AcadeMir Charter Schools

2024 SUMMER 5th GRADE PACKET

AcadeMir Charter School West
2024 Summer Learning Requirements

Dear Parent(s)/Guardian(s),

In preparation for the 2024 – 2025 school year and to ensure that our students maintain growth-oriented academia during the summer, the school curriculum team has created the following Summer Learning assignment for each student to complete by the first day of school. Each student must complete the Summer Learning Packet over the summer and turn it in to your classroom teacher by August 23, 2024.

Summer Reading

ACSW students will be expected to read the novel from the reading list for their incoming grade level. For example, if your child is entering 1st grade in the fall, he/she would read the 1st grade novel and complete the activity. Please note that this assignment will be worth one grade for Reading and one grade for Language Arts.

Mathematics Activities

ACSW students are required to complete the mathematics packet that pertains to their incoming grade level and/or assignment. For example, if your child is in the Accelerated Mathematics course in the elementary level, he/she needs to complete the Accelerated packet. For middle school, Algebra, Geometry, etc. is separated from the ELA, Science, and Social Studies packet. Please ensure that you do all the components.

Thank you for your partnership in ensuring your child continues to strive for excellence over the summer!
We look forward to an outstanding 2024 – 2025 school year!

Sincerely,

Susie Bello, Principal
AcadeMir Charter School West
bello@academircharterschoolwest.com

ACADEMIR
SUMMER READING
2023-2024

Summer provides a plethora of opportunities for students and their families to enjoy unforgettable books and create lifetime memories.

AcadeMir students entering K-8th grade are required to read from the summer reading lists developed by our Academic Team for the upcoming grade.

Creating lifelong readers is one of the greatest gifts that we can give our children. We want our students to have a fun summer break while also pursuing reading for enjoyment at the same time.

Research has shown that the single greatest factor in predicting reading success is whether a child is read to when they are young. All of our students are to read the selected book for their grade.

These assignments are for a grade and should be completed and turned in to your student's new ELA teacher by Friday, August 23rd.

Happy Reading and enjoy your summer break!!!

ACADEMIR CHARTER SCHOOLS

2024 Summer Reading List

Grade	Summer Reading	Author	Book Synopsis	Front Cover
Kindergarten	Swimmy	Leo Lionni	Deep in the sea there lives a happy school of little fish. Their watery world is full of wonders, but there is also danger, and the little fish are afraid to come out of hiding . . . until Swimmy comes along. Swimmy shows his friends how—with ingenuity and teamwork—they can overcome any danger.	
First Grade	From Seed to Pumpkin	Wendy Pfeffer	Pumpkins can be baked in a pie, carved into jack-o'-lanterns, and roasted for a healthy snack. But how does a tiny seed turn into a big pumpkin? With clear text and detailed, colorful illustrations, this book explains what a pumpkin seed needs to help it grow!	
Second Grade	Mango, Abuela, and Me	Meg Medina	Mia's abuela has left her sunny house with parrots and palm trees to live with Mia and her parents in the city. The night she arrives, Mia tries to share her favorite book with Abuela before they go to sleep and discovers that Abuela can't read the words inside. Then Mia sees a parrot in the pet-shop window and has the perfect idea for how to help them all communicate a little better.	
Third Grade	The Boxcar Children	Gertrude Chandler Warner	The Aldens begin their adventure by making a home in a boxcar. Their goal is to stay together, and in the process, they find a grandfather.	
Fourth Grade	The Lion, the Witch and the Wardrobe	C.S. Lewis	Narnia… the land beyond the wardrobe door, a secret place frozen in eternal winter, a magical country waiting to be set free. Lucy is the first to find the secret of the wardrobe in the professor's mysterious old house. At first her brothers and sister don't believe her when she tells of her visit to the land of Narnia. wardrobe themselves.	

