

# ACSP

## Summer Gazette

2019-2020

*Edition*

Entering

SIXTH GRADE

- Curriculum
- Supply List
- Contact Info

STUDENT NAME:

*Academir Charter School Preparatory*  
19185 SW 127<sup>th</sup> Ave.  
Miami Fl. 33177







AcadeMir Charter School Preparatory  
"Expect Excellence"

AcadeMir Charter School Preparatory is proud and excited to offer all students our summer assignments. This summer magazine contains all REQUIRED Reading, Mathematics, and/or Science project based learning activities for your child's incoming grade. Enclosed you will also find other pertinent information to help your family prepare for the upcoming school year. As always, use these assignments as a way to connect with your child and acclimate students to what will be expected next year. ALL magazines will be collected during the first week of school and will be evaluated for a participation grade. We hope you have a wonderful and restful summer.

Sincerely,

M. Kristina Ledo Ed. D.  
Principal

AcadeMir Charter School Preparatory está orgulloso y emocionado de ofrecer a todos los estudiantes nuestras asignaciones de verano. Esta revista de verano contiene todas las actividades de aprendizaje basadas en proyectos de Lectura, Matemáticas y / o Ciencias REQUERIDAS para el grado de su hijo. Adjunto encontrará también otra información pertinente para ayudar a su familia prepararse para el próximo año escolar. Como siempre, utilice estos proyectos como una manera de conectarse con su hijo y aclimatar a los estudiantes a lo que pueden esperar el próximo año. TODOS los proyectos se recogerán durante la primera semana de la escuela y serán evaluados para un grado de participación. Esperamos que tengan un maravilloso y tranquilo verano.

Sinceramente,

M. Kristina Ledo Ed. D.  
Principal

# Sixth Grade



## Classroom Supplies

### General Supplies:

- ✓ #2 Pencils
- ✓ 2 Blue / Black Pens
- ✓ 2 Red Pens
- ✓ 2 Highlighters
- ✓ 2 Erasers
- ✓ Sharpeners with Covers

### Homeroom Supplies:

- ✓ 2 Bottles of Hand Sanitizer
- ✓ 2 Tissue Boxes
- ✓ 2 Bottles of Lysol
- ✓ 2 Paper Towels
- ✓ 2 Dry Erase Markers  
(Black/ Blue/Red/Green)
- ✓ 3 Reams of Copy Paper  
(White)
- ✓ 1 Pack of Color Paper
- ✓ 1 Pack of College Ruled Loose Leaf Paper

### ELA/Reading:

- ✓ 1- 2inch Binder
- ✓ 1- Duo-tang folder  
w/pockets
- ✓ 2- Composition Notebooks
- ✓ 1- Pair of Headphones
- ✓ 1-8GB USB memory stick

### Math:

- ✓ 1- Duo-tang folder  
w/pockets
- ✓ 2- Composition Notebooks

### Science:

- ✓ 1- Composition Notebooks
- ✓ 1- Duo-tang folder  
w/pockets
- ✓ 6 Dividers with pockets  
plastic covers
- ✓ 12 Pack of color pencils

*Please keep in mind that this is just a general supply list. Teachers will be including additional supplies in their syllabus that will be required. This will be given out during the first TWO days of school.*





Dear ACSP families:

Books can take your imagination to faraway places, on fantastic adventures, or back in time. You can learn about new things, meet new characters, and experience other cultures when you read. Reading can be relaxing, fun, and rewarding. People become better readers by reading!

Middle school students will choose ONE of the books that correspond to their grade level and follow the TEXT ANNOTATION & CODING guidelines.

Students will also read the TWO poems included in the summer magazine and complete the questions after each poem.

The goal is to develop your understanding of literature by deepening your vocabulary, comprehension skills, and your ability to discuss the texts you read.

If you have any questions, please call our school office at (305)964-7542. Have a wonderful summer!

Summer Book Reading List- CHOOSE ONE		
Grade Level	1 <sup>st</sup> Book Option	2 <sup>nd</sup> Book Option
Entering 6 <sup>th</sup> Grade	"Maniac Magee" by Jerry Spinelli	"Hatchet" by Gary Paulsen

Summer Poetry Reading List- Included in Magazine- READ BOTH		
Grade Level	1 <sup>st</sup> Poem	2 <sup>nd</sup> Poem
Entering 6 <sup>th</sup> Grade	"O Captain! My Captain" -Walt Whitman	"Oranges" -Gary Soto



# Text Symbols for *Annotating* Text

## *"THINKING WHILE READING"*

**\* = This is important!**

**\_\_\_ = This is a key word/detail.**

**✓ = I understand.**

**○ = This is unfamiliar.**

**? = I don't understand.**

**! = I'm surprised.**

**∞ = I made a connection.**

**Words and Comments = I am thinking.**

important detail

Aunt Dot and Uncle Dan hated each other, but because they were strict Catholics, they wouldn't get a divorce. Around the time Jeffrey arrived, they stopped talking to each other. Then they stopped sharing.

