included in the sentence. Instead, it is understood to be there. The subject "you" is understood in this example:

Go to the corner of Fifth Avenue and Grand Street.

Test Terms Glossary

To **describe** means to provide details about something, such as how to get from place to place.

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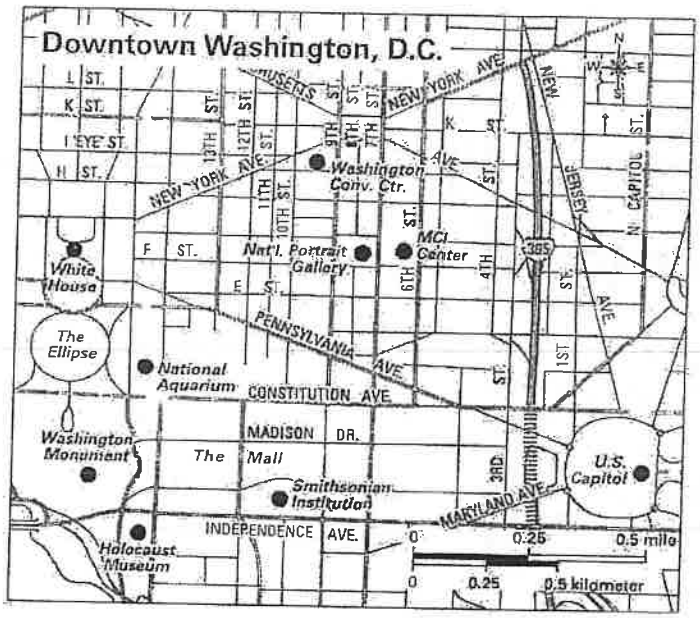

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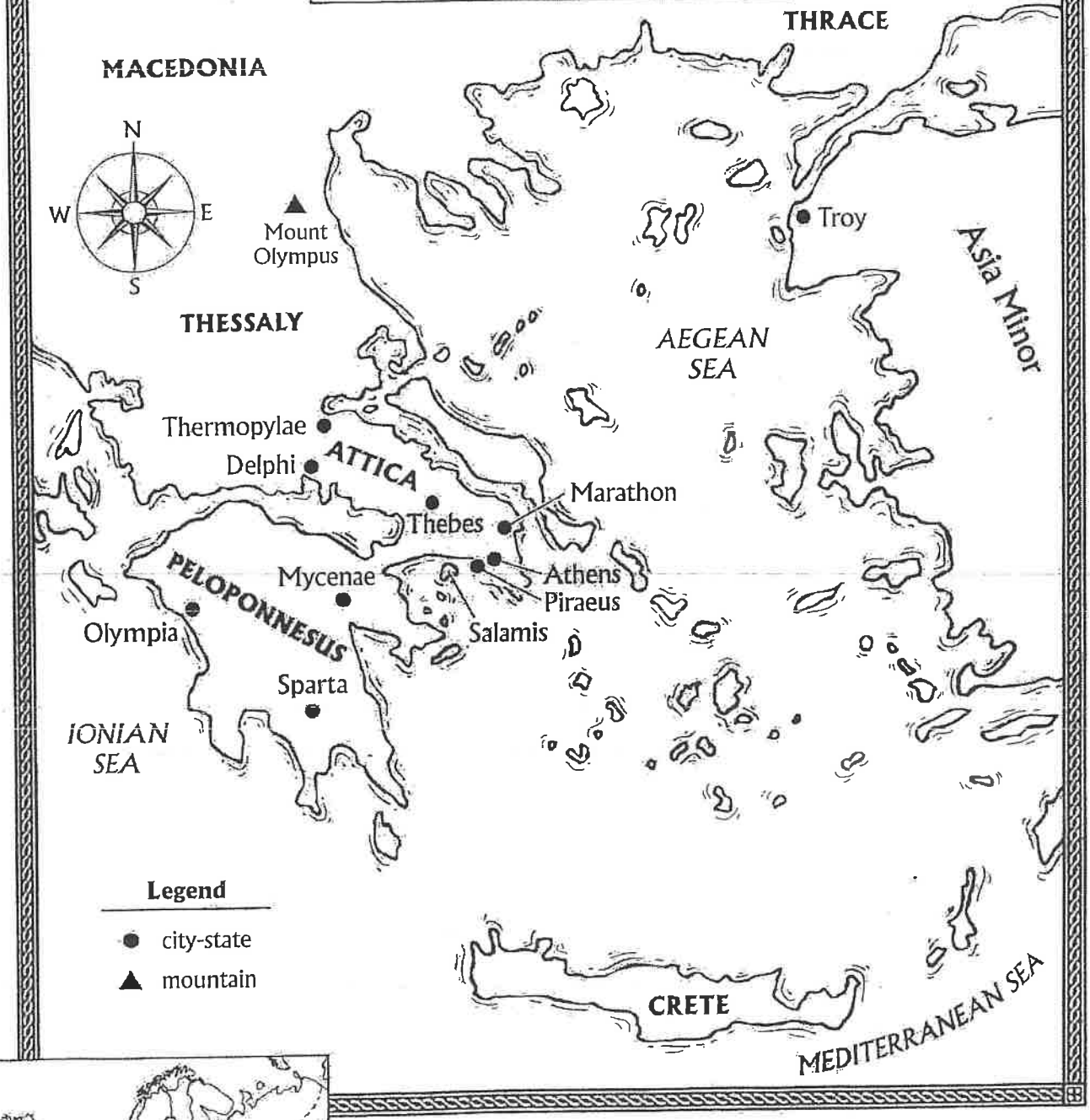
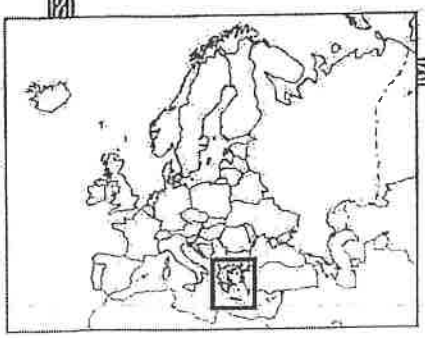
A History Map: Ancient Greece





A HISTORY MAP: ANCIENT GREECE QUESTIONS

1. Which seas surround ancient Greece?

2. The mainland of Greece was a peninsula. Name at least five city-states located on the mainland.

3. The city-states of Olympia and Sparta were part of which region?

4. The beginnings of the Greek civilization can be traced to the largest island in ancient Greece. Name the island.

5. Which city-state was named after the goddess Athena? (Hint: the name is very similar)

6. The ancient Greeks believed in gods and goddesses who made their home on a mountain. Name the Greek mountain.

7. The first recorded ancient Olympic Games took place in which city-state in 776 B.C.?

8. A modern-day long-distance race is named after which city-state?

9. In which direction would you travel from Athens to get to Delphi?

10. In which direction would you travel to get to Sparta from Troy?

11. **CHALLENGE-** Add a caption to the map describing the location of ancient Greece.