ACADEMIR CHARTER SCHOOLS

2024 Summer Reading List

Grade	Summer Reading	Author	Book Synopsis	Front Cover
Fifth Grade	The City of Ember	Jeanne DuPrau	Many hundreds of years ago, the city of Ember was created by the Builders to contain everything needed for human survival. It worked…but now the storerooms are almost out of food, crops are blighted, corruption is spreading through the city and worst of all— the lights are failing. Soon Ember could be engulfed by darkness…	
Sixth Grade	Hatchet	Gary Paulsen	Brian is on his way to Canada to visit his estranged father when the pilot of his small prop plane suffers a heart attack. Brian is forced to crash-land the plane in a lake--and finds himself stranded in the remote Canadian wilderness with only his clothing and the hatchet his mother gave him as a present before his departure.	
Seventh Grade	Old Yeller	Fred Gipson	At first, Travis couldn't stand the sight of Old Yeller. The stray dog was ugly, and a thieving rascal, too. But he sure was clever, and a smart dog could be a big help on the wild Texas frontier, especially with Papa away on long cattle drive up to Abilene.	
Eighth Grade	The Swiss Family Robinson	John David Wyss	The Robinsons leave their home in Switzerland planning to settle half a world away. But things do not turn out as they had expected. The sole survivors of a terrible shipwreck, they wash ashore to learn that the danger has only begun. Their new world will test their courage, cleverness, endurance, and faith as they struggle to survive and create a civilization of their own in the wilderness.	
Ninth Grade	1984	George Orwell	The scene is London, where there has been no new housing since 1950 and where the city-wide slums are called Victory Mansions. Science has abandoned Man for the State. As every citizen knows only too well, war is peace. To Winston Smith, a young man who works in the Ministry of Truth (Minitru for short), come two people who transform this life completely.	

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ELA

Fifth Grade

Many hundreds of years ago, the city of Ember was created by the Builders to contain everything needed for human survival. It worked…but now the storerooms are almost out of food, crops are blighted, corruption is spreading through the city and worst of all— the lights are failing. Soon Ember could be engulfed by darkness…

ACADEMIR CHARTER SCHOOLS

WRITE A COMPLETE RESPONSE FOR THE FOLLOWING QUESTIONS

Students Name: _____   **Date:** _____

Title of book and authors name:

_____
_____
_____

Describe the setting of the book:

_____
_____
_____
_____

State the main character's name and describe the character:

_____
_____
_____
_____

What does that character value?

_____
_____
_____
_____

What is that character's personality like?

_____
_____
_____
_____

On a scale from 1-10 (10 being the best book you've ever read), how would you rate this book? Explain your reasoning.

_____
_____
_____
_____

List the sequence of events in the story. Circle the conflict, highlight in yellow the main idea, underline the resolution, and highlight in orange the main characters.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Summarize the story on a seperate sheet of paper.

Cursive passages: Stars

Cursive Writing Worksheet

Trace and copy the passage:

In the sky, you can see the sun, stars and the moon. The sun is up during the day. It is very hot. The sun gives us light and heat. Plants need the sun to grow. We can see the stars at night. They give off light and heat, like the sun. That is because the sun is a star too! There are more stars than we can count.

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MATH

Dear incoming accelerated 5th grader,

We hope you had a wonderful, accelerated 4th grade year!

This summer packet has been created to help you review and prepare for 5th grade accelerated Mathematics. It covers many of the math topics that you learned in class this year and some of the concepts you will learn next year.

- Please show all your work for every problem in the packet. You can show your work on a separate sheet of paper.
- The paper should be neatly organized- with every problem numbered.
- Highlight, draw a box, or draw a circle around your final answers.
- Calculators may be used to help you complete this section of your summer packet since they will be used during the school year.

*Note: If you submit your summer packet without work, you **WILL NOT** receive full credit.

<u>The completed packet is due on the first week of school by:</u>
<u>Friday, August 23rd, 2024.</u>

This packet will count as your first math grade of the new school year.