Pretty soon there were two of everything in the house. Two bathrooms. Two TVs. Two refrigerators. Two toasters. If it were possible, they would have had two Jeffreys. As it was, they split him up as best they could. For instance, he would eat dinner with Aunt Dot on Monday, with Uncle Dan on Tuesday, and so on.

Eight years of that. <sup>✓ this sounds like an unhappy routine. I understand</sup> Then came the night of the spring musicale at Jeffrey's school. He was in the chorus. There was only one show, and one auditorium, so Aunt Dot and Uncle Dan were forced to share at least that much. Aunt Dot sat on one side, Uncle Dan on the other.

Jeffrey probably started screaming from the start of the song, which was "Talk to the Animals," but nobody knew it because he was drowned out by all the other voices. Then the music ended, and Jeffrey went right on screaming, his face bright red by now, his neck bulging. The music director faced the singers, frozen with his arms still raised. In the audience faces began to change. There was a quick <sup>smatter of</sup> giggling by some people who figured the screaming kid was some part of the show, some funny animal maybe. Then the giggling stopped, and eyes started to shift and heads started to turn, because now everybody could see that this wasn't part of the show at all, that

### EXAMPLE OF HOW TO ANNOTATE

Annotating is a simple way of taking notes about what you are reading. This is an example of what the annotations should look like. Remember you will be graded on the annotations from the novel you choose to read over the summer.

little Jeffrey Magee wasn't supposed to be up there on the risers, pointing to his aunt and uncle, bellowing out from the midst of the chorus: "Talk! Talk, will ya! Talk! Talk! Talk!"

No one knew it then, but it was the birth scream of a legend.

And that's when the running started. Three <sup>steps</sup> down from the risers — girls in pastel dresses screaming, the music director lunging — a leap from the stage, out the side door and into the starry, sweet, onion-grass-smelling night.

Never again to return to the house of two toasters. Never again to return to school.

is on so off as  
? does he really  
understand  
? what does this  
mean?

? don't understand

\* detail

sometimes I feel like I go unheard, too

? what does this mean?

words & comments  
the chorus  
the singing  
the music director



# O Captain! My Captain!

BY WALT WHITMAN

O Captain! my Captain! our fearful trip is done,  
The ship has weather'd every rack, the prize we sought is won,  
The port is near, the bells I hear, the people all exulting,  
While follow eyes the steady keel, the vessel grim and daring;  
    But O heart! heart! heart!  
    O the bleeding drops of red,  
    Where on the deck my Captain lies,  
    Fallen cold and dead.

O Captain! my Captain! rise up and hear the bells;  
Rise up—for you the flag is flung—for you the bugle trills,  
For you bouquets and ribbon'd wreaths—for you the shores a-crowding,  
For you they call, the swaying mass, their eager faces turning;  
    Here Captain! dear father!  
    This arm beneath your head!  
    It is some dream that on the deck,  
    You've fallen cold and dead.

My Captain does not answer, his lips are pale and still,  
My father does not feel my arm, he has no pulse nor will,  
The ship is anchor'd safe and sound, its voyage closed and done,  
From fearful trip the victor ship comes in with object won;  
    Exult O shores, and ring O bells!  
    But I with mournful tread,  
    Walk the deck my Captain lies,  
    Fallen cold and dead.

## TEXT-DEPENDENT QUESTIONS

1. Read the first sentence (stanza one). What does *exulting* mean? Who is exulting, and where are they?

---

---

---

---

2. Who is the narrator of this poem (describe)? What is (his) mood in the first stanza? What evidence from the text supports your analysis and thinking?

---

---

---

---

3. In the second stanza, one phrase is repeated 5 times. What is it? Why do you think Whitman chose to repeat this phrase? What effect does it create?

---

---

---

---

---

---

4. If you had to describe this poem's mood(s) with **two** adjectives, what would they be? Explain. If you had to go down to just a one word description of the overall mood, what **one** word would you pick? Why?

---

---

---

---

---

5. Reread the first two lines: "O Captain! My Captain! Our fearful trip is done...the prize we sought is won." Who is the narrator speaking to? What does he mean by these words?

---

---

---

---

---



# ORANGES

By Gary Soto

1-                   The first time I walked  
                      With a girl, I was twelve,  
                      Cold, and weighted down  
                      With two oranges in my jacket.  
5-                   December. Frost cracking  
                      Beneath my steps, my breath  
                      Before me, then gone,  
                      As I walked toward  
                      Her house, the one whose  
10-                  Porch light burned yellow  
                      Night and day, in any weather.  
                      A dog barked at me, until  
                      She came out pulling  
                      At her gloves, face bright  
15-                  With rouge. I smiled,  
                      Touched her shoulder, and led  
                      Her down the street, across  
                      A used car lot and a line  
                      Of newly planted trees,  
20-                  Until we were breathing  
                      Before a drugstore. We  
                      Entered, the tiny bell  
                      Bringing a saleslady  
                      Down a narrow aisle of goods.  
25-                  I turned to the candies  
                      Tiered like bleachers,