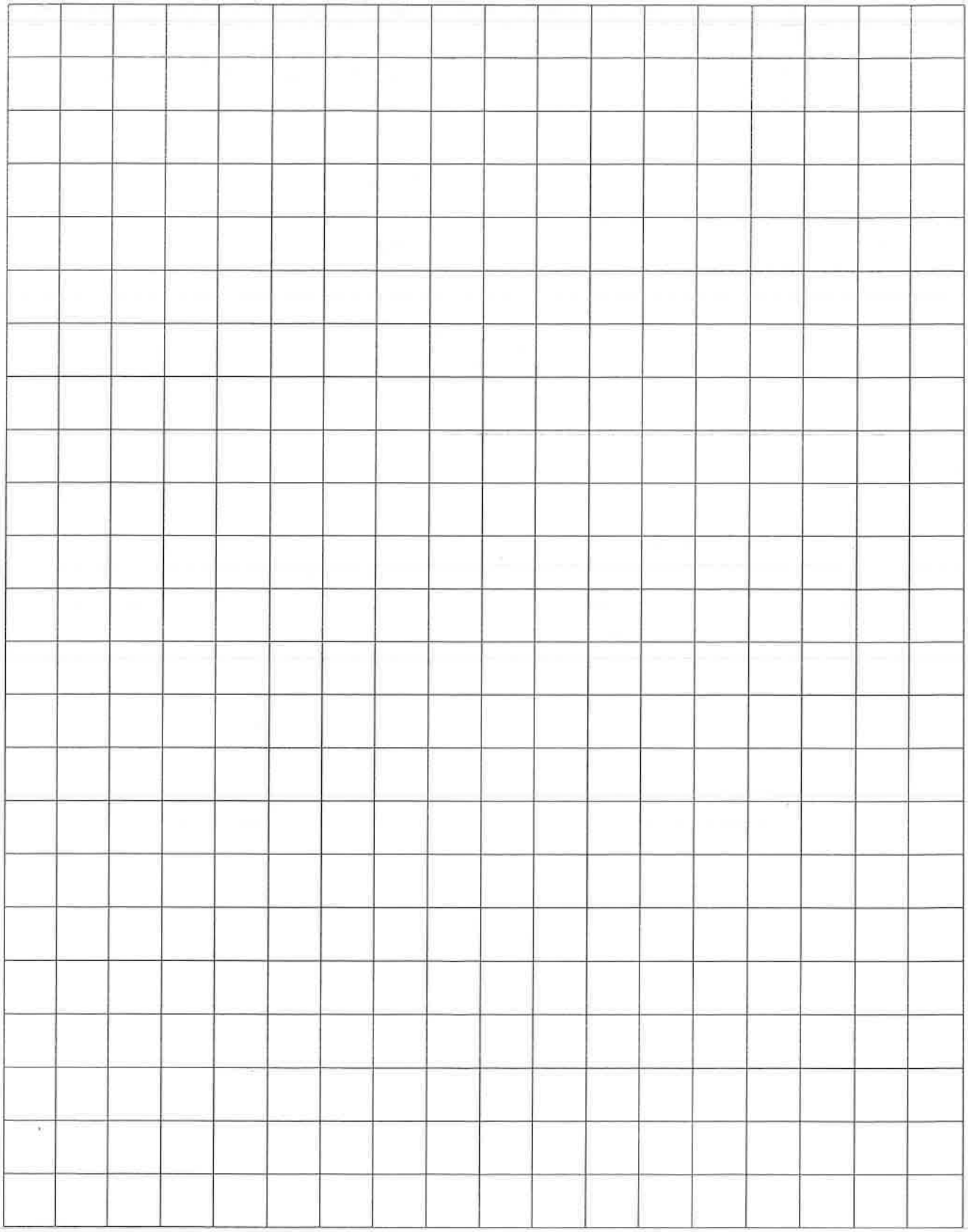
Design An Amusement Park Map Skills Challenge

Directions: You have been hired to develop and design a new amusement park. One of the first things you need to do is to develop a map of the new park for your guests. Consider what your park will look like and if it will have a specific theme. The design is up to you -be creative!

You must include the following on your map-

1. **Map Title-** The name of your amusement park should be the title. Think of something creative and catchy.
2. **Symbols to represent park facilities-**
    a. Washrooms
    b. Parking
    c. Restaurants
    d. At least one other facility or service you can add
3. **At least 6 rides must be shown on your map-** You can draw a mini-picture and label it OR use a symbol to represent the ride
4. **Scale-** You map should be drawn to scale of 1 cm=25 m (Each square is 1 cm x 1 cm)
5. **Map Elements-**
    a. **Compass**
    b. **Scale** (See above)
    c. **Legend or Key** (include all symbols for facilities and rides)

Name: _____ Date: _____



Content Outline for Teaching

The Nature of Science

Section 1 How Science Works

Underlined words and phrases are to be filled in by students on the Note-taking Worksheet.

A. Science—process of trying to understand the world

B. Archaeology—branch of science that studies the tools and other cultural remains of humans

1. Tools—could be stone or bone
2. Weapons—for hunting or defense
3. Rock drawings—clues to everyday life
4. Remains of buildings
5. Pottery—whole or shards; can more accurately date culture

C. Technology—knowledge gained from science used to conduct scientific studies; radar surveys can help study archaeological sites.

D. Archaeological excavations or digs are important ways of studying a site.

1. As artifacts are found, they are mapped, photographed, registered, and cataloged.
2. In a lab, chemical analysis can help determine the age of artifacts.

