ACADEMIR CHARTER SCHOOLS

Summer
Learning Packets

Incoming
4th Grade

ACADEMIR CHARTER SCHOOLS

Dear Parents and Guardians,

In preparation for the upcoming 2025–2026 school year and to support the continued academic growth of our students, the curriculum team at AcadeMir Charter Schools has developed grade-level-specific summer learning packets. These assignments are designed to help students retain the knowledge and skills acquired during the previous school year and to ensure a strong start in the fall.

All students are required to complete the summer learning packet, which includes activities in reading, handwriting, mathematics, social studies, and science. In addition, students should read the grade-specific book that has been chosen for them and be prepared to discuss their literary journey with the rest of the class when school begins. Completed packets are due on the first day of school. We appreciate your support in helping your child stay engaged and prepared over the summer break.

Warm regards,
AcadeMir Charter Schools Administration

Estimados padres y tutores:

En preparación para el próximo año escolar 2025–2026 y con el fin de apoyar el crecimiento académico continuo de nuestros estudiantes, el equipo curricular de AcadeMir Charter Schools ha desarrollado paquetes de aprendizaje de verano específicos por nivel de grado. Estas asignaciones están diseñadas para ayudar a los estudiantes a retener los conocimientos y habilidades adquiridos durante el año escolar anterior y asegurar un buen comienzo en el otoño.

Todos los estudiantes deben completar el paquete de aprendizaje de verano, el cual incluye actividades de lectura, escritura a mano, matemáticas, estudios sociales y ciencias. Además, los estudiantes deben leer el libro asignado correspondiente a su grado y estar preparados para compartir su experiencia literaria con el resto de la clase al comenzar el año escolar.

Los paquetes completados deben entregarse el primer día de clases. Agradecemos su apoyo para ayudar a que su hijo(a) se mantenga comprometido(a) y preparado(a) durante las vacaciones de verano.

Cordialmente,
Administración de AcadeMir Charter Schools

ACADEMIR CHARTER SCHOOLS
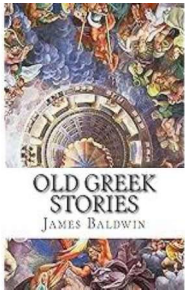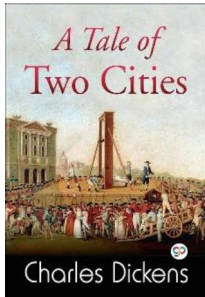
2025 Summer Reading List

| 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

2025 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	Tales of Greek Heroes	Roger Lancelyn Green	Tales of the Greek Heroes tells the mysterious and exciting legends of the gods and heroes in Ancient Greece. Greek mythology has inspired stories for thousands of years, with tales of lost love and magic. Join our heroes in their journeys of resilience and revenge, guilt and love, and trials and betrayal.	
Seventh Grade	The Red Umbrella	Christina Diaz Gonzalez	The Red Umbrella is a moving tale of a 14-year-old girl's journey from Cuba to America as part of Operation Pedro Pan. -an organized exodus of more than 14,000 unaccompanied children, whose parents sent them away to escape their country's dictatorship.	
Eighth Grade	The Swiss Family Robinson	Johann 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	Old Greek Stories	James Balwin	*Old Greek Stories* by James Baldwin is a collection of classic Greek myths retold in a clear and engaging style for young readers. The book highlights legendary heroes, gods, and moral lessons from ancient Greece, including tales of Prometheus, Pandora, Hercules, and Theseus.	
Tenth Grade	Tale of Two Cities	Charles Dickens	"A Tale of Two Cities," set during the French Revolution, centers on Dr. Manette's 18-year imprisonment and his subsequent reunion with his daughter Lucie in London. Lucie marries Charles Darnay, a French aristocrat, while Dr. Manette's life is restored through her love. The story unfolds with Darnay facing accusations of treason, and Sydney Carton, a dissolute lawyer who loves Lucie, makes the ultimate sacrifice to save Darnay.	