And asked what she wanted  
Light in her eyes, a smile  
Starting at the corners  
30- Of her mouth. I fingered  
A nickle in my pocket,  
And when she lifted a chocolate  
That cost a dime,  
I didn't say anything.  
35- I took the nickle from  
My pocket, then an orange,  
And set them quietly on  
The counter. When I looked up,  
The lady's eyes met mine,  
40- And held them, knowing  
Very well what it was all  
About.  
Outside,  
A few cars hissing past,  
45- Fog hanging like old  
Coats between the trees.  
I took my girl's hand  
In mine for two blocks,  
Then released it to let  
50- Her unwrap the chocolate.  
I peeled my orange  
That was so bright against  
The gray of December  
That, from some distance,  
55- Someone might have thought  
I was making a fire in my hands



Name \_\_\_\_\_

Date \_\_\_\_\_

### **"Oranges"**

1. How do the sentence structure, sentence length, and word choice reflect the maturity of the poem's speaker?
2. How has the boy's regard for the girl changed over the course of the date? Use evidence from the text to show this change. (refer to lines 1-3, 16-17, and 46-47)
3. Explain the author's use of the phrase "light in her eyes" on line 28? Why did the author choose to include this phrase?
4. How does the author use the images of light vs. dark and warm vs. cold to develop the theme? Cite specific images and the lines on which you find them.
5. In the last line of the poem Gary Soto wrote, "I was making a fire in my hands." How does this statement relate to the theme of the poem?

## Summer Student Enrichment Packet

### Math 6

**WEEK 1 || Number & Operations in Base Ten Standard 5.NBT.1:** Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and  $\frac{1}{10}$  of what it represents in the place to its left.

Our place value system is structured like this:

Thousands	Hundreds	Tens	Ones	Decimal	Tenths	Hundredths	Thousandths
7	3	5	4	.	6	8	8

The system is set up in "base ten." So, each place is ten times as large as the place to its right.

For example, in the number 330, there are 3 hundreds and 3 tens. So, the 3 in the hundreds place has 10 times the value of the 3 in the tens place, because  $30 \times 10 = 300$ .

*Can you advance through the three levels of the Base Ten Bonanza? Good Luck!*

## LEVEL 1

Compare the values of the digits in the number below.

Then choose True or False for each statement.

# 2.22

- |                                    |              |
|------------------------------------|--------------|
| a.) 0.02 is 10 times 0.2.          | True   False |
| b.) 2 is 10 times 0.02.            | True   False |
| c.) 0.2 is 10 times 0.02.          | True   False |
| d.) 0.2 is $\frac{1}{10}$ of 2.    | True   False |
| e.) 0.02 is $\frac{1}{10}$ of 0.2. | True   False |
| f.) 2 is $\frac{1}{10}$ of 0.2.    | True   False |



## Summer Student Enrichment Packet

### Math 6

#### LEVEL 2

Fill in the number that correctly completes each statement.

a.) 500 is 10 times larger than \_\_\_\_\_.

b.) 500 is 10 times smaller than \_\_\_\_\_.

c.) 62 is  $\frac{1}{10}$  of \_\_\_\_\_.

d.) 62 is 10 times larger than \_\_\_\_\_.

e.) 8.9 is  $\frac{1}{10}$  of \_\_\_\_\_.

f.) 8.9 is 10 times larger than \_\_\_\_\_.

g.) 7.1 is 10 times larger than \_\_\_\_\_.

h.) 7.1 is 10 times smaller than \_\_\_\_\_.

#### LEVEL 3

For each number in the table, write a phrase from the box to make the correct comparisons.

Number	Phrase
7	
0.7	
700	
0.07	
70	

- Is  $\frac{1}{10}$  of 700
- Is  $\frac{1}{10}$  of 7
- Is  $\frac{1}{10}$  of 0.7
- Is 10 times as much as 70
- Is 10 times as much as 0.7

#### BONUS LEVEL (Culminating Question):

Explain the relationship (how many times greater or less one number is than the other) between the two 5's in the number 455,721.

## Summer Student Enrichment Packet

### Math 6

**WEEK 2 || Number & Operations in Base Ten Standard 5.NBT.3:** Read, write, and compare decimals to thousandths.

Did you know that you can take a number and *E-X-P-A-N-D* it? Well, you can!  
For example, let's say you want to take the number 743.86 and *E-X-P-A-N-D* it.