We hope you have a nice summer break and look forward to seeing you in August.

Multiplying Whole Numbers

1. Write the problem vertically

2. Multiply the ones digit of the bottom number by each of the digits in the top number, right to left

3. Bring down a zero and then multiply the tens digit of the bottom number by each digit in the top number, right to left

4. Bring down two zeros and repeat with the hundreds digit of the bottom number

5. Add up all of the products

ex: 3,481 x 142

$$
\begin{array}{r}
3,481 \\
\times \quad 142 \\
\hline
6962 \\
139240 \\
+ \quad 348100 \\
\hline
494,302
\end{array}
$$

Dividing Whole Numbers

1. Write out the long division problem with the first number (dividend) underneath the division symbol and the second number (divisor) to the left of the division symbol

2. Divide the divisor into the smallest part of the dividend it can go into and write the number of times it can go in on top of the division symbol

3. Multiply the number on top by the divisor and write the product under the number you divided into in step 2

4. Subtract your product from the number above it

5. Bring down the next digit of the dividend

6. Repeat steps 2-5 until there is nothing left to bring down.

7. If your last subtraction answer is not zero, write the remainder on top

ex: 6,425 ÷ 21

$$
\begin{array}{r}
305 \text{ R } 20 \\
21 \overline{)6425} \\
-63 \\
\hline
12 \\
0 \\
\hline
125 \\
-105 \\
\hline
20
\end{array}
$$

Find each product. Show your work.

1. 238 x 5	2. 832 x 156	3. 4,899 x 67	4. 756 x 300
5. 19 x 863	6. 188 x 732	7. 3,249 x 173	8. 609 x 840

Find each quotient. Show your work.

9. 876 ÷ 2	10. 9,473 ÷ 5	11. 396 ÷ 24	12. 8,911 ÷ 45
13. 700 ÷ 12	14. 1,065 ÷ 15	15. 2,737 ÷ 305	16. 4,516 ÷ 22

Solve each problem, showing all work.

17. Mrs. Kleim bought 5 boxes of 15 pencils to give to her students. If she has 26 students in her class, how many pencils can she give each student? How many pencils will she have left over?	18. Sarah and her 3 friends split a bag of candy evenly. They each ate 13 pieces of candy and there were 2 pieces leftover. How many pieces of candy were originally in the bag?

Rounding with Whole Numbers & Decimals

ten-thousands	thousands	hundreds	tens	ones	tenths	hundredths	thousandths

1. Keep all digits to the left of the place you are rounding the same

2. If the digit to the right of the rounding digit is less than 5, keep the rounding digit the same. If it's 5 or greater, increase the rounding digit by 1.

3. Change all places to the right of the digit you are rounding to 0. (Trailing zeros after the decimal are unnecessary)

ex: round 52.943 to the nearest tenth

52.9$\underline{4}$3

less than 5, so the 9 stays the same

52.900

don't need trailing zeros after the decimal

52.9

Word Form & Expanded Form

1. <u>Word Form</u>: write the whole number in word form, translate the decimal to "and", & write the decimal as if it were a whole number, followed by the name of the place of the last digit

2. <u>Expanded Form</u>: write the value of each non-zero digit separately, with addition signs between them

ex: 209.315

two hundred nine and three hundred fifteen thousandths

200 + 9 + 0.3 + 0.01 + 0.005

Comparing & Ordering Decimals

1. Compare the whole number portions of the numbers. If they are different write > for greater than or < for less than.

2. If the whole numbers are the same, compare each digit to the right of the decimal point, one at a time until you find digits that are different. (If necessary, add zeros at the end of a decimal.)

ex: 13.702 ◯ 13.74

13 = 13

13.7 = 13.7

13.70 < 13.74

So, 13.702 < 13.74

Round the number 21,498.2536 to the nearest indicated place.