ELA
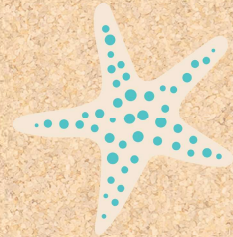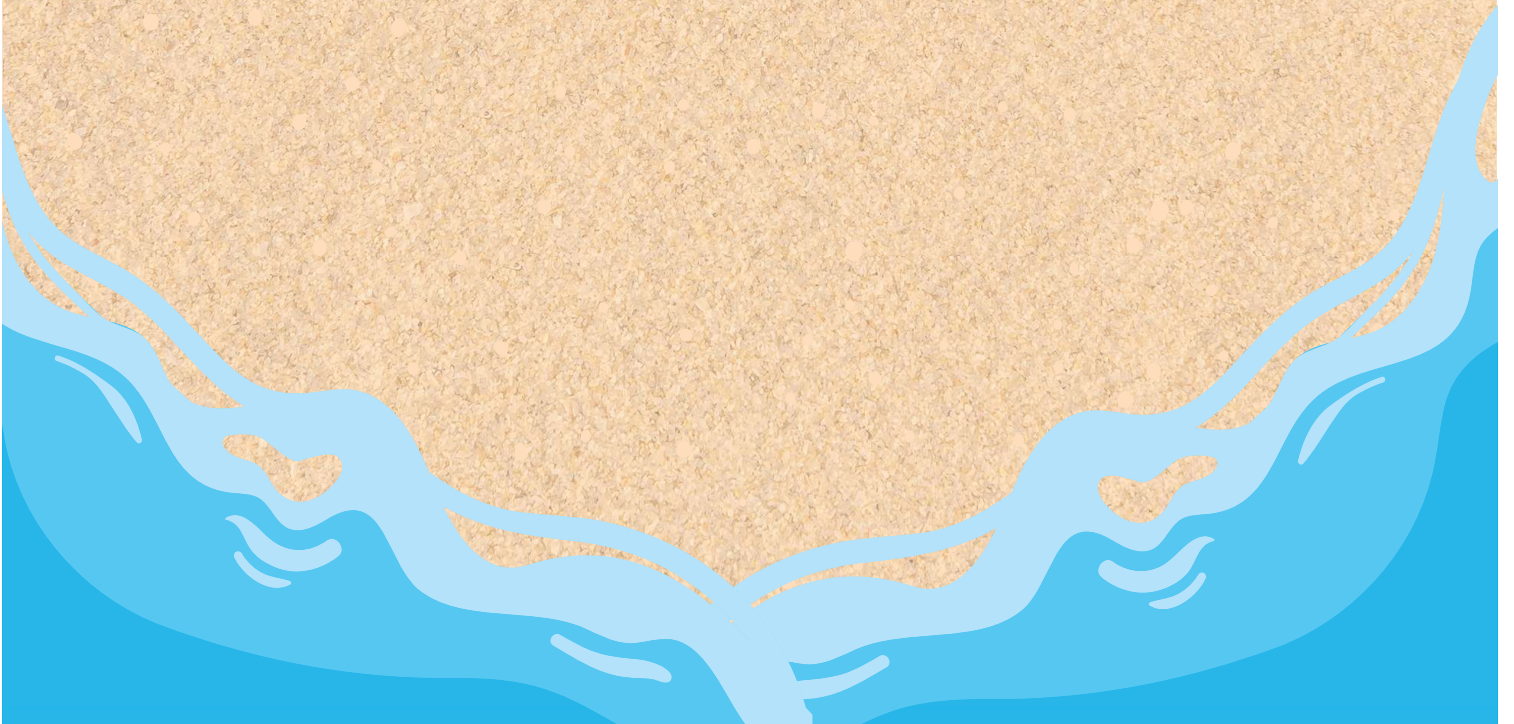
ACADEMIR CHARTER SCHOOLS