You can do so by breaking down the number using the base 10. Like this:

**743.86 is composed of:**

*whole number parts:*  $700 + 40 + 3$

*and*

*decimal parts:*  $0.8 + 0.06$

*In table form using decimals, it looks like this:*

700	→	$7 \times 100$
40	→	$4 \times 10$
3	→	$3 \times 1$
0.8	→	$8 \times 0.1$
0.06	→	$6 \times 0.01$
743.86		

*Using fractions, the expanded form of the number is:*

$$7 \times 100 + 4 \times 10 + 3 \times 1 + 8 \times \frac{1}{10} + 6 \times \frac{1}{100}$$

Using fractions like the example above, write the following numbers in expanded form:

1) 6.741
2) 98.48
3) 473.9
4) 9.1042
5) 76.07
6) 20.001



## Summer Student Enrichment Packet

### Math 6

Choose the correct expanded form of the number given:

7) 80.03

a.  $8 \times 10 + 3 \times \frac{1}{10}$

b.  $8 \times \frac{1}{10} + 3 \times \frac{1}{100}$

c.  $8 \times 10 + 0 \times 1 + 0 \times \frac{1}{10} + 3 \times \frac{1}{100}$

d.  $8 \times 1 + 3 \times \frac{1}{100}$

8) 2.728

a.  $2 \times 1 + 7 \times \frac{1}{10} + 2 \times \frac{1}{100} + 8 \times \frac{1}{1000}$

b.  $2 \times \frac{1}{10} + 7 \times \frac{1}{10} + 2 \times \frac{1}{100} + 8 \times \frac{1}{1000}$

c.  $2 \times 1 + 7 \times \frac{1}{10} + 8 \times \frac{1}{1000}$

d.  $2 \times 1 + 7 \times \frac{1}{10} + 2 \times \frac{1}{1000} + 8 \times \frac{1}{10000}$

### Culminating Question

9) Which of the following expressions show the values of the digits in four hundred fifty-three and forty-eight hundredths? Circle all that apply.

A.  $4 \times \frac{1}{100}$

B.  $8 \times \frac{1}{100}$

C.  $50 \times 10$

D.  $8 \times 100$

E.  $4 \times 100$

F.  $5 \times 10$

G.  $3 \times 10$

H.  $3 \times 1$

I.  $4 \times \frac{1}{10}$

# Summer Student Enrichment Packet

## Math 6

**WEEK 3 || Number & Operations in Base Ten Standard 5.NBT.4:** Use place value understanding to round decimals to any place.

Do you remember your rounding rules? Here is one song that teaches the rounding rules:

*Find your place (Circle the place of the number you're rounding)*

*Look RIGHT next door*

*Five or greater, add one more*

*Four or less, stays the same*

*Numbers behind, zero's your name.*

When you round a number, you are finding a number that is close to the given number.

**Example:**

Round **8.526** to the nearest:

- **Whole number** (Look RIGHT next door: The 5 in the tenths place tells you to round the 8 in the ones place up to a 9) Answer → 9
- **Nearest tenth** (Look RIGHT next door: The 2 in the hundredths place tells you to keep the 5 in the tenths place) Answer → 8.5
- **Nearest hundredth** (Look RIGHT next door: The 6 in the thousandths place tells you to round the 2 in the hundredths place up to a 3) Answer → 8.53

1) **1.8453**

Round the above number to the:

Nearest whole number \_\_\_\_\_

Nearest tenth \_\_\_\_\_

Nearest hundredth \_\_\_\_\_

Nearest thousandth \_\_\_\_\_

2) **13.2607**

Round the above number to the:

Nearest whole number \_\_\_\_\_

Nearest tenth \_\_\_\_\_

Nearest hundredth \_\_\_\_\_

Nearest thousandth \_\_\_\_\_



## Summer Student Enrichment Packet

### Math 6

**WEEK 4 || Number & Operations in Base Ten Standard 5.NBT.7:** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.



**Directions:** Perform the operation indicated. Show your process. Use estimation to check the reasonableness of your answer. NO CALCULATOR should be used.

The answer for each problem corresponds to a letter. Each letter should be placed in a blank that corresponds to a problem number to answer this riddle:

***What blew the flags at the beach?***

- |                        |                        |                       |
|------------------------|------------------------|-----------------------|
| 1) $64.32 + 18.94$     | 2) $48.3 + 37.91$      | 3) $25 + 60.62$       |
| 4) $79.6 - 45.9$       | 5) $23 - 7.55$         | 6) $51.68 - 30.29$    |
| 7) $72.6 - 28.49$      | 8) $8.3 \times 4.9$    | 9) $6.08 \times 3.45$ |
| 10) $0.5 \times 17.64$ | 11) $58.8 \times 19.3$ | 12) $87 \times 0.28$  |

20.976 → U	40.67 → O	15.45 → G	24.36 → N
85.62 → S	1134.84 → T	33.7 → D	21.39 → A
44.11 → I	83.26 → F	8.82 → U	86.21 → W

___	___	___	___	___	___	___	___	___	___	___	___
6	10	5	9	3	11	8	1	2	7	12	4

## Summer Student Enrichment Packet

### Math 6

**WEEK 5 || Number & Operations – Fractions Standards 5.NF.1 and 5.NF.2:** Use equivalent fractions as a strategy to add and subtract fractions.



Perform the indicated operation(s).