19. tenth	20. hundred	21. thousandth	22. one
23. thousand	24. hundredth	25. ten	26. ten-thousand

Complete the chart below.

Standard Form	Expanded Form	Word Form
3.962	27.	28.
29.	100 + 2 + 0.09	30.
31.	32.	Five thousand six hundred eighty-five and twelve hundredths
8,770.006	33.	34.
35.	900 + 10 + 4 + 0.3 + 0.02 + 0.008	36.
37.	38.	Two thousand nine and thirty-five thousandths

Compare each pair of numbers by writing <, >, or = in the provided circle.

39. 0.046 ◯ 0.13	40. 9.52 ◯ 90.13	41. 24.13 ◯ 24.130	42. 15.96 ◯ 15.906
43. 0.964 ◯ 1	44. 6.83 ◯ 6.825	45. 7.256 ◯ 7.24	46. 32.9 ◯ 3.290

Order the numbers from least to greatest.

47. 6.86, 6.8, 7, 6.9, 6.827	48. 12.03, 1.2, 12.3, 1.203, 12.301

Adding & Subtracting Decimals

1. Write the problem vertically, lining up the decimal points

2. Add zeros, if necessary

3. Add or subtract the numbers as if they were whole numbers

4. Bring the decimal point straight down

ex: 12.8 - 1.52

$$12.\overset{7}{\cancel{8}}\overset{1}{0}$$
$$-\ \ 1.52$$
$$\overline{\boxed{11.28}}$$

Multiplying Decimals

1. Write the problem vertically with the numbers lined up to the right (decimals do NOT need to be lined up)

2. Ignore the decimal points and multiply the numbers as if they were whole numbers

3. Count the total number of decimal places in the two factors and put a decimal point in the product so that it has that same number of decimal places

ex: 3.24 x 0.8

$$\overset{1}{\ }\overset{3}{\ }$$
$$3.24 \longrightarrow 2\ \text{decimal places}$$
$$x\quad 0.8 \longrightarrow \underset{+}{1\ \text{decimal place}}$$
$$\overline{\qquad\qquad}\quad 3\ \text{decimal places}$$
$$2592$$
$$\boxed{2.592}$$

Dividing Decimals

1. Write the dividend under the division symbol and the divisor in front of the division symbol

2. Move the decimal in the divisor after the number and then move the decimal in the dividend the same number of places and bring it up

3. Ignore the decimal point and divide as if whole numbers

4. If there is a remainder, add a zero to the end of the dividend, bring it down, and then continue dividing until there is no remainder

ex: 32.3 ÷ 0.5

$$\begin{array}{r} 64.6 \\ 0.5\overline{)32.30} \\ -30 \\ \overline{23} \\ -20 \\ \overline{30} \\ -30 \\ \overline{0} \end{array}$$

Find each sum or difference. Show your work.

49. 8.74 + 10.36	50. 37.4 − 8.55	51. 12.9 + 105.67	52. 450.89 − 213.33
53. 24.1 + 3.74	54. 14.76 − 9.8	55. 622.85 + 53.49	56. 67 − 14.06

Find each product or quotient. Show your work.

57. 4.5 x 6	58. 144.8 ÷ 4	59. 2.7 x 0.8	60. 6.2 ÷ 0.04
61. 8.9 x 2.5	62. 15.8 ÷ 0.5	63. 14.8 x 0.12	64. 16.2 ÷ 1.2

Solve each problem, showing all work.

65. Ryan spent $3.25 on lunch every day, Monday through Friday. If he had $20 at the start of the week, how much money did he have left after Friday?	66. Three friends went out to lunch. The bill came to $47.31. If they split the bill evenly, how much money does each friend owe?

