Dear Incoming 6's,
Welcome to the Seniors! As has been the case throughout your Arbor career, you have a set of assignments to do over the summer. Our purposes in assigning you this work are to keep fresh the many skills you have acquired, to prepare you for the classes that you will be starting in the fall, and to give you the opportunity to make work that can be used to enrich the classrooms and inform your peers.

All of the summer homework assignments (Humanities, Math, and Spanish) are contained in this document.

See you in the fall!

- The Senior Team


## HUMANITIES

6th Grade

## \# 1 Reading Log:

Your most important job is simply to spend time reading over the summer. Feed yourself with good books. Nothing is more important for your growth as a learner than reading. Read, read read! As Britta told you before the end of the school year, three of the books that you read should be from the Senior Summer Reading List on the Arbor website, each one from a different category. For example, you might choose one "realistic fiction" book, one "science fiction" book and one "nonfiction" book." Please keep track of all the books you read this summer and turn in a neatly written list of their titles and authors.

## \#2 Written Piece

Choose one of the books that you read. It doesn't have to be one of the three that you read from the Summer Reading List. Any book will do!

Think about the book. If you were to describe it to someone, what would you say was one of the big ideas that it was about. We don't mean what is the plot of the book, but rather what is one of its themes.

Here are examples of some big ideas (themes) that many books center around:

| Hope | Struggle | Courage |
| :--- | :--- | :--- |
| Friendship | Growing up | Loss |
| Love | Change | Conflict |
| Rebellion | Justice | Identity |

Of course, that's not all of the possibilities for themes, but it is a few.

Once you have chosen your theme, spend between one and two hours writing about how that theme appears in the book. Use specific examples from the story. For example, if you choose the theme of "bravery," be sure that you can write about several examples of how the characters are brave. Provide detail when you give these examples! If you can't come up with several examples, you have probably not chosen the right theme (or possibly you might want to choose a different book).

Finally, as you should do before you turn in almost any piece of writing, take the time to reread your work and edit and revise it using a different color pencil (or pen, or whatever). If you've chosen to type your piece, please print it out and do the editing and revision by hand.

A big part of the point of this work is to give your next year's Writing teacher (Linus!) an idea of what you can do in about an hour's writing time. So please do spend at least an hour on this piece (including editing and revising) - but don't spend more than two!

## \# 3 Map Your Neighborhood

This coming year we will be thinking and talking a lot about human communities: religious communities, countries, whole civilizations, and cities. To get you in the spirit of this, your job is to make a map of your neighborhood. We are intentionally leaving what we mean, exactly, by neighborhood vague rather than specifying a certain area that you need to cover, because we all live in different kinds of areas.

Your map 100\% does NOT need to be accurate and to scale. The purpose of this map is not for someone to use it to navigate around your neighborhood.

In fact, this map has two purposes: 1. To get you exploring and noticing things about the place that you live. 2. To decorate the classroom when you arrive in the fall.

So, in terms of purpose number one, really do spend some time checking your neighborhood out. Walk or bike or drive around. What do you notice? What makes the area unique or interesting? Make sure to include those things on your map! If you get really interested, try counting and observing something specific and including that information on your map. How many people bike past a specific intersection during an hour and how many of them are wearing helmets? Where are all of the fire hydrants or sewer manhole covers located? How many trees are there in the parking strips? How many spots where the sidewalk needs repair?

As far as the second purpose - decorating the classroom for the beginning of the year - here is what you need to do. First, please use a nice quality piece of paper (something nicer than printer paper) that is at least 11 inches by 17 inches. Second, it needs to hang on the wall; it can have 3d elements if you want, but it does need to hang on the wall. More than anything else, please put time into making this something that you will be proud to have hung up and seen by your fellow Seniors, parents, visiting tours, and so on. That means spending at least an hour making it, please; feel free to spend more time if you are really enjoying it! (The world is full of amazing maps if you want some inspiration; if you just do an internet image search for "cool maps" or "cool maps of cities," you'll find tons.)

## \#4 Poetry Reading

Your final job is to spend an hour or so reading some poems from The Space Between Our Footsteps, an anthology of poems and paintings from the Middle East put together by Naomi Shihab Nye. You can follow the link below for a scanned version of it.

## The Space Between Our Footsteps

But here's the thing: reading poetry from a screen is oogy. Don't do it. For real. Take the time to either print out the poems you want to read or - even better - visit your local library and check out the book. In fact, not only should you not read from a screen, we recommend reading outside. It's summertime. It's beautiful out. Okay. So, once you've spent an hour reading poetry (more if you're enjoying it!), just pick one poem that you like and get familiar with it. Read it several times. Practice reading it aloud. You don't have to memorize it. Just be familiar with it (okay, you do need to memorize the author's name and the poem's name but that's it!). We'll be asking you to read the poem aloud when you return to school. (If it's a super long poem, you can read part of it.)

## MATH (Problems and Puzzles)

Before you start on the problems below, make sure to skim them as well as read the other elements of the assignment. Our advice to you is that you spread this work out over several, shorter sessions, rather than trying to do it all in one sitting. If you are unable to complete the question, then highlight the problem(s) and we will review it upon your return to campus.