1)  $\frac{1}{3} + \frac{1}{4} + \frac{1}{6}$

2)  $\frac{1}{3} + \frac{5}{6} + \frac{1}{12}$

3)  $3\frac{5}{9} + 2\frac{1}{6}$

4)  $4\frac{3}{10} + 6\frac{1}{3}$

5)  $10\frac{1}{2} - 8\frac{2}{9}$

6)  $3\frac{8}{9} - 2\frac{5}{12}$

7)  $\frac{1}{2} + \frac{1}{3} - \frac{1}{4}$

8)  $\frac{1}{8} + \frac{3}{4} - \frac{2}{3}$



## Summer Student Enrichment Packet

### Math 6

#### WEEK 6 || Number & Operations – Fractions Standards 5.NF.4a and

**5.NF.4b:** Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.

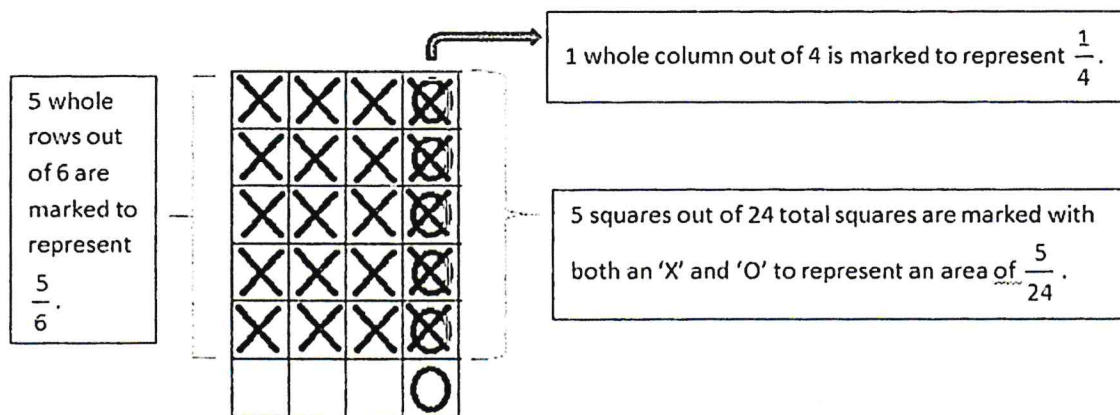
**Number & Operations – Fractions Standards 5.NF.6:** Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.



One way to visualize multiplying two fractions is to draw a rectangle model that is made of side lengths that are equal to each of the fractions.

**Example:** What is the area of a rectangle with side measurements of  $\frac{1}{4}$  and  $\frac{5}{6}$ ?

You should know that to find area of a rectangle, multiply the length times the width. To model this, you can create a rectangular grid on which you can represent each side length. Then you can shade the area of the rectangle to represent the expression and confirm your answer by multiplying the fractions.

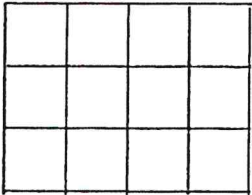


So to find the area of a rectangle with side lengths of  $\frac{1}{4}$  and  $\frac{5}{6}$ , multiply numerators straight across and denominators straight across:  $\frac{1}{4} \times \frac{5}{6} = \frac{5}{24}$ .

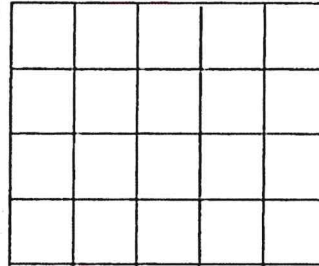
## Summer Student Enrichment Packet

### Math 6

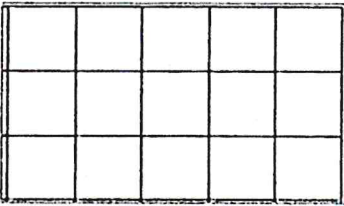
- 1) Shade the figure and determine the area of a rectangle with side lengths of  $\frac{3}{4}$  and  $\frac{2}{3}$ .



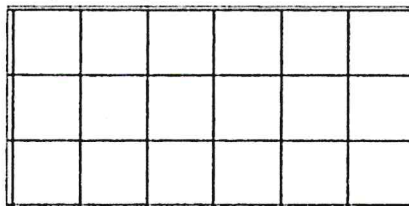
- 2) Shade the figure and determine the area of a rectangle with side lengths of  $\frac{2}{4}$  and  $\frac{2}{5}$ .



- 3) Shade the figure and determine the area of a rectangle with side lengths of  $\frac{1}{3}$  and  $\frac{4}{5}$ .



- 4) Shade the figure and determine the area of a rectangle with side lengths of  $\frac{1}{6}$  and  $\frac{2}{3}$ .



- 5) In the space below, draw a grid and model the expression  $\frac{2}{3} \times \frac{1}{2}$ , then check using math.