Adding & Subtracting Fractions

1. Rename the fractions to equivalent fractions with common denominators

2. Add or subtract the numerators and keep the denominator the same

3. If mixed numbers, add or subtract the whole numbers

4. If possible, simplify the answer & change improper fractions to mixed numbers

ex: $4\frac{4}{9} + \frac{2}{3}$

$$4\frac{4}{9} \begin{array}{c} \times 1 \\ = \\ \times 1 \end{array} \frac{4}{9}$$

$$+ \quad \frac{2}{3} \begin{array}{c} \times 3 \\ = \\ \times 3 \end{array} \frac{6}{9}$$

$$4 \quad \frac{10}{9} = \boxed{5\frac{1}{9}}$$

Multiplying Fractions

1. Turn a whole number into a fraction by giving it a denominator of 1

2. Cross-simplify the fractions if possible

3. Multiply the 2 numerators and the 2 denominators

4. If possible, simplify the answer & change improper fractions to mixed numbers

ex: $6 \times \frac{2}{3}$

$$\frac{\overset{2}{6}}{1} \times \frac{2}{\underset{1}{3}} = \frac{4}{1}$$

$$= \boxed{4}$$

Dividing Fractions

1. Turn a whole number into a fraction by giving it a denominator of 1

2. Keep the 1st fraction the same, change the division symbol to multiplication, and flip the 2nd fraction to its reciprocal

3. Multiply the 2 fractions

4. If possible, simplify the answer & change improper fractions to mixed numbers

ex: $12 \div \frac{1}{2}$

$$\frac{12}{1} \div \frac{1}{2}$$

$$\frac{12}{1} \times \frac{2}{1} = \frac{24}{1} = \boxed{24}$$

Find each sum or difference. Show your work.

|			
67. $\frac{7}{8} + \frac{5}{6}$	68. $\frac{9}{10} - \frac{1}{2}$	69. $\frac{3}{11} + \frac{2}{3}$	70. $\frac{11}{12} - \frac{13}{18}$
71. $4\frac{5}{9} + 7\frac{1}{3}$	72. $12\frac{9}{14} - 9\frac{3}{7}$	73. $3\frac{3}{5} + 2\frac{3}{4}$	74. $2\frac{2}{15} - 1\frac{2}{3}$

Find each product or quotient. Show your work.

75. $\frac{1}{6} \times \frac{3}{4}$	76. $6 \div \frac{1}{3}$	77. $15 \times \frac{2}{3}$	78. $\frac{1}{2} \div 3$
79. $\frac{1}{6} \times 10$	80. $\frac{1}{4} \div 2$	81. $\frac{5}{9} \times \frac{3}{20}$	82. $4 \div \frac{1}{5}$

Solve each problem, showing all work.

83. Jacqui ran $1\frac{1}{2}$ miles on Monday, Wednesday, and Friday and $\frac{3}{4}$ mile on Tuesday and Thursday. How far did she run in all?	84. Tyrell gave 3 packs of baseball cards to his friends. He gave each friend $\frac{1}{3}$ of a pack. How many friends got baseball cards?

The Metric System

| Kilo- | Hecto- | Deca- | Base Units meters/ liters/ grams | Deci- | Centi- | Milli- |
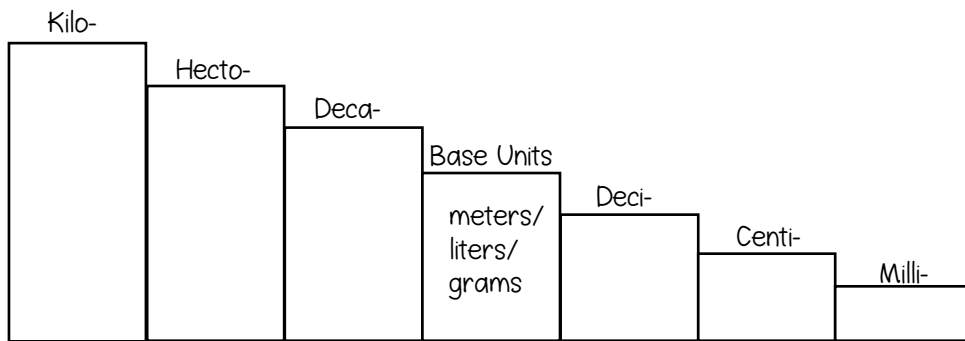
ex: 23 m = _____ cm

going from base unit step to centi- step, so need to move the decimal 2 places right

23.00

= 2,300 cm

Determine the direction and count the number of steps it takes to get from the starting unit to the unit you are converting to and move the decimal point the same number of places in that direction.

