

LOWER ELEMENTARY WEEK TEN: JUNE 1-5, 2020

Dear Lower Elementary Families,

Welcome to the tenth, the last week of Distance Learning. Please take your time choosing among the lessons and activities we have for you. We hope they guide your children toward purposeful moments, engaging discussions, and creative follow ups.

We wish you a healthy, happy summer.

Best,

Ms. Pasco, Dr. Feeley, Ms. Shirley, and Mr. Weathers

Language

Quantitative Adjectives

- Through your work with Grammar Boxes and adjective games, you know that adjectives are words that describe. Today, let's focus on one particular kind of adjective: quantitative adjectives.
- Quantitative adjectives answer the question "How many?" They describe the quantity of nouns.
- Examples:
 - Much
 - Little
 - Some
 - All
 - A few
 - Several
 - Most
 - Many
 - Any
 - Enough
 - A lot
 - Numerous
 - A plethora
 - A pair of
 - A couple of
 - One, two, three, ten, five-hundred, a million

- A tenth, a fraction, a hundredth... etc.
- Follow-up Activities:
 - (Intro Level) Describe quantitative adjectives.
 - (Practice Level) Write 10 sentences using the examples of quantitative adjectives above.
 - Imagine your own follow-up activity.

Spelling

Choose a **spelling list** for this week from the *Instructional Spelling Program* by Andrea Rolfe or choose the last list from *The Reading Teacher's Big Book of Lists (Intermediate Spelling Demons)* by Kress and Fry. Practice spelling your list out loud with a parent or sibling. Make up sentences for each word and write them down. You can take a quiz on Friday.

- stir, dirt, third, first, born, short, storm, sport, north, form.
- plays, played, stays, sprayed, dries, dried, fries, fried, worries, worried.
- grate, great, died, dyed, coward, cowered, loan, lone, bold, bowled.
- danced, dancing, loses, losing, carved, carving, shares, sharing, pasted, pasting.
- yield, written, visible, usually, twelfth, system, running, quantity, pursue, ordinary.

Mathematics

Divisibility

- Let's look at another pattern in numbers and their factors. Remember we can determine whether a dividend is evenly divisible by a divisor or not by looking at the patterns in the multiples of numbers. Remember the parts of a division problem: **468** (dividend) \div **2** (divisor) = **234** (quotient).
- Today let's look at numbers divisible evenly by 9.

Divisible by 9	Not divisible by 9
-	1
-	2
-	3
-	4
-	5
-	6
-	7
-	8
9	-
-	10
-	11
-	12

-	13
-	14
-	15
-	16
-	17
18	-
-	19
-	20
-	21
-	22
-	23
-	24
-	25
-	26
27	-

- Let's look at the three numbers that we have found that are divisible by 9: 9, 18, 27. What is the relationship between tens and units in these two digit numbers? Do you notice something?
- If we continue looking at multiples of 9, the pattern becomes clearer for two digit numbers. Consider the next four multiples of 9: 36, 45, 54, 63
 - What is the sum of each number pair? Is every two digit number whose digits add up to 9, evenly divisible by 9?
 - Write down all the skip counting multiples of 9 from 63 to 99 and see if they too add up to nine. Write them out and circle all the ones that add up to 9.
 - Look at three digit numbers that add up to 9: Are they all evenly divisible by 9?
 - Write the skip counting sequence for 9 from 99 to 180. Does the rule hold true that far?
 - What happens when we get to the next number, 189? What is the sum of those digits? Does this new number relate to 9 somehow? How is it related?

Clapping Rhythm Patterns and Recognizing Counts, Part 2



- Building on a previous rhythm patterns activity, practice these measures. The three notes connected are triplets. They stand for one count. This continues our 4/4 counts.
 - The first measure is counted like this: ONE, TWO-AND-A THREE, FOUR
 - The second measure is counted like this: ONE, TWO, THREE-AND-A FOUR
 - The third measure is counted like this: ONE-AND-A TWO, THREE, FOUR.
 - The fourth measure: ONE-AND-A TWO, THREE-AND-A FOUR
 - The fifth measure: ONE-AND-A TWO-AND-A THREE, FOUR
 - The sixth measure: ONE, TWO-AND-A THREE-AND-A FOUR
 - The seventh measure: ONE-AND-A TWO-AND-A THREE-AND-A FOUR
- Follow-up Activities:
 - (Intro Level) Play each of the measures. Practice each a few times. Tap or clap out each rhythm if you do not have any instruments handy.
 - Write a short song using the rhythm patterns above.
 - Imagine your own follow-up activity.