- 6) Aretha's trip to an art supply store took  $1\frac{1}{6}$  hours. Her return trip took only  $\frac{5}{7}$  of the time of her trip to the store. How long was Aretha's return trip? What was Aretha's total driving time?

# Summer Student Enrichment Packet

## Math 6

### WEEKS 7 & 8 || MATH 6 UNIT 1 PREVIEW – Number System Standard

**6.NS.4:** Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor.



### Finding the Least Common Multiple

Strategy: To find the Least Common Multiple (LCM) of two numbers, simply find the multiples of each of the numbers. Then determine the lowest multiple that is shared by both numbers.

**For example:** Find the LCM of 4 and 9.

*Multiples of 4:* 4, 8, 12, 16, 20, 24, 28, 32, **36**

*Multiples of 9:* 9, 18, 27, **36**

***The LCM of 4 and 9 is 36.***

**LEAST  
COMMON  
MULTIPLE**

You can find the LCM of three numbers using the same method.

Try these:

1) What is the LCM of 6 and 9?

2) What is the LCM of 6 and 10?

3) What is the LCM of 8 and 12?

4) What is the LCM of 5 and 8?

5) What is the LCM of 4, 6, and 9?

6) What is the LCM of 4, 5, and 6?



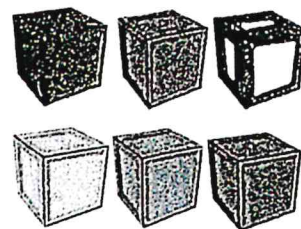
## Summer Student Enrichment Packet

### Math 6

#### Greatest Common Factor – Example 1



Brenda has 54 marbles and 72 cubes to put into bags. She wants each bag to have the same number of each item with nothing left over. What is the greatest number of bags Brenda could make? How many of each item would there be in each bag?



To determine the **GREATEST** number of bags Brenda could make, you could find the **greatest common factor** of the number of marbles (54) and cubes (72). This can be done by listing the possibilities in a table.

Number of Bags	1	2	3	6	9	<b>18</b>	27	54
Marbles in each bag	54	27	18	9	6	3	2	1

# of Bags	1	2	3	4	6	8	9	12	<b>18</b>	24	36	72
Cubes in each bag	72	36	24	18	12	9	8	6	4	3	2	1

- The greatest number of bags that is found in **both** tables is 18, so 18 is the greatest number of bags Brenda could make. Therefore, 18 is the **greatest common factor** for 54 and 72.
- In each bag, there would be 3 marbles and 4 cubes.

#### Example 2

Find the greatest common factor of 12 and 30.

*Strategy:* List the factors of each number.

Identify the greatest factor that both numbers have.

12: 1, 2, 3, 4, 6, 12

30: 1, 2, 3, 5, 6, 10, 15, 30

*So, the greatest common factor of 12 and 30 is 6.*

**G**REATEST  
**C**OMMON  
**F**ACTOR

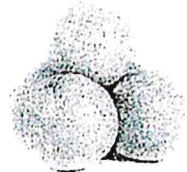
# Summer Student Enrichment Packet

## Math 6

1) Barbara is having a party and wants to pre-make plates of snacks for her guests. She has 90 pretzels and 63 cookies. What is the greatest number of plates she can make with the same amount of pretzels and cookies on each plate and no snacks left over? How many of each item would there be?



2) A farmer is putting apples and oranges into boxes to sell at a market. He has 64 apples and 24 oranges. What is the greatest number of boxes he can make using all of the apples and oranges if each box has identical contents?



3) Melody is making cups of fruit salad. She has 25 grapes, 15 strawberries, and 50 blueberries. How many cups of fruit salad can Melody make if each cup has to have the same amount of each type of fruit and there is nothing left over?



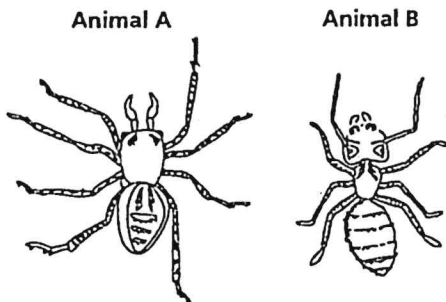
4) Toni is making party bags for her daughter's birthday party. Toni bought 36 party favors, 27 cookies, and 18 lollipops. How many party bags can Toni make if she wants to use all of the materials that she bought and every bag contains the same items?