Fourth Grade
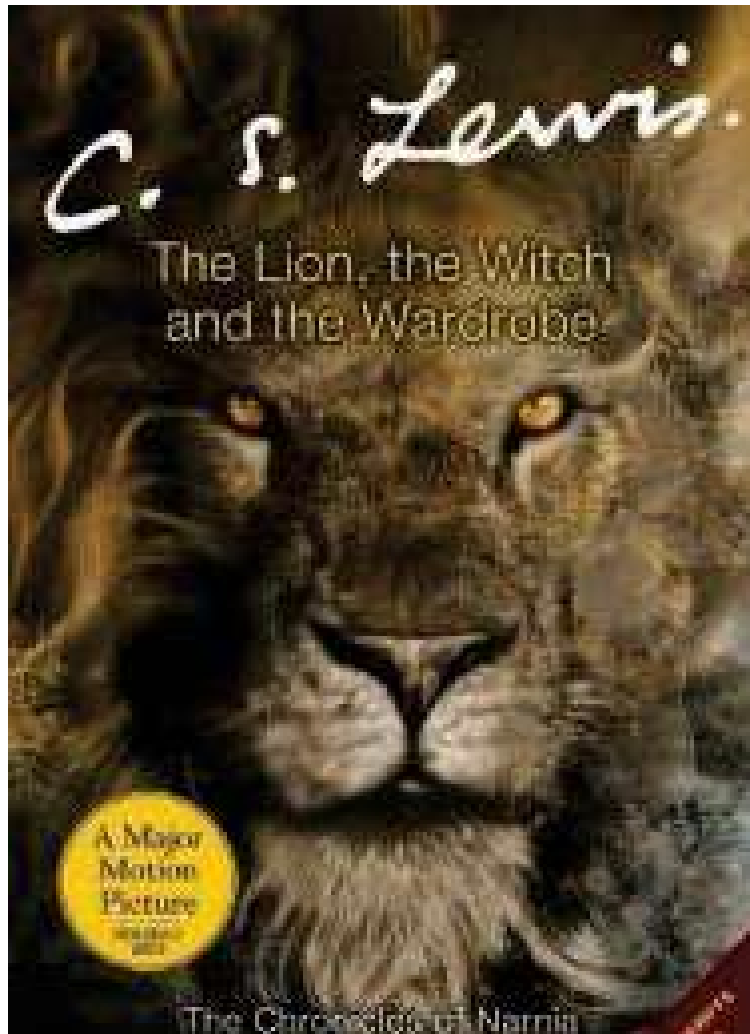
Narnia… the land beyond the wardrobe door, a secret place frozen in eternal winter, a magical country waiting to be set free.

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.