Geometry

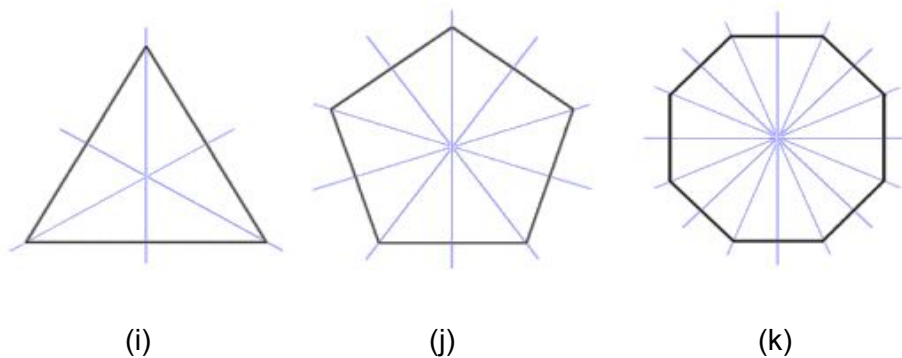
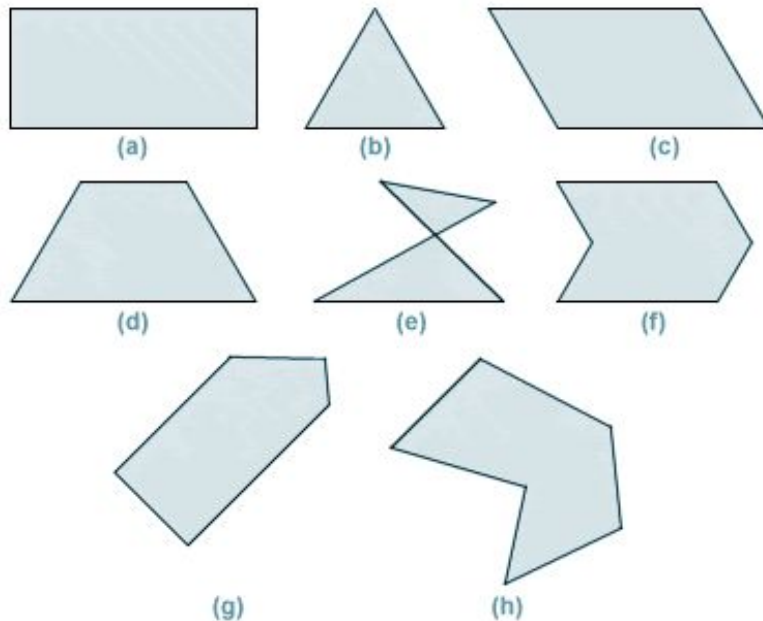
Volume

- In continuation from the geometric solids review, let's study volume. **Volume is the amount of space inside a solid.** It's usually measured in "cubed" units because the shapes which have volume have 3 dimensions (length, width, and height). Another way to measure volume is with liquid. Today, let's use water to help us measure the volume of solids. For this, you will need to ask permission to use materials with which to practice.
- Materials:
 - liquid measuring cups
 - hollow items that can be filled with water (at least 3, but as many as you like)
 - pencil
 - paper (or your journal if you have it)
- Procedure:
 - Choose your first water-holding item. The challenge for this activity is precision. Be patient with the steps and process as you determine the volume of the hollow objects you chose.
 - Determine the appropriate unit of measure to use. Cups? Milliliters? Ounces?
 - Optional: Estimate how many units the item will hold.
 - Patiently see how much liquid exactly fits the space inside the item of your choice.
 - Record your findings.
 - Choose another item. Repeat.



Regular and Irregular Polygons

- Examine these polygons. Some are regular. Some are irregular.



- All the polygons named “a” through “h” are irregular. All the polygons labeled “i” through “k” are regular.
- How do regular and irregular polygons differ?
 - Compare triangles “b” and “i”. Look at the sides of triangle “i”. Are they the same length? What about the angles? Are they the same amplitude?
 - Compare pentagons “j” and “g”. Do you find the same relationships? Are the side lengths and angle amplitudes the same?
 - Write a definition of a regular polygon.
 - Write a definition of an irregular polygon.

History

Hero Spotlight: Who is Kehinde Wiley?