# Comprehensive Science Summer Packet



# **SCREENING TEST 1**

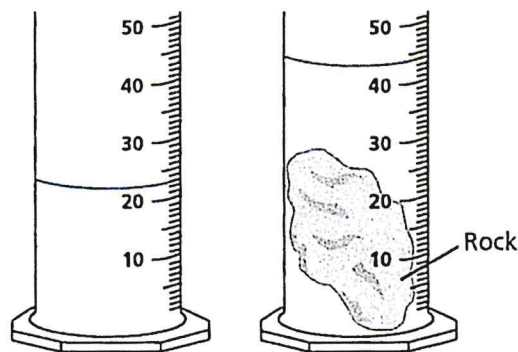
*Directions: Use the diagram below to answer questions 1 and 2.*



1. Which of the following statements is a quantitative observation you can make about the animals shown in the diagram?
  - A Both animals are invertebrates that live on land.
  - B Animal A has a narrow body with a pattern on its back and extremely long legs.
  - C Animal B has a body with three main sections, two antennae on its head, and three pairs of legs.
  - D Both animals have a similar appearance, but Animal A appears bigger than Animal B.
2. Insects are animals that have three main body parts and six legs. Given that information, how would you classify the animals in the diagram?
  - A Both animals are insects.
  - B Animal A is an insect, but Animal B is not.
  - C Animal B is an insect, but Animal A is not.
  - D Neither animal is an insect.

3. The islands of Hawaii have formed as hot magma from inside Earth comes to the surface and cools. Many years after it erupts, the hardened magma becomes home to plants, animals, and other living things. Which of the following is the most logical prediction about newly erupted magma?
  - A More magma will erupt in the future, increasing the total area of the islands.
  - B People will need to establish farms and villages to make the newly-cooled magma useful.
  - C In the past, living things always moved in to live on the cooled magma.
  - D Although the cooled magma has no life on it at first, it will eventually support a variety of living things.

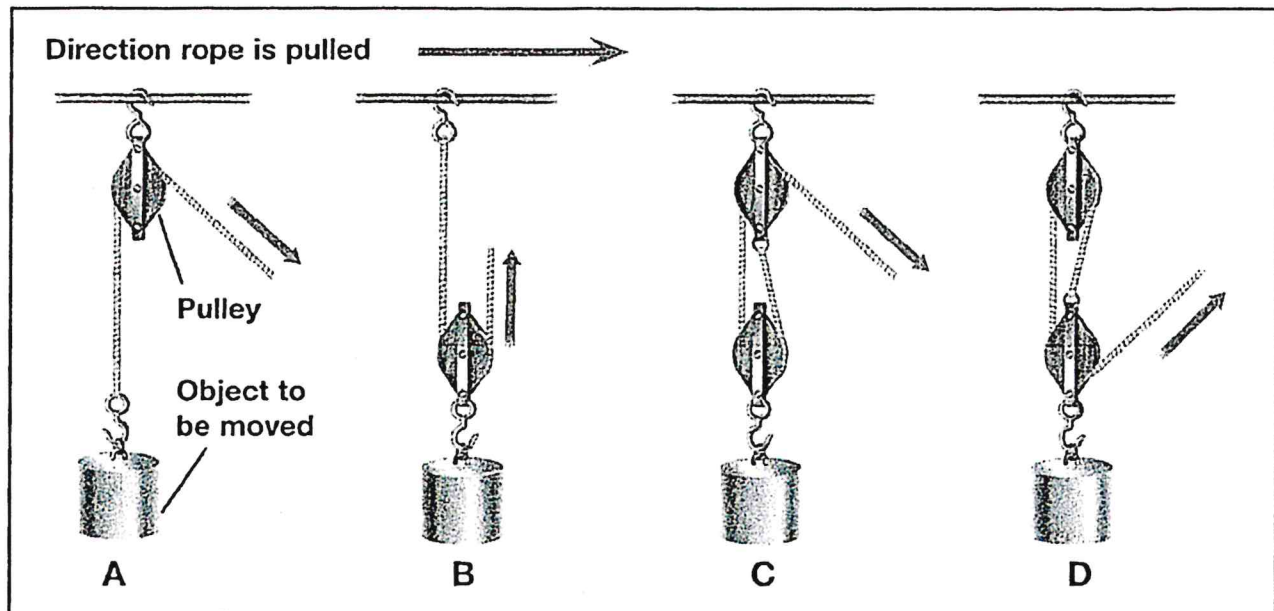
*Directions: Use the diagram below to answer question 4.*



4. The diagram above shows one way to measure the volume of an irregular object. Which of the following measurements gives the correct volume of the rock?
  - A 14 mL
  - B 21 mL
  - C 29 mL
  - D 43 mL

## SCREENING TEST 1 (continued)

Directions: Use the diagram below to answer questions 5 and 6.



5. Pulleys are one type of simple machine. A pulley is a grooved wheel with a rope or cable wrapped around it. Which statement is an accurate observation about the pulleys shown in the diagram?
  - A The diagram shows four different kinds of simple machines, which can be combined in various ways.
  - B All the ropes should be pulled in the same direction when the pulleys are used.
  - C Two machines are made up of single pulleys, while the other machines are made up of two pulleys.
  - D Pulleys make work easier by allowing you to change the amount or direction of the force you exert.
6. Which statement is a logical inference based on the pulleys in the diagram?
  - A If you pull on each of the ropes, the objects will be lifted upward.
  - B If you pull on the rope in pulley B, the object will be lowered.
  - C Because pulley system C has two pulleys, you will need two people to pull on the rope to move the object.
  - D You need to see more of the ropes before you can make inferences about the pulleys.