DISCUSSION QUESTION:

How are archaeological sites found? *Many are accidentally found; some are found through research.*

Section 2 Scientific Problem Solving

A. Scientific methods—solving problems using step-by-step procedures

B. Scientific problem—question without an answer

1. Scientists make **observations** using their senses.
   a. What do you see? Did it change?
   b. Is there and odor?
   c. Did the texture change?
2. Observations lead to **inferences**—conclusions about observations

C. After identifying a problem, a **hypothesis** is developed based on observation, research, or prior knowledge.

Content Outline for Teaching (continued)

D. An experiment, a series of carefully planned steps, tests the hypothesis.
   1. **Independent variable**—the factor that is changed in the experiment
   2. **Dependent variable**—the factor or outcome to be measured in the experiment
   3. **Constants** are factors that stay the same during the experiment.
   4. A standard used for comparison is a **control**.

E. Data are collected during the experiment through numeric measurements and observations.

F. After analyzing data, a scientist makes a conclusion, which is valid only after multiple experiments support it.

DISCUSSION QUESTION:

What is a hypothesis based on? *observation, research, prior knowledge*

SECTION 1 Reinforcement

How Science Works

Directions: *Answer the following questions on the lines provided.*

1. Explain the difference between science and technology.

2. Name some types of technology.

3. Why is it necessary to excavate an archaeological site slowly and carefully?

4. What is the focus of each of the two main branches of archaeology?

5. Circle the tools that are likely to be used at an archaeological site.

   small shovel paint brush video camera chain saw washing machine

6. How are most archaeological sites discovered?

7. What do maps of an archaeological site show?

8. List archaeological activities that are performed at the site and activities that are performed in the laboratory.

   At the Site

   In the Lab

SECTION 2 Reinforcement

Scientific Problem Solving

Directions: *List the basic steps used to solve scientific problems.*

1.
2.
3.
4.
5.
6.

To determine which of three types of batteries last the longest, Laura used three identical flashlights, put one type of battery in each, turned them on simultaneously, and timed how long each flashlight remained lit. Use Laura's experiment to answer these questions.

7. What are the independent variables?

8. What are the dependent variables?

9. What are the constants?

10. What are the controls?

11. How could Laura make sure her conclusions were valid?

12. If one of the flashlights went off after only one minute, what would you conclude?

13. Wallace hypothesized that batteries will last longer if he plays his boom box at low rather t high volume. Describe how he could test his hypothesis.

SECTION 2 Enrichment

Inductive Reasoning

When you draw a conclusion based on a number of observations, you are using inductive reasoning. By this process, you make a general statement based on specific examples. The following are examples of inductive reasoning.

Problem to solve:	What percent of the seeds in a package will sprout?
Observations:	In three tests of 100 seeds each, 95, 89, and 92 seeds sprouted.
Conclusion:	About 92% of the seeds in a package will sprout.

Problem to solve:	Which of the two cars in a race is faster—the blue car or the red car?
Observations:	In 5 tests of 10 laps each, with the same driver for both cars, the blue car's time was always faster.
Conclusion:	The blue car is the faster car.

The conclusions that result from inductive reasoning only reflect the observations that were used to make them. If other factors would affect the conclusion but were not observed, the process may produce misleading results.

1. Suppose all of the seed tests were done at the same time in the same type of soil and weather conditions. What limitations would that put on the conclusion that 92% of the seeds in a seed package will sprout?

2. What if, unknown to the experimenter, a wheel on the red car was loose? What effect could that fact have on the validity of the conclusion that the blue car is the faster car?

SECTION 1 Enrichment

La Brea Tar Pits

For centuries, crude oil has seeped to Earth's surface through fissures in an area of Los Angeles, California, creating pools of sticky asphalt. These pools, the La Brea Tar Pits, contain fossils and bones from as long as 40,000 years ago.

During the 1800s, people who lived near the area considered them to be only a smelly nuisance. Then, in 1895, the bones of a saber-tooth tiger were dug out of the asphalt, and six years later the first scientific excavation began. Since that time, millions of bones have been collected.

Excavation Today

Today, excavators take an even more scientific approach to their work. Instead of simply digging up and removing the bones from the ground, scientists carefully analyze the bones and how they relate to one another. This gives them a clearer picture of what life was like long ago, when the area was cooler and moister.

Excavations are divided into 3-foot-square grids. This allows the excavators to accurately record the location of each fossil found. In earlier years, the digging was crudely done, and many smaller fossils were missed. Workers today use smaller tools such as chisels and trowels, even tiny brushes and dental picks. In case they miss anything, the sediment is screened to find microfossils.

Including plants, mollusks, and insects, over 650 different species have been identified by their fossil remains at La Brea. Paleontologists —scientists who study fossils—have learned that some of the plants and animals that formerly occupied the area still live there. On the other hand, many species, such as camels, mammoths, land sloths, and giant storklike birds, are found nowhere in North America today.

Creating the Tar Pits

How did the bones get there? The asphalt, as noted above, is very sticky. Careless animals were trapped like flies on flypaper. They eventually died from starvation and dehydration. In time they were completely covered by the asphalt which acts like a natural preservative, saturating bones and protecting them from the ravages of wind, water, and weather. The fossils have been so well preserved that La Brea fossils are now the standard to which other fossils for that period from around the world can be compared.

It is through the careful gathering of data and the keeping of accurate records that a body of scientific knowledge can be accumulated. With that knowledge comes a better understanding of the world and our place in it.

1. Give two reasons so many fossils have been found at La Brea compared to other places.

2. Give two reasons why information about fossils is more accurate today than earlier in the twentieth century.

3. Why have La Brea fossils become the world's standard for fossils from that time period?

4. Some of the fossils found at La Brea are those of extinct animals. Can you think of any reasons why other identified animals may no longer live in the area?

Chapter Review (continued)

Directions: *Select the term from the following list to describe the problem-solving step being used in each situation.*

recognize the problem	observe and infer	form a hypothesis
test the hypothesis	analyze the data	draw conclusions

_____ 13. Kenesha regularly sees rabbits in a neighbor's field. She thinks they have a nest nearby.

_____ 14. Elizabeth rode her bike to school every day for two weeks. She knows she can get to school in 15 minutes.

_____ 15. Carlos wonders if his bicycle is getting hard to pedal because the tires need air.

_____ 16. Georgia notices that her watch is losing time.

Part B. Concept Review

Directions: *Answer the following questions on the lines provided.*

1. You discover an old homesite and decide to excavate at a spot where you found some old glass.
   a. What kind of record would you make of the site as you found it?