- This history topic is inspired by a student's presentation in which she shared, "Kehinde Wiley was born in California. Now, he lives in New York. He is a visual artist. He first got commissioned in 2017 to paint a portrait of former President Barack Obama for the Smithsonian National Portrait Gallery. Some of the other arts he does are painting, sculpting, and glasswork."
- On Wiley's website, there is a Q&A in which he said, "In art school, I just liked being able to make stuff look like other stuff. It made me feel important. Back then, it was basic apples and fruit and understanding light and shadow. From there I did the body and a lot of self-portraiture. So much of what I do now is a type of self-portraiture."
- Perhaps this is a familiar feeling among you all. Every time you play with lines, shapes, shadow, and textures in the sketches you create, you are strengthening skills. The attention you give and the patience you practice are building blocks. Perhaps one day, your talents will be called to the world's stage.
- Check out some of Wiley's works in the picture below:
 - Top left: **President Barack Obama** 2018, oil on canvas
 - Top middle: **Shantavia Beale II**, 2012, oil on canvas
 - Top right: **Napoleon Leading the Army Over the Alps**, 2005, oil on canvas
 - Bottom left: **Randerson Romualdo Cordeiro**, 2008
 - Bottom middle: a process picture of Kehinde working on **Two Heroic Sisters of the Grassland**, 2011
 - Bottom right: **The Two Sisters**, 2012, oil on linen



- Follow-up Activities:
 - (Intro Level) Kehinde Wiley used oil on canvas for most of his works. Think of as many artistic media as you can. List the varieties and materials that human beings have used to create art. Let's think back from the early human beings, the Sumerians, who painted on caves.
 - (Research Level) So far, we have put Dorothea Lange, Dale Chihuly, and Kehinde Wiley in the spotlight. Do you have an artist in mind to feature?
 - Think of your own way of following up.

Famous Figures of Ancient Rome

- Below is a statue of **George Washington** that can be seen in the Smithsonian Museum of American History. He is not dressed as a general. He is not dressed in 18th century clothing. He is dressed as an ancient Roman. This is because George Washington was compared to an ancient Roman general, **Cincinnatus**. Washington was called the American Cincinnatus.
 - Read about Cincinnatus. Read about Washington. Why did Washington's contemporaries think that he was like Cincinnatus?
 - Examine the statue of Washington. What is in his left hand? What is he doing with it? Does this remind you of something that Cincinnatus did?
 - Read about other famous Romans. Does another ancient Roman remind you of a later historic figure?



Biology

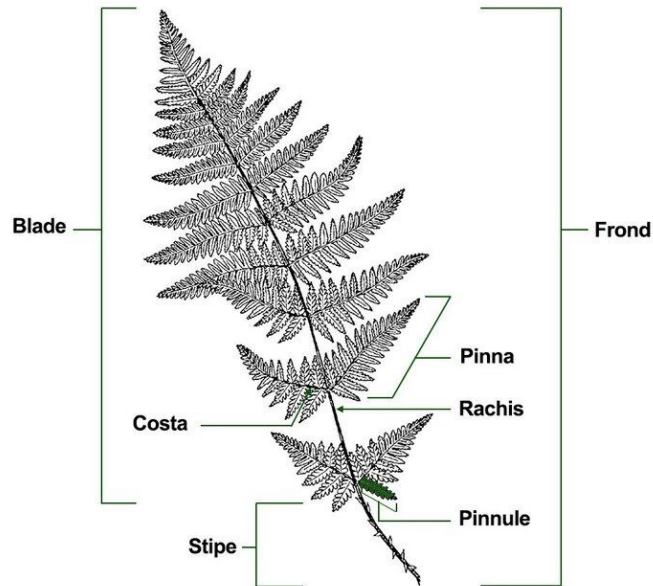
Ferns, Non-Flowering Plants

“Only spread a fern-frond over a man’s head and worldly cares are cast out, and freedom and beauty and peace come in.” — John Muir

- We have frequently studied flowering plants. It’s easy to give angiosperms (flowering plants) attention because their bright corollas and inviting scents naturally seem to call to us. Today, let’s give our attention to pteridophyta: ferns.
- There are over 10,000 species of ferns. Ferns do not produce flowers and therefore do not produce seeds. Ferns reproduce with tiny spores, which are carried by the wind. The leaves on ferns are called “fronds.” They grow from underground stems. Spores are made and grow on the underside of fronds.
- The small sections on the frond of a fern lets the leaf catch more sunlight. Photosynthesis, the plant’s way of making its own food, glucose, is also important for producing spores.
- Echoing a previous lesson about how plants defend themselves, the stem at the bottom of the frond is usually protected with hairs, scales, or thorns.
- Based on studies of fossils, ferns are theorized to have first existed 360 million years ago in the mid-Devonian period.
- The three major parts of the fern:

- the rhizome (the underground stem)
- the leafy frond (See diagram for further details.)
- sporangia (the reproductive structure)

Parts of a Fern



- Follow-up Activities:
 - (Intro Level) Go on a nature walk (this can be your garden, your neighborhood, the plants section of the grocery store, or a nearby park). Search for a fern. Capture the botanical specimen artistically then identify the parts.
 - (An Artist's Approach) Use clay to make a fossil model of the fern you found. After, create little tickets to identify the parts.
 - (A Geographer's Approach) What was the Earth like during the Devonian Period? Describe the planet's state.
 - (A Paleontologist Approach) What creatures existed during the Devonian Period? How did they meet their fundamental needs?
 - Imagine your own way to follow up with this lesson.