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: The Bicycle

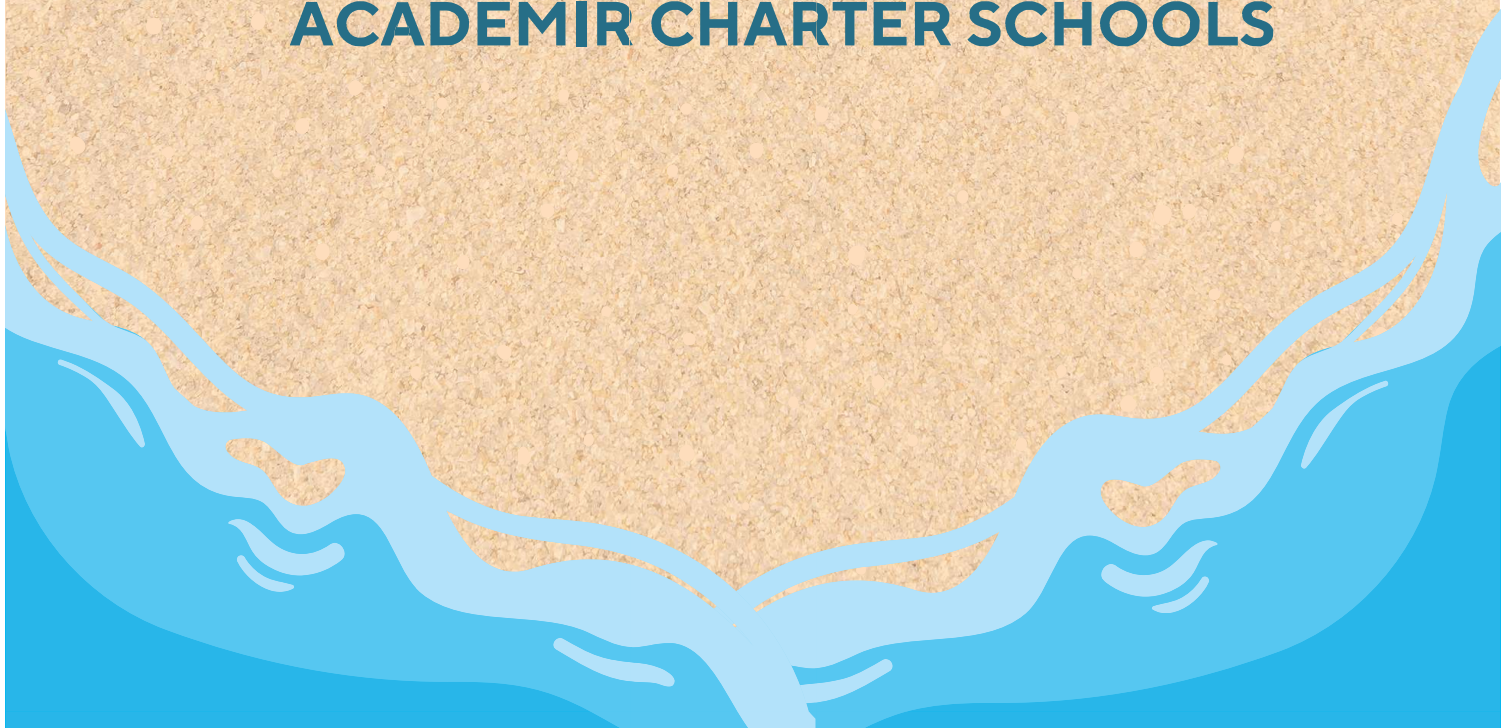Cursive Writing Worksheet

Trace and copy the passage:

Emma has a new bicycle. It is bright pink and shiny. It was a gift from her uncle. He hid it behind a bush to surprise her. When Emma looked behind the bush and saw the bicycle, she jumped for joy. It was just what she wanted. She gave her uncle a big hug.

MATH

ACADEMIR CHARTER SCHOOLS

Name _____

Numbers to Ten Thousand

Complete the packing chart. Use the fewest packages possible.
When there is a zero, use the next smaller size package.

	Number of Blocks Ordered	Crates (Ten Thousands)	Boxes (Thousands)	Cases (Hundreds)	Stacks (Tens)	Single Blocks (Ones)
1.	1,492	0	1	4	9	2
2.	3,016					
3.	2,804					
4.	4,675					
5.	1,727					
6.	2,351					
7.	5,008					
8.	4,976					

Problem Solving REAL WORLD

9. A worker at the block factory packed blocks in 3 boxes of 1,000, 4 cases of 100, and 9 single blocks. How many blocks did the worker pack?

_____

10. Matt needs to pack an order for 1,816 blocks. How can Matt pack the blocks without using boxes of 1,000?

_____

_____

_____

Name _____

Read and Write Numbers to
Ten Thousands

Write the number in standard form.

1. 2,000 + 600 + 30 + 5 _____2,635_____

2. five thousand, three hundred sixty _____

3. 8,000 + 800 + 90 + 9 _____

4. one thousand, fifty-one _____

5. three thousand, six hundred nine _____

Write the value of the underlined digit two ways.

6. 5,<u>8</u>96

7. 4,4<u>9</u>2

_____

_____

8. <u>1</u>,350

9. 3,<u>4</u>13

_____

_____

10. Rename 4,180 as hundreds and
tens.

_____ hundreds _____ tens

11. Rename 7,168 as tens and ones.

_____ tens ____ ones
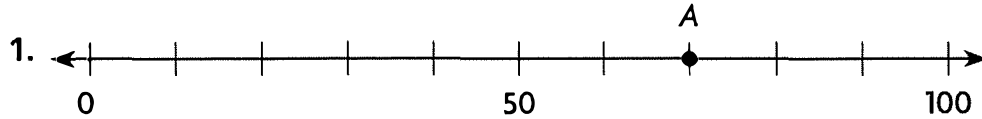
Problem Solving 🌐 REAL WORLD

12. The population of a town is
4,951 people. What is the value
of the digit 4 in the number?

13. The number of tourists who visited
a national park in one day was nine
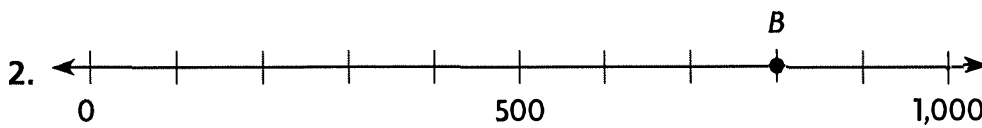thousand, four hundred twelve. Write
this number in two other ways.

_____

_____

_____

_____

Name _____

Relative Size on a Number Line

Find the number represented by the point.

1.

A

+———+———+———+———+———+———+———●———+———+———+→
0   50   100

7 tens is 70

_____
70

2.

B

+———+———+———+———+———+———+———+———●———+———+→
0   500   1,000

_____

Problem Solving REAL WORLD

For 3–4, use the number line below.

Colin and Sophia score points in a game.
They show their score on a number line.

D

+———+———+———+———●———+———+———+———+———+→
0   5,000   10,000
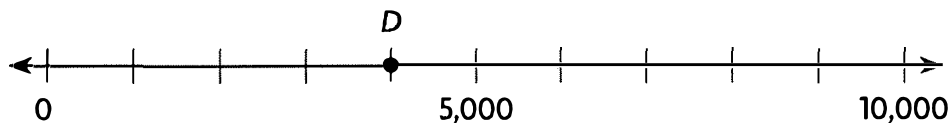
3. Colin's score is shown by point D on the number line.
How many points has he scored?