The Customary System

Length	Weight	Capacity
1 ft = 12 in 1 yd = 3 ft 1 mi = 5,280 ft	1 lb = 16 oz 1 T = 2,000 lb	1 c = 8 fl oz 1 pt = 2 c 1 qt = 2 pt 1 gal = 4 qt

ex: 18 c = _____ pt

cups are smaller units of measure than pints, so need to divide

18 ÷ 2 = 9 pints

To convert from a larger unit to a smaller unit, multiply. To convert from a smaller unit to a larger unit, divide.

Volume

Volume is the number of cubic units inside a figure.

Volume of Rectangular Prism = length x width x height

Volume of Irregular Figure: count cubic units

ex: find the volume

4 cm
10 cm
5 cm
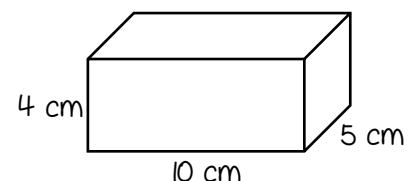
$V = 4 \times 10 \times 5 =$ 200 cm³

Convert each Metric measurement. Show your work.

85. 1.9 km = _____ m	86. 23 g = _____ mg	87. 350 ml = _____ kl
88. 0.07 kg = _____ cg	89. 6 cm = _____ m	90. 35 ml = _____ l

Convert each Customary measurement. Show your work.

91. 48 in = _____ ft	92. 6 pt = _____ c	93. 3 T = _____ lb
94. 1.5 mi = _____ ft	95. 32 pt = _____ gal	96. 32 oz = _____ lb

Find the volume of each figure. Show your work.

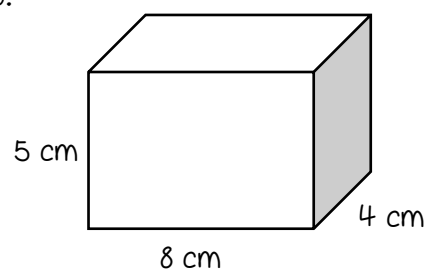| 97.	98.
99.	100.

97.

98.