   _____

   b. What tools might you use?

   _____

   c. What precautions would you take to ensure that you do not break any glass you might unearth?

   _____

   d. Suppose you find some perfume bottles, a medicine bottle, and an unusual bottle you can't identify. How could you find out more about them?

   _____

2. How are hypotheses made?

   _____

3. Describe some ways you can make observations.

   _____

4. Why do scientists share their results?

   _____

5. Why is it important to repeat experiments? _____

   _____

6. Why is it important to verify conclusions? _____

   _____

Chapter Review — The Nature of Science

Part A. Vocabulary Review

Directions: *Write the correct term in the space beside each definition. The boxed letters should spell the term f a scientist who studies the cultural remains of ancient people.*

1. the factor being measured in an experiment _____
2. an explanation of an observation _____
3. step-by-step procedures of a scientific problem solving _____
4. the use of knowledge gained through science to make products or tools people can use _____
5. the one factor that you change in an experiment _____
6. a statement that can be tested _____
7. factors in an experiment that stay the same _____
8. a standard used for comparison _____
9. the study of cultural remains of ancient people _____
10. a judgment based on what has been observed _____
11. the process of trying to understand the world _____
12. bits of information you gather with your sense organs _____

The boxed letters spell: _____

Chapter Test (continued)

Directions: *Identify each statement as true or false. If the statement is true, write* **true**. *If the statement is false, change the italized word to make the statement true.*

_____ 10. In an experiment, it is important to keep everything the same EXCEPT the *variable* you are testing.

_____ 11. Computers are a *technology* that can be used to solve scientific problems.

_____ 12. *Data* can be many things, including numbers and adjectives such as faster, longer, greener.

_____ 13. A *seismograph* is a type of technology.

_____ 14. A student scientist reads an article on cells. This *observation* should help him in his problem solving.

_____ 15. For scientists, completing experiments and drawing conclusions are important. There is also a need to *conceal* the results.

_____ 16. There can be *only* one constant in an experiment.

_____ 17. The *dependent* variable in an experiment changes in response to the independent variable.

_____ 18. Problem-solving steps used by scientists *cannot* vary from situation to situation.

_____ 19. To make an experiment valid, you should *vary* it.

Directions: *For the following paragraph, identify the underlined phrases as either* **independent** *or* **dependent** *variables.*

Cole is testing different types of soils to see how well corn will grow in them. He fills two pots with 20. two types of soil and plants the same corn seed in each. He gives them each the same amount of water and the same sunlight. Each day he measures how 21. tall the corn sprouts have grown.

20. _____

21. _____

II. Understanding Concepts

Skill: Designing an Experiment

Directions: *Design an experiment to test the effect of mineral oil on aquatic plants.*

1. Design: _____

_____

_____

_____

Chapter Test — The Nature of Science

I. Testing Concepts

Directions: *For each of the following, write the letter of the term or phrase that best completes the sentence or answers the question.*

_____ 1. A process for understanding the world is called _____.
a. technology
b. science
c. research
d. inference

_____ 2. With which of these locators is an artifact labeled?
a. horizontal depth found
b. relative positions of items
c. vertical depth found
d. all of these

_____ 3. The branch of science that studies the tools and cultural remains of humans is called _____.
a. anthropology
b. geology
c. archaeology
d. technology

_____ 4. Francis wonders where his dog is getting through the fence. He found a spot behind a bush where the fence is rotted away. What is his next step?
a. form a hypothesis
b. test the hypothesis
c. infer
d. draw a conclusion

_____ 5. An archaeologist observing a number of human tools may be ready to form a(n) _____ that could be tested.
a. hypothesis
b. experiment
c. conclusion
d. variable

_____ 6. The radar used to survey an archaeological site is an example of a(n) _____.
a. scientific process
b. experiment
c. inquiry
d. technology

_____ 7. A scientific problem has no immediate _____.
a. observation
b. hypothesis
c. answer
d. inference

_____ 8. What should an experimenter do after forming a hypothesis?
a. draw a conclusion
b. analyze the data
c. test the hypothesis
d. recognize the problem

_____ 9. When designing an experiment, everything should be the same except for the _____.
a. data
b. independent variable
c. dependent variable
d. control

III. Applying Concepts

Hannah wanted to test the ability of different drinks to wear away bone. In 15 identical glass jars, she submerged chicken bones in orange juice, apple juice, milk, cola, and distilled water.

1. What is/are the independent variable(s)?

2. What is/are the dependent variable(s)?

3. What is/are the constant(s)?

4. What is/are the control(s)?

IV. Writing Skills

Directions: *Using complete sentences, answer the following questions on the lines provided about the experiment described above.*

1. What hypothesis might Hannah be testing?

2. How might Hannah communicate the results of her experiment?

Skill: Making and Using Graphs

Austin wondered, "Which brand of dog bones do dogs prefer?" He offered three brands of bones to two small dogs, two medium dogs, and two large dogs. He recorded his results on the table below.

Dog Bone Preferences

Dog size	Brand A	Brand B	Brand C
Small	2	0	0
Medium	1	1	0
Large	0	2	0

2. Make a bar graph showing the number of dogs that preferred each brand.

3. What conclusions can you draw from Austin's experiment?

4. If Austin repeated the experiment on another set of dogs of the same sizes as the first, what results might you expect?

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7th grade: @hill7hcm
8th grade: @hill8hcm

YOU MUST USE YOUR SCHOOL E-MAIL ADDRESS TO GET ON GOOGLE CLASSROOM.

Firstname.lastname@stu.harrison.kyschools.us

Welcome to 6th, 7th, and 8th grade

Explore

Fine dining restaurant for a well-rounded mind.

NTI 21-25

Choose 1 of the following activities to complete during the week of April 13th through the 17th.

Each student in the school must complete this assignment!

Appetizer

Health

Explore the ins and outs of infectious disease and discover how to prevent the spread of diseases!

Main Course

Art

Explore the 5 purposes for art while incorporating your experiences with COVID-19!