Please do your work on graph paper. Show all your work and label it carefully. Staple those sheets together, in order, with your name on each page. If you are still unable to complete the question, then highlight the problem(s) and we will review it upon your return to campus.

Section 1 - Section 3: Take the time you need to complete these problems, focusing on being effortful and producing quality work. Copy each problem down onto the graph paper pages on which you do your work.

Section 4: Read through the four puzzles. Spend at least one-hour working on any of the four puzzles from this section (more if you're having fun), but don't feel that you need to solve every puzzle.

When you have finished that work, reflect upon what you've done and answer the following two questions. Be thoughtful, honest, and thorough in your responses. Use complete sentences (note that sentences is plural and implies more than one sentence) to express yourself.

Which problem(s) did you enjoy the most? Why?
Which problem(s) did you enjoy the least? Why?
Optional additional assignment:
Create a 9" X 12" poster that clearly documents the process(es) you employed to solve a problem from either the Word Problems or Puzzles section. These posters will hang on the wall of the Senior Sunroom, so be clear in your writing and feel free to beautify your poster.

## PRACTICE PROBLEMS

## Section 1: Patterns

Fill in the blanks in the patterns below and explain each pattern in words.
a) $5,13,21$, $\qquad$
b) 5, 20, $\qquad$ , 320, $\qquad$ ,
c) $1,4,9$, $\qquad$ , -
d) Create your own number pattern, describe it in words, and list its first six numbers.
$\qquad$

## Section 2: Computational Skills

Solve the following problems. Show all of your neatly organized work on graph paper.
a) $0.12+1.25+2.3=$
b) $16.25-10.3=$
c) $8.97 \times 0.5=$
d) $12.45 \div 1.5=$
e) $3 \frac{5}{6}+2 \frac{9}{10}=$
f) $5 \frac{1}{9}-2 \frac{2}{3}=$
g) $\frac{3}{10} \times \frac{5}{6}=$
h) $\frac{9}{16} \div 6=$
i) Express 0.47 as a percentage.
j) Express $\frac{6}{15}$ as a percentage.
k) Express $85 \%$ as a decimal.
l) Express $16 \%$ as a fraction in simplest form.

## Section 3: Word Problems

Clearly show your process.
a) Nick used $\frac{1}{3}$ of his Arborfest tickets on lemon peppermint sticks and $\frac{2}{3}$ of the remainder at the Parlor of Funk. He had 6 tickets left. How much money did he spend altogether?
b) An armadillo and a crocodile toted buckets in order to fill the Junior Pond $\frac{3}{5}$ full with water. If 30 liters more water are needed to fill the pond completely, what is the capacity of the pond?
c) Nick, Greg, and Linus have 256 bouncy balls altogether. The ratio of Nick's to Linus's bouncy balls is $4: 3$. Linus has 14 more bouncy balls than Greg. How many bouncy balls does Nick have?
d) The normal price of a cape was $\$ 76$. Chuckles saw a cape at a sale discounted by $15 \%$. What was the selling price of the cape?

## PUZZLES

1. Old McArbor raises goats and chickens. The animals have a total of 32 heads and 72 feet. None of McArbor's animals are mutants. Each goat has one head and four feet. Each chicken has one head and two feet. How many goats and how many chickens does McArbor have?
2. Here are some words translated from an artificial language.
eselklup means "black dog"
eselrifoulof means "white puppy"
finiklupulof means "gray cat"
Based on the meanings of the words above, which of the words below is most likely to mean "gray kitten" and why?
finikluprifo
finirifoklupulof
finiulofklup
klupulofrifonofini
3. Fill in the blanks below, following the pattern. (Numbers go on the lines only - the totally empty spaces stay blank, otherwise the pattern won't work!)

|  | Column A | Column B | Column C | Column D | Column E |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Row1 | 1 | 2 | 3 | 4 | 5 |
| Row2 | 9 | 8 | 7 | 6 |  |
| Row3 |  | 10 | 11 | 12 | 13 |
| Row4 | 17 | 16 | 15 | 14 |  |
| Row 5 |  | 18 | - | - |  |

Row 6 _ _ _ _ _ _

## Row 7

The real puzzle is to decide in which row and column the number 1000 will appear. How do you know?
4. The Dazzling Echidna is a magician and trickster. One of her favorite gimmicks involves words. Her assistant thinks of a five letter word. Then the Dazzling Echidna proceeds to guess five letter words, and her assistant tells her how many letters the word he thought of shares with the word she guessed. One day, she guessed five words and he told her that each of her words shared exactly two letters with the word he had in mind.

The five words she guessed were:
BLUNT VOTER SPICE BUOYS MADLY
What word did the assistant have in mind? How did you figure it out?

## SPANISH FOR RISING SIXES (El alfabeto, Conversación, Cognados)

Rising Sixes have had three in-person sessions in Spanish this spring that introduced them to their assignment. To access further support materials, they should use their Arbor Gmail account to join a new Google Classroom called "6s Spanish 2023-2024." The code to join the class is guz5awo. Student Gmail accounts should be their first name last initial @arborschool.org (e.g., Anna Jones would be annaj@arborschool.org). The temporary password is arborschool. Kelly is the administrator.