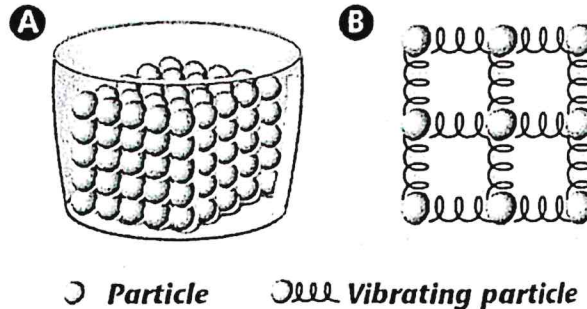
**SCREENING TEST 1** (continued)

*Directions: Use the table below to answer questions 7 and 8.*

Title?	
Type of Snake	Length (m)
Reticulated python	8
Anaconda	5
Mamba	3.5
King cobra	3.4
Boa constrictor	3.3
Eastern rattlesnake	2.5
Grass snake	1

7. Examine the table of data. Which of the following choices would be the best title for the table?
- A Lengths of Different Types of Snakes
  - B Types of Snakes
  - C Length (m)
  - D How Snakes Differ
8. Examine the data in the table. Would it be useful to show these data in a circle graph?
- A Yes, because the snake lengths make up the parts of a whole.
  - B Yes, because the graph will then show which percent each type of snake represents.
  - C No, because the data is made up of averages, and they should be on a line graph.
  - D No, because the snake lengths do not make up the parts of a whole.

*Directions: Use the diagram below to answer question 9.*



9. There are three common states of matter: gases, liquids, and solids. The diagram shows a model for one state of matter. Which statement below correctly describes what the model shows?
- A The particles can move in any direction, so they can fill the entire space of their container.
  - B The particles are completely free to move, so they take on the shape of their container.
  - C The particles can vibrate, but they stay in fixed positions, causing them to have a definite shape.
  - D The particles have a fixed shape because they have no energy related to motion.
10. Over the centuries, people have observed that a red sky early in the morning is typically followed by a stormy day. Which inference(s) can be logically made from that observation?
- A The red color is associated with light from the rising sun.
  - B The red color comes from red molecules in the clouds.
  - C In nature, a red color is a signal of danger.
  - D All of the above inferences are logical.



**SCREENING TEST 1** (continued)

11. Viruses are smaller than bacteria. Viruses can cause disease when they invade specific types of living things. Which of the following is a scientific question about viruses?

A Is it right to destroy disease-causing viruses?  
B Why do some viruses infect only plants, while other viruses infect only animals?  
C How much money should be spent trying to eliminate diseases caused by viruses?  
D Should government make rules for the way diseases caused by viruses are treated?

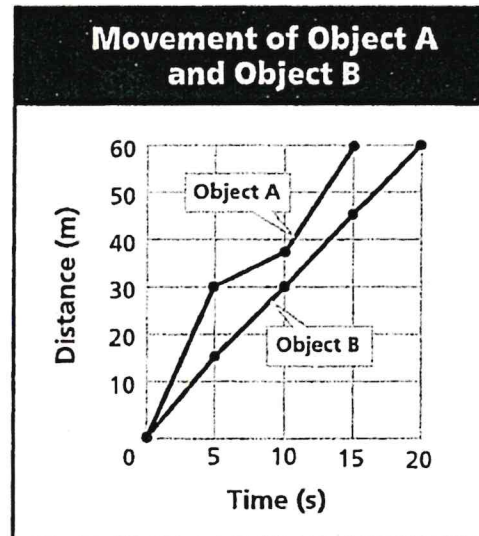
12. One sunny morning, you see blue morning glories growing on a fence. That night, it rains. The next morning, flowers are pink, but they soon change to blue again. You know that acids make blue litmus paper turn red. Which hypothesis would be the most logical explanation for the change in flower color?

A The growing plant produces acid that causes the flower color to change.  
B The color change occurs when the plants do not get enough water.  
C The color change is caused by acid that is present in the rain.  
D The color change is caused by plant chemicals that break down as the plant grows older.

13. Scientists often test their hypotheses with controlled experiments. Which of these is a rule for conducting a controlled experiment?

A Change at least two variables at a time.  
B Keep all variables constant.  
C Change as many variables as possible.  
D Change only one variable at a time.

Directions: Use the graph below to answer questions 14 and 15.



14. What information does the graph explicitly provide?

A The data points give the speed of the objects at specific times.  
B The graph shows where the objects will be at 25 and 30 seconds.  
C The graph shows that one object had to be pushed, while the other object moved on its own.  
D The data points tell how far the objects have moved from the starting points at specific times.

15. Which statement accurately summarizes what was learned from the graph?

A Objects A and B moved in the same direction.  
B Object A moved at a constant speed. Object B's speed changed as it moved.  
C Object A moved faster than Object B.  
D Statements A, B, and C are all accurate.