Dessert

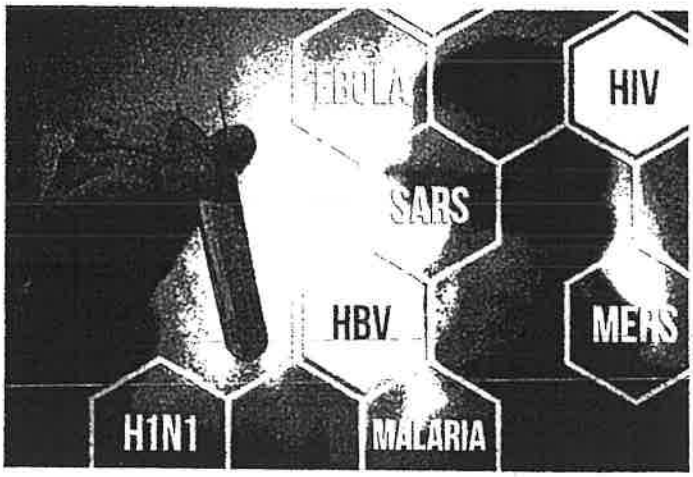
Music

Explore the excitement of product creation while making your own instrument using recycled items!

Contact information for each teacher found on the next page!

NTI Days 21-25
HEALTH

INFECTIOUS DISEASE



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Infectious vs. Noninfectious Disease

Infectious diseases are diseases caused by pathogenic microbes (pathogens) such as bacteria, viruses, protists (protozoa), and fungi. As such, they have the ability to spread from one host to another in a variety of ways. It is important to note, however, that not all microbes are pathogenic. The human body contains thousands of species of bacteria, fungi, and protozoa that are beneficial and important for the proper operation of biological processes such as digestion and immune system function. On the other hand, truly pathogenic microbes have a single goal - survive and multiply at all cost, typically resulting in illness for the host organism.

Noninfectious diseases, by contrast, are diseases that do not involve pathogens. These diseases do not spread from one host to another due to the lack of pathogenic involvement. Noninfectious diseases are typically the result of genetic mutation, environmental conditions (e.g. exposure to the sun's ultraviolet rays), accidents, or lifestyle habits (e.g. smoking, poor dietary choices, lack of exercise).

Types of Pathogens

As stated earlier, pathogens - also sometimes referred to as germs - are microscopic, living organisms that have the ability to cause illness and spread the illness from one host to another. All living organisms fall into one of two categories depending on the fundamental structure of their cells: prokaryotes and eukaryotes. Prokaryotic organisms are made up of cells that lack a cell nucleus or any membrane-encased organelles. Most prokaryotes are unicellular (made up of one cell) but a few are multicellular. Bacteria belong to the prokaryotic group. Eukaryotic organisms are made up of cells that possess a membrane-bound nucleus containing genetic material (DNA). All animals are eukaryotes. Pathogenic eukaryotes include fungi and protozoa. There are four major types of pathogens: bacteria, viruses, protozoa, and fungi.

Bacteria are single-celled organisms that cause disease by producing toxins. They are responsible for diseases such as strep throat, pneumonia, tuberculosis, and cholera to name a few. Endotoxins are components of the bacterial cell wall that are released as a result of the deterioration or death of the bacteria. These toxins can cause symptoms such as fever, changes in blood pressure, septic shock, organ damage, and death. Exotoxins are produced and released into the environment by the bacteria. There are three types of exotoxins - cytotoxins, neurotoxins, and enterotoxins. Cytotoxins damage and destroy certain types of body cells. *Streptococcus pyogenes* (bacteria that causes strep throat) produces a cytotoxin capable of destroying blood cells, damaging capillaries, and producing symptoms associated with flesh-eating disease. Neurotoxins are poisonous substances that affect the nervous system and brain. *Clostridium botulinum* (botulism) releases a neurotoxin that causes muscle paralysis. Enterotoxins affect cells of the intestines and are capable of causing severe vomiting and diarrhea. *Escherichia* (E. coli) is a typical enterotoxin-producing bacteria.

Viruses are the smallest of all pathogens and can cause a multitude of diseases ranging from the common cold, the flu, the recently discovered novel coronavirus (COVID-19), Ebola, and AIDS. Viruses are unique in the sense that they are not living cells but are, instead, segments of DNA or RNA encased within a protein envelope. They infect certain body cells, high-jacking the cell and causing it to produce more viruses at a rapid rate. The influenza virus, for example, infiltrates the respiratory system's tissues resulting in symptoms that make breathing difficult. The rabies virus attacks central nervous system tissues (brain) and the hepatitis viruses have an affinity for the liver. HIV, which leads to the disease known as AIDS, attacks the $CD4^+$ lymphocytes of the immune system.

Fungi are eukaryotic organisms such as yeasts and molds. Fungal infections tend to be rare in humans and are typically the result of a breakdown of a physical barrier (skin, mucus membrane) or a compromised immune system. Skin diseases such as athlete's foot and ringworm are caused by fungi. Some fungi, such as Histoplasma, can cause lung disease while others, such as Stachybotrys (black mold) and Aspergillus, can release neurotoxins that may lead to serious central nervous system disease.

Protozoa are tiny multicellular organisms of the animal Kingdom Protista that cause disease in humans by parasitically feeding off of their host. Protozoa are commonly transmitted to humans through contaminated soil, food, or water. They can also be transmitted by animals as well as insect vectors. Malaria is a common disease caused by the protozoa *plasmodium* which is transmitted by a mosquito bite. The amoeba *Naegleria fowleri* is a protozoa commonly found in freshwater habitats that has been referred to as the brain-eating amoeba due to causing the disease called primary amebic meningoencephalitis.

Infectious Disease Modes of Transmission

Pathogens can be spread in a variety of ways. **Direct contact** involves the spread of pathogens by direct body-to-body contact. This can happen when a person with an infectious disease touches, kisses,coughs, or sneezes on someone who isn't infected. Pathogens can also be spread directly through the exchange of body fluids from sexual contact.

Indirect contact involves contact with a surface or substance that is contaminated with pathogens. Many germs can linger on an inanimate object, such as a tabletop, doorknob, or faucet handle.