The summer homework, which consists of the three sections below, is designed to build familiarity with sounds and conversational basics by using them with other people, as well as to consider words that are related in English and Spanish, so parents will likely find themselves learning a little Spanish as well!

## On the first day of school in September, you should bring with you:

1) your labeled Spanish notebook, with your note to Caroline about teaching the alphabet
__ 2) your flashcards or sticky notes with greetings on them
2) the page below with your list of English cognates

## Section 1: El alfabeto

- Use the video in the Google Classroom and/or the chart below to help you practice the alphabet song. Play it as many times as you need, until you can name all the letters and sing the song without help.
- Teach the alphabet song to someone once you are confident that you know it well. You will have to think about what your student needs from you in order to be successful. Your student could be a younger sibling, a parent, a grandparent, a cousin, a friend, a neighbor-anyone who doesn't already know it!
- In your new Spanish composition notebook, write Caroline a note saying whom you taught and how it went. How exactly did you teach your student the alphabet song? Did you break it up into sections? What was difficult for your student? What did you do to help your student? There are examples of this note in the Google Slides, which is in your new Google Classroom.

| El alfabeto español |  |  |  | English pronunciation guide |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a | b | c | ch | ah | beh | ceh | che |
| d | e | f | g | deh | eh | efeh | heh |
| $\mathrm{h}^{*}$ | i | j | k | ah-che | ee (like week) | hohta | kah |
| 1 | 11 | m | n | eleh | eh-yeh | emeh | eneh |
| ñ | o | p | q | enyeh | oh (like go) | peh | kooh (like coop) |
| r | rr | s | t | ereh | erreh | eseh | teh |
| u | v | w |  | ooh (like boot) | veh / beh | doble |  |
| x | y | z |  | eh-kees | ee-griega | seta |  |

## Section 2: Conversación

1) Watch the conversation videos in the Google Classroom and/or use the information below. Write down the phrases and what they mean on index cards or sticky notes, and keep them safe. You do not need to watch all the videos in one sitting. You may watch them as many times as you need in order to feel comfortable with the pronunciation of the words.
2) Practice having conversations with classmates, friends, and family members. Do this several times over the summer and see how long you can keep your conversations going. If your parents do not know Spanish, you can teach them! You will know you have practiced enough when you feel comfortable asking and answering everything below.

Preguntas / Questions
Respuestas / Responses
¡Hola!
Buenos días (good morning)
Buenas tardes (good afternoon)
Buenas noches (good evening)
¿Cómo te llamas?
¿Cómo estás?
¿Cuántos años tienes?
保

Estoy ... muy bien, bien, regular, más o menos, mal, muy mal, gracias. ¿Y tú?

Yo tengo $\ldots{ }^{\circ}$ años. ¿Y tú?

> ¡Adiós!

Hasta luego
Hasta mañana
Hasta pronto
${ }^{\circ}$ Los números 0-12: cero, uno, dos, tres, cuatro, cinco, seis, siete, ocho, nueve, diez, once, doce

## Section 3: Cognados

1) The Latin word cognatus means "related by blood." Many words in languages such as English, Spanish, French, Italian, and Portuguese are similar in appearance and related in meaning because these languages have common roots in Latin. These similar, related words are called cognados in Spanish and cognates in English-"cognate" is an example of a cognate! Thinking about cognates will help you when you study English word roots as Seniors; it will also help you with your Spanish.

In the list on the next page, you can see how similar some Latin and Spanish words are (columns 1 and 2). While their English meanings (column 3) aren't always cognates-that is, they don't always look like the Latin and Spanish words-if you think hard, you can probably come up with an English word that is a cognate for the Latin and Spanish words (column 4). Ask yourself, for example, "What is something that
has to do with trees that sounds like 'arbor' or "árbol"? What is something that has to do with a year that sounds like "annus" or "año"? You might come up with more than one cognate for each-that's great!

Yo me llamo: $\qquad$
Your task is to try to fill out the following list. You are welcome to add more words to make this list even longer. If you know another related language, you can include that too!

| Latin | Spanish | English meaning | English cognate(s) |
| :---: | :---: | :---: | :---: |
| arbor | árbol | tree |  |
| annus | año | year |  |
| antiqua | antigua | ancient |  |
| carnis | carne | meat |  |
| centum | cien | hundred |  |
| dormire | dormir | to sleep |  |
| duodecim | doce | twelve |  |
| liber | libro | book |  |
| manus | mano | hand |  |
| populus | pueblo | people |  |
| veritas | verdad | truth |  |
| vita | vida | life |  |
| terra | tierra | land |  |
| tardus | tarde | late |  |
| debere | deber | to owe |  |
| monstrare | mostrar | to show |  |
| navigare | navigar | to sail |  |
| duo | dos | two |  |
| totus | todo | whole |  |

Optional: If you would like to learn any or all of these Spanish words, go for it! You can make flashcards with the Spanish on one side and the English on the other. For example: árbol / tree.