Planting Cycles

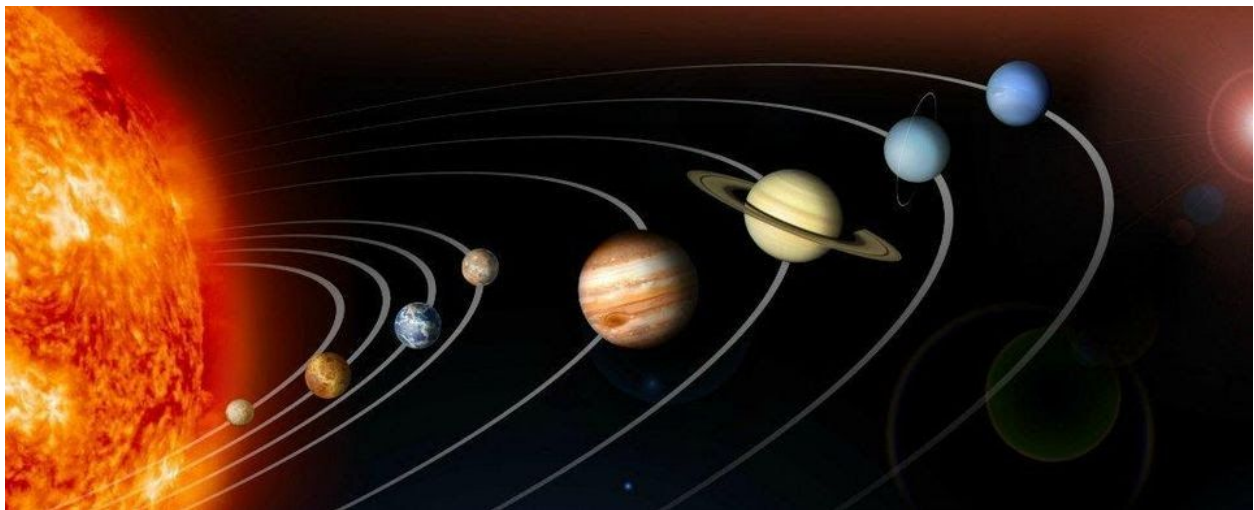
- Gardens are planted now all around our region. Some garden vegetables are ready to harvest already. We will have to wait a long time for others.
- Here is a list of fruits and vegetables. [Use a planting and harvest chart like this one](#) to find out which ones are almost ready and which plants won't be ready until July or later.
 - Strawberries
 - Lettuce
 - Watermelons
 - Peas
 - Red Potatoes
 - Pumpkins
 - Sweet potatoes
 - Peaches
 - Corn
 - Blackberries



Geography

The Solar System

- This lesson echoes the First Great Story from the beginning of the year. We talked about solid, liquid, and gas particles and the laws that they follow. Natural laws aren't just followed here on Earth, but largely, the universe.
- The solar system was formed about 4.6 billion years ago from a cloud of gas and dust. The solar system is made up of our sun, the 8 planets that revolve around the sun, the moons that orbit those planets, asteroids, and comets.
- Three types of planets:
 - Ice giants— Uranus and Neptune
 - Gas giants — Jupiter and Saturn
 - Rocky planets — Mercury, Earth, Venus, Mars
- Do you notice where the types of planets are in relation to the sun?



- Order of the Planets from closest to farthest from the Sun:
 - Mercury
 - Venus
 - Earth
 - Mars
 - Jupiter
 - Saturn
 - Uranus
 - Neptune
- Follow-up Activities:
 - (Intro Level) Name the 8 planets. Describe the Solar System. Discuss the laws that solids, liquids, and gasses follow.
 - (Research Level) Choose one planet to learn more about. Write a short report. If you'd like, you can make a small booklet and include all 8 planets, asteroids, and comets, too. Maybe with a cover page and a table of contents?

- Imagine your own way of following up.

More Famous Cities

- The names of cities change. Sometimes they change when new rulers take over the city. **New York City** once belonged to a Dutch Trading Company. In the 1600s, when the Dutch founded their city, they called it **Nue** (New) **Amsterdam**. When the English forced the Dutch out they renamed it New York.
- Below is a chart with the names of cities. Fill in the modern name or the previous name, wherever you see a blank space.
 - Why did these name changes occur? Was it due to conquest? Political changes?

Modern city name	Country	Previous name
St. Petersburg	Russia	?
?	India	Bombay
Beijing	China	?
Istanbul	Turkey	?
?	Ireland	Dyfinn
Oslo	Norway	?