Other forms of pathogen transmission include:

- **Animal to person (zoonotic).** Being bitten or scratched by an infected animal can lead to disease. Handling animal waste can also potentially lead to disease transmission. For example, you could potentially get a toxoplasmosis infection by scooping your cat's litter box if not done properly.
- **Mother to unborn child.** A pregnant woman may potentially spread infectious diseases to her unborn baby. Some germs are capable of passing through the placenta. Others can be spread through breastfeeding. Some examples of diseases that can be transmitted this way are AIDS, Zika, and syphilis.
- **Insect bites.** Some pathogens rely on insect vectors - such as mosquitoes, fleas, or ticks - to move from host to host. Mosquitoes can carry diseases such as malaria, the Zika virus, and West Nile Virus. Fleas played a major role in the Black Death (bubonic plague) pandemic of the mid 14th century that wiped out nearly a third of Europe's population. Deer ticks may carry the bacteria responsible for Lyme disease.
- **Airborne.** Highly contagious diseases such as the common cold, influenza, and tuberculosis can be spread as the pathogen is expelled from an infected person (coughing, sneezing, laughing, breathing). The pathogen can remain suspended in the air and then be inhaled by another person.
- **Foodborne.** Infectious disease can be transmitted through contaminated food. Diseases such as E. coli can be spread by eating undercooked food or through improper cleaning habits before or after handling contaminated foods.
- **Waterborne.** Some infectious diseases can be spread through consumption or contact with contaminated water.

****YouTube Video****

Dr. Anthony Fauci says "everything is on the table" to fight spread of coronavirus; Face the Nation 3/15/20 (11:09)

youtube.com/watch?v=NKwwh2lai2w

Treatment

- **Viral Infections** are typically treated with a **vaccination**. A vaccine is a preparation containing killed or weakened pathogens (such as bacteria or viruses) that is given usually by injection. This injection stimulates the immune system's production of antibodies in order to increase protection against a particular disease.
- **Bacterial Infections** are typically treated with **antibiotics**. An antibiotic is a medicine that is made from substances produced by one microorganism that selectively inhibits the growth of another (penicillin produced by a certain fungi). Some antibiotics are also created synthetically. Antibiotics have no effect on viral infections.

- **Fungal Infections** are typically treated using topical antifungal drugs. Topical antifungal drugs may include gels, creams, lotions, powders, sprays, or shampoos. Antifungal drugs can also be taken orally.
- Treatment for **protozoan infections** tends to vary depending on the type of infection. Oral medications, vaccination (as is the case for malaria), and supportive therapy (to combat the loss of body fluids and possible dehydration consistent with many protozoan infections) are the typical forms of treatment.

Prevention Measures

- **Wash your hands**. This is especially important to do before and after preparing food, before eating, after coming into contact with potentially ill people, etc. A common way that germs can enter the body is when a person touches their eyes, nose, or mouth with unclean hands.
- **Prepare food safely**. To prevent cross-contamination, you should keep counters and other kitchen surfaces clean when preparing food. Foods, especially meat, should be cooked to the proper temperature. Leftovers should also be promptly refrigerated to reduce the risk of bacteria development.
- **Stay home when ill**. This will help prevent the spread of illness to uninfected people.
- **Get vaccinated**. Vaccination can drastically reduce the chances of contracting many diseases such as influenza, measles, chickenpox, etc.
- **Don't share personal items**. You should always use your own toothbrush, comb/brush, and razor. Also, avoid sharing drinking glasses and eating utensils.
- **Practice safe sex or choose abstinence.** It has been estimated that approximately 1 out of 5 Americans may have an STI (some unknowingly). Choosing abstinence virtually eliminates the risk of contracting an STI while practicing safe sex greatly reduces the chances.
- **Travel wisely**. If you plan to travel out of the country, talk to your doctor about any special vaccinations you may need.

****YouTube Video****

Why Dr. Fauci Never Misses a Flu Shot; NIAID 10/16/19 (8:19)

youtube.com/watch?v=nZj9eY5IC98

Answer the following questions using the infectious disease notes.

1. Which is **NOT** a way to reduce the risk of contracting an infectious disease?

   ○ A. choose abstinence
   ○ B. washing your hands often
   ○ C. inhaling pathogens from the air
   ○ D. avoiding contact with infected people

2. Unicellular microorganisms that may cause diseases such as strep throat and E. coli are:

   ○ A. viruses.
   ○ B. bacteria.
   ○ C. fungi.
   ○ D. protozoa.

3. The smallest pathogens which attack only certain body cells causing them to reproduce the pathogen and cause diseases such as the common cold, flu, and AIDS are:

   ○ A. viruses.
   ○ B. bacteria.
   ○ C. fungi.
   ○ D. protozoa.

4. A vaccine:

   ○ A. is used to treat fungal infections.
   ○ B. is used to treat protozoan infections.
   ○ C. is effective 100% of the time.
   ○ D. is used to treat viral infections.

5. About 1 out of every ____ Americans may have an STI.

   ○ A. two (50%)
   ○ B. five (20%)
   ○ C. ten (10%)
   ○ D. twenty (5%)

6. A medicine made from substances produced by another microorganism that slows the growth of bacteria is called a(n):

   ○ A. antibiotic.
   ○ B. vaccine.
   ○ C. antibody.
   ○ D. ointment.

7. How are infectious diseases different from noninfectious diseases?

8. What are 2 strategies that you can use to protect yourself from infectious diseases?

9. According to Dr. Anthony Fauci, what are 2 proactive steps that can and should be taken to prevent the spread of COVID-19?

10. According to Dr. Anthony Fauci, is it possible to contract the flu virus from the flu vaccination? Why or why not?

Can a person still contract the flu virus after being vaccinated?

INFECTIOUS DISEASE RESEARCH

Directions: Choose **one** (1) of the infectious diseases from the following list. Answer the questions fully and completely with regards to the disease that you chose.