99.
5 in
14 in
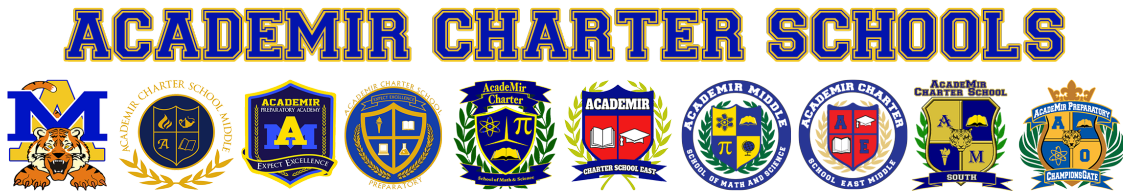14 in

100.
5 cm
8 cm
4 cm
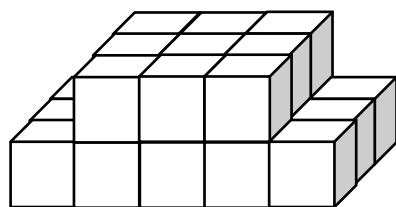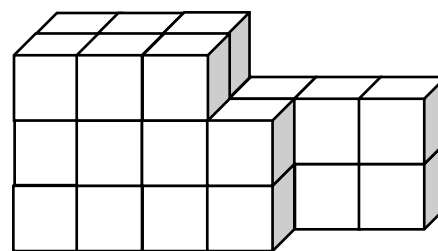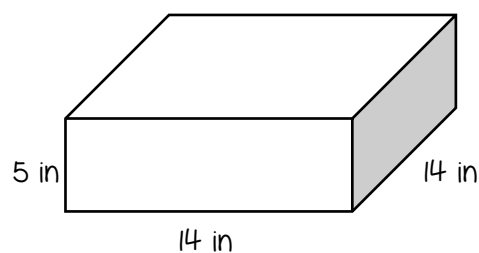
AcadeMir Charter Schools

SOCIAL STUDIES

5th Grade Social Studies

Summer Geography Project

Please select a country from the list below. Research your country and answer the questions on the following page. In addition, you are to write a one paragraph summary of the country that you have chosen. Enjoy your summer.

Countries to choose from:

Afghanistan	Ecuador	Mexico
Argentina	Egypt	Nicaragua
Australia	Ethiopia	Peru
Bahamas	France	Qatar
Belgium	Germany	Saudi Arabia
Brazil	Greece	South Africa
Cambodia	Haiti	South Korea
Chile	Honduras	Spain
China	India	Turkey
Columbia	Iraq	United Kingdom
Cuba	India	United States
Dominican Republic	Jamaica	Vietnam

My Country Research

country name

☐ Asia ☐ Australia ☐ Europe ☐ Africa ☐ N. America ☐ S. America
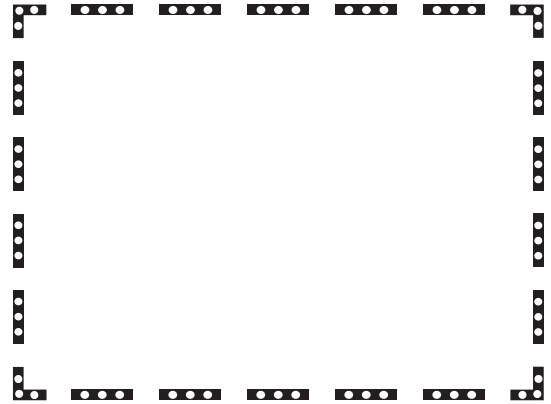
FACTS SHEET:

Area: _____

Population: _____

Capital: _____

Currency: _____

Languages: _____

_____

Climate: _____

Famous-Foods/Products: _____

_____

↶ flag of the country

Current Leader(s):

_____

_____

FUN FACTS ABOUT THIS COUNTRY:

1. _____

2. _____

3. _____

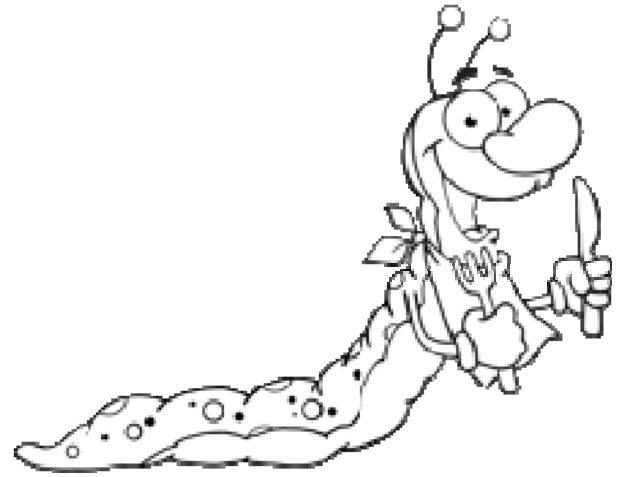On a seperate sheet of paper, please write a one paragraph summary of the country you chose.