- AIDS
- Avian Influenza
- Chicken pox
- Dengue fever
- E. Coli
- Ebola
- Listeria
- Lyme disease
- Malaria
- Measles
- Mononucleosis
- MRSA
- Plague
- Pneumonia
- Polio
- Rabies
- Salmonella
- SARS
- Seasonal flu
- Smallpox
- Strep throat
- Swine flu
- West Nile virus
- Zika

Recommended websites to use include:

The Centers for Disease Control and Prevention www.cdc.gov

The World Health Organization www.who.int

The Mayo Clinic www.mayoclinic.com

The National Institute of Allergy & Infectious Disease www.niaid.nih.gov

Disease Name _____

1. What type of pathogen causes this disease?

   CIRCLE ONE: bacteria virus fungi protozoa

2. What is the name of the pathogen that causes this disease?

3. What are the symptoms associated with this disease?

4. How is this disease spread?

5. What is the treatment for this disease if a person were to catch it?

6. What are the prevention measures for this disease/how do you keep from getting it?

7. What is the estimated number of cases per year for this disease in the U.S.? Worldwide?

8. Where is this disease most likely to be found?

9. Based on your present environmental conditions & location, your lifestyle habits, and your potential risk factors, how likely are you to contract this disease? **WHY**?

10. List one other important fact about the disease you chose that you learned by doing this research assignment. (This answer must be different from anything that you mentioned in the previous nine questions.)

ART-NTI LESSON (EXPLORE TEAM)

In this lesson you will learn about the five purposes of art: Ceremonial, Artistic Expression, Narrative, Functional & Persuasive.

VOCABULARY

***PURPOSES OF ART*=======**

1. **Purposes for creating art**-rules or reasons that art is made. Four purposes: Ceremonial, Artistic Expression, Narrative, Functional & Persuasive).
2. Ceremonial art Purpose-artworks created to support worship ceremonies, rituals and celebrations. (examples: church altars, baptism gowns, totem poles, etc.)
3. Artistic Expression Purpose art-artworks created to express or communicate emotions, ideas and feelings. (these can be any art form and any subject matter).
4. Narrative art Purpose-artworks that tell stories, describe and illustrate experiences, communicate ideas or information and document important or historical events. (examples are historical paintings of events & children's illustrated books).
5. Functional art Purpose-artworks that are artistic objects that are used in everyday life. (examples are: furniture, clothing, jewelry, lamps, automobiles, etc.)
6. Persuasive art Purpose-artworks that promote ideas, philosophies, or products (examples: advertising, marketing and propaganda)

INTRODUCTION OF ART LESSON

Artists make art for many reasons as listed above. During times of historical significance, such as what we are experiencing presently with COVID-19 creative individuals express themselves in response using varied art forms and media.

- Their art might fall into the category above listed as **Narrative Art**-art that tells a story or documents a historical event. They may create a 3D mobile or sculpture reflective of many aspects of the event. They may create a graphic novel or a series of pictures or paintings narrating what took place.
- As well, the art might be categorized as **Artistic Expression**-where the artist is conveying their feelings toward the event and how it makes him/her feel. Maybe they create a portrait of themself or their family to show the emotion of how they expressed their feelings. This might be done with photography, drawings or paintings. The artist might take an approach much like that of artistic expressionist artist, Jackson Pollock, and use significance through the colors of paint and how he applies them to a canvas,
- The art could take on a **Ceremonial** purpose if it is created in some type of a ritual. For instance maybe the artist creates a piece of art that is a charm or piece of jewelry of some sort to be worn as a remembrance of the event & certain actions are performed in the wearing or using of the piece,
- The art could be **Persuasive** in the form of a poster that is promoting proper hand washing or outlines good practice in proper distancing.
- Lastly maybe the art fits into the category of **Functional** as it is a bench placed in a park to signify the historical context but is also useful.

THE ART PROJECT

WHAT YOU WILL DO: Create an artwork or series of artworks reflective of COVID-19 & its impact upon you, your family, our community, our country or our world.

PART ONE: You will create a piece of art or a series of artworks that fulfill one or more of the outlined art purposes (from the other side of this page). You may use any art form (painting, printmaking, drawing, sculpture, mobile, weaving, etc.), depending on what materials you have available to you. It is preferable that you use resources that you already have and not go out and purchase anything new. For instance, why not use toilet paper or paper towel rolls....not only is this a good, usually throw away resource; it also has a lot of significance to the COVID-19 event in that toilet paper and paper towels seem to be something of extremely great value at the moment. Use graphite (pencil), marker, paint, whatever you have if you decide to draw or paint. Remember, you can draw or paint on the backs of food boxes such as cereal boxes if you don't have paper. If you decide to do something using photography you can submit it using technology in the form of a google slide presentation or use google drawing as well-if you have access to technology and know how to use this resource. If you want to use these resources please contact me for help (if you have access to the internet from home).

As mentioned earlier, you could create a graphic novel and make this a narrative work of art. Remember, all of you were introduced to artist/author Nathan Hale (https://www.nathanhaleauthor.com/) earlier this year when we went to the highschool for his assembly. I have placed mini sketchbooks in the front foyer at HCMS for students to pick up. I plan to continue to replenish this as long as I have extra donated paper available.

PART TWO: After you have created your art you will need to submit a paragraph as a reflection about your art work. You can either do so on paper or you may submit it through my google classroom where you will find a goggle form to complete as your reflection. You are welcome to photograph your art and submit it to me through google classroom also and/or Artsonia.com. If you are unable to do so electronically, you will submit the actual art or a photo of your art upon returning to school.

I am very excited about this art project as I believe this will all become a part of history. You are living history right now, whether you realize it or not. And always remember, *"We will get through this, we will be o.k."*.

Best wishes to all of you during this abnormal time. Please connect with me through

- email at debbie.pulliam@harrison.kyschools.us
- google classroom http://classroom.google.com/ using the code vxv5b47
- my teacher website at https://sites.google.com/harrison.kyschools.us/hcmsart/home
- Sign up for Remind: www.remind.com My code is: bbkk38 (NTI-Pulliam-art updates)
- Zoom App: please visit my website & google classroom page, if at all possible, so that you will know when I have scheduled a Zoom meeting. (This allows us to video chat with each other so that I can answer questions & share art related materials)

I will be adding relevant resources to my google classroom & web page throughout, so please visit these and if possible, let me know you have done so.

Happy Art Making, Mrs. Pulliam

Creating a Musical Instrument for Week 21-25

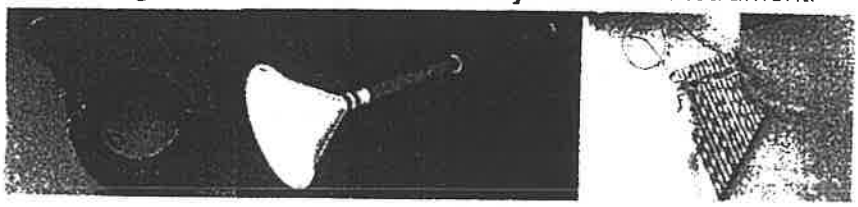
Create your own music instrument from household items. **Ask your parents if the items are okay to use before you repurpose them. :)**

The Percussion Family may be the easiest. **YOU MUST MAKE 2 PERCUSSION INSTRUMENTS IF YOU CHOOSE THIS FAMILY!**

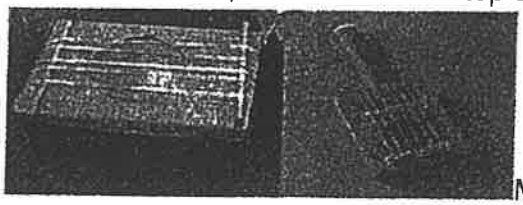
1. Put uncooked rice in a plastic easter egg. Attach a plastic spoon on each long side & tape the two handles of the spoon together then decorate.
2. Stretch a balloon over empty large vegetable cans to make a drum
3. Take 3 Pringles cans and tape them all together and add rice for a rainstick

Wind instruments are more of a challenge but can be done. Make a Brass or Woodwind Instrument (MAKE 1 ITEM ONLY)

1. Take straws and tape them together flat. Cut the bottom so that each is a little shorter than the one before. Play like a flute.
2. Use tubing and a funnel to make a recycled brass instrument.



String Instruments – (MAKE 1 ITEM ONLY)
Take a shoe box, cut a hole in the top and pull rubber bands across the hole.

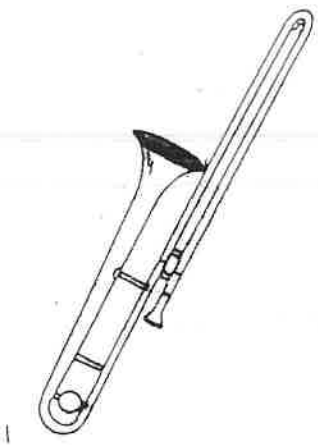

Modify any way you like!!

Feel free to look up other possibilities on the internet! I've even seen a clarinet made out of a carrot. Challenge yourself to make something original.

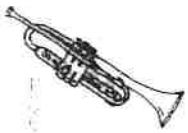
******PART 2 WRITING ASSIGNMENT**

What family is your instrument in & why is it from that family. Name your instrument as if you were creating something knew for that family. Explain how sound is made on your instrument.

Brass Family



The brass instruments, like the woodwinds, are played by blowing air through a tube. Unlike most of the woodwinds, brass instruments do not have reeds. The vibrations of the player's lips cause the air in the tube to vibrate, producing sounds.



Trumpet. The trumpet is the smallest and the highest-pitched of the brass instruments. It has three valves (buttons) that lower the pitch by opening an extra section of tubing. The pitch is lowered because the vibrating air must travel farther before it exits the bell — the end of the tube that flares out.

French Horn. The French horn has its tubing coiled into a circle. If the coil were unwound, the tube would stretch nearly 20 feet! The French horn's bell points backward, and players often put a hand into the bell to change the sound. The French horn is very good at playing both deep and high notes.

Trombone. Unlike the other brass instruments, the trombone does not have valves. Instead, the player moves a slide back and forth to change the pitch. The sound gets lower when the slide is pushed out because the tube gets longer. When the slide is pulled in, the tube becomes shorter and the sound goes higher. The trombone's voice is lower than the French horn's but higher than the tuba's.

Tuba. The tuba has the lowest voice of the brass instruments. Not surprisingly, it is also the largest of the brass instruments. Some tubas have four valves instead of the usual three.

Woodwind Family

All woodwinds are pipes with little holes in their sides. Called "woodwinds" because they all used to be made of wood, they produce sounds when players blow air ("wind") into them. By covering and uncovering the holes, a player changes the length of the column of air in the pipe. It is the length of this column of air that determines the pitch.

Flute and Piccolo. The flute and piccolo are the smallest and simplest woodwinds. They are different from other windwinds in that 1) they are made of metal instead of wood, and 2) they do not have reeds attached to the mouthpiece. In fact, they do not have mouthpieces. One end of a flute or piccolo is closed, and a player blows into a hole in the side of the pipe at the other end. The flute is larger and has a warmer tone than the piccolo. The tiny piccolo produces the highest notes in the orchestra.

Oboe and English Horn. The oboe is made of wood and has a double-reed mouthpiece. The two reeds are shaped so that only a narrow passage for air can get between them. As a result, the oboe produces a strong, piercing tone. The English horn — a little longer and a little wider than the oboe — produces a softer, less piercing tone.

Clarinet. The clarinet is a single-reed instrument that has a very wide range. It can produce sounds from very low to very high. The bass clarinet has a lower, richer tone.

Bassoon. Like the oboe, the bassoon is a double-reed instrument. It is much larger than an oboe and produces some of the lowest tones in the orchestra.

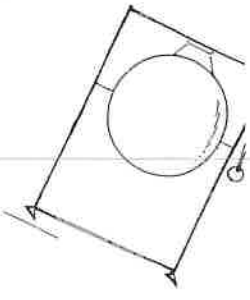
String Family

A string makes a sound when it moves back and forth very fast. This is string vibration. The longer a string is, the deeper the sound when it vibrates. You can make a string vibrate by "plucking" it. But the vibration will last longer if you rub the string with a bow.

The violin and cello are the two main stringed instruments played with a bow. Both instruments have four strings. The strings are of different thickness to make different sounds. The thicker the string, the lower the sound when it vibrates. The player stretches each string until it gives just the right sound.

The guitar, harp, and double bass are stringed instruments played by plucking the strings.

Percussion Family



Probably the oldest music makers are objects that make sounds when someone shakes them or hits them. Cave people, no doubt, struck a stretched animal skin with pieces of bone. They used small stones to make rattles. By striking or shaking these objects, prehistoric people created sound waves of a definite pitch or music.

Objects that make music when they are struck or shaken are call percussion instruments. They come in many shapes and sizes. They include all kinds of drums, cymbals, gong, triangle, tambourine, rattles, bell, chimes, and xylophone.