AcadeMir Charter Schools

SCIENCE

Some Ways Animals Gather Food

All animals need food. No matter where an
animal lives, finding food is an important work it
must do in order to survive. However, different
animals differ in the food they eat. They also
differ in the way they get their food. Animals
obtain their food a number of ways such as:
1) Scavenging for scraps that other animals have left behind
2) Killing and eating other animals
3) Collect and gather vegetation

Many animals have special kinds of teeth. Some teeth are for biting and tearing,
while others are for grinding. Dogs, cats, lions, tigers and wolves have pointed
canines (teeth); they use these teeth for ripping and tearing their prey to pieces.
They use their molars for grinding the meat.

Herbivores like cows, horses, sheep and giraffes have broad, flat molars (teeth).
They use their molars to chew and mash plants and grass etc.
Some kinds of **owl** hunt for food at night. These owls have a very keen sense of
hearing. If a mouse is around, the owl can determine exactly where it is by the
noise it makes. Then it swoops down and catches the mouse with its sharp claws and
eats it.

Frogs have tongues that can move fast and catch insects. **Turtles** have no teeth,
but they have a beak with a sharp edge which they use for cutting food. Some have
strong jaws with which they capture their prey. Turtles eat plants and animals.

Some **fish** feed on plants, while others feed on animals. Some fish have teeth;
others have none. The shark has strong jaws and triangular teeth which bite into
its prey. A piranha can tear its prey to pieces with its razor sharp teeth.
Some fish can leap from the water to grab an insect or a plant near the water.
Oysters, clams and mussels use their gills for feeding. **Snakes** swallow their prey
whole. They have teeth that curve back toward the throat. They use their teeth to
pull the prey back to the throat.

The Ways Animal Gather Food Writing Activity

1. Why do some animals have flat teeth? How does it help them in getting food?

    _____

    _____

    _____

    _____

    _____

2. Write three different ways in which animals obtain food?

    _____

    _____

    _____

    _____

3. Explain in your own words, how does a fish get its food?

    _____

    _____

    _____

    _____

    _____

    _____

    _____

4. Is it possible that Herbivore animals (like cows or goats) starts eating flesh?

    Hint : Think in perspective of their teeth

    _____

    _____

    _____

    _____

5th Grade Summer Science Activity

"Making Invisible Ink"

Introduction

Have you ever wanted to write a secret message to a friend that only they could read? This summer project is going to show you how to make invisible ink with simple items you can find around your house. Let's make some invisible ink!

Materials

- Baking soda
- Paper
- Water
- Light bulb (heat source)
- Paintbrush or cotton swab
- Measuring cup
- Purple grape juice (optional)

Procedures

1. Mix equal parts water and baking soda.
2. Use a cotton swab, toothpick, or paintbrush to write a message onto white paper, using the baking soda solution as "ink."
3. Allow the ink to dry.
4. One way to read the message is to hold the paper up to a heat source, such as a light bulb. You can also heat the paper by ironing it. The baking soda will cause the writing in the paper to turn brown.
5. Another method is to paint over the paper with purple grape juice. The message will appear in a different color. The grape juice acts as a pH indicator that changes color when it reacts with the sodium bicarbonate of baking soda, which is a base.

Additional information

1. If you are using the heating method, avoid igniting the paper; don't use a halogen bulb.
2. Baking soda and grape juice react with each other in an acid-base reaction, producing a color change in the paper.
3. The baking soda mixture can also be used more diluted, with one-part baking soda to two parts water.
4. Grape juice concentrate results in a more visible color change than regular grape juice.

Why this works?

Writing a secret message in baking soda solution slightly disrupts the cellulose fibers in paper, damaging the surface.

When heat is applied, the shorter, exposed ends of the fibers darken and burn before the undamaged sections of paper.

If you apply too much heat, there's a risk of igniting the paper. For this reason, it's best to use either the grape juice chemical reaction or else apply a gentle, controllable heat source.

Your task

Write a nice message for your new teacher in invisible ink and show her as your evidence that you completed the science project.