_____

4. Sophia scored 3,000 points more than Colin.
Draw a point on the number line to show Sophia's
score. What is her score?

_____

_____

Name _____

Compare 3- and 4-Digit Numbers

Compare the numbers. Write $<$, $>$, or $=$ in the $\bigcirc$.

1. 576 $\bigcirc>$ 567

2. 9,876 $\bigcirc$ 9,886

3. 490 $\bigcirc$ 409

4. 7,245 $\bigcirc$ 7,245

5. 2,145 $\bigcirc$ 2,245

6. 9,304 $\bigcirc$ 9,034

7. 8,691 $\bigcirc$ 8,691

8. 245 $\bigcirc$ 254

9. 1,807 $\bigcirc$ 807

10. 5,247 $\bigcirc$ 5,247

11. 3,485 $\bigcirc$ 3,548

12. 1,953 $\bigcirc$ 9,351

13. 6,310 $\bigcirc$ 6,310

14. 589 $\bigcirc$ 5,890

15. 760 $\bigcirc$ 1,760

16. 5,123 $\bigcirc$ 5,321

17. 7,645 $\bigcirc$ 7,546

18. 5,612 $\bigcirc$ 5,622

Problem Solving REAL WORLD

19. On Saturday, 4,567 people saw the new animal movie. On Sunday, 4,078 people saw the movie. Use $<$, $>$, or $=$ to compare the number of people who saw the movie on the two days.

_____

20. Captain Fry flies 1,764 miles. Captain Hale flies 764 miles. Who flies more miles?

_____

21. Adam says he is 1,352 millimeters tall. Bobby says that he is 1,452 millimeters tall. Who is shorter?

_____

Name _____

Multiply with 11 and 12

Find the product.

1. __99__ = 9 × 11

Think: 9 × 10 = 90 and
        9 × 1 = 9
So, 9 × 11 = 90 + 9 = 99.

2. 12 × 9 = _____

3. _____ = 1 × 11

4. 2 × 11 = _____

5. _____ = 12 × 0

6. _____ = 5 × 11

7. _____ = 7 × 12

8. 4 × 11 = _____

9. _____ = 12 × 4

10. 8 × 11 = _____

11. _____ = 3 × 12

12. _____ = 9 × 12

Problem Solving REAL WORLD

Use the table for 13–14.

13. Mr. Wang buys 6 packs of pencils. How many pencils does Mr. Wang buy?

_____

14. Mr. Wang buys 12 packs of pens and 11 packs of erasers. Does Mr. Wang buy more pens or erasers? **Explain**.

Supplies	
Item	Number in Each Pack
Pencils	12
Pens	8
Erasers	9

_____

_____

_____

Name _____

Divide with 11 and 12

Find the unknown factor and quotient.

1. $11 \times \blacksquare = 88$ $88 \div 11 = \blacksquare$
$\blacksquare = \underline{8}$ $\blacksquare = \underline{8}$.

2. $11 \times \blacksquare = 55$ $55 \div 11 = \blacksquare$
$\blacksquare = \underline{\hspace{1cm}}$ $\blacksquare = \underline{\hspace{1cm}}$

3. $12 \times p = 36$ $36 \div 12 = p$
$p = \underline{\hspace{1cm}}$ $p = \underline{\hspace{1cm}}$

4. $12 \times g = 84$ $84 \div 12 = g$
$g = \underline{\hspace{1cm}}$ $g = \underline{\hspace{1cm}}$

Find the quotient.

5. $\underline{\hspace{1cm}} = 96 \div 8$

6. $44 \div 4 = \underline{\hspace{1cm}}$

7. $\underline{\hspace{1cm}} = 60 \div 5$

8. $55 \div 5 = \underline{\hspace{1cm}}$

9. $\underline{\hspace{1cm}} = 66 \div 6$

10. $\underline{\hspace{1cm}} = 48 \div 4$

11. $72 \div 6 = \underline{\hspace{1cm}}$

12. $88 \div 8 = \underline{\hspace{1cm}}$

13. $\underline{\hspace{1cm}} = 108 \div 9$

14. $\underline{\hspace{1cm}} = 12 \div 1$

15. $\underline{\hspace{1cm}} = 24 \div 2$

16. $33 \div 3 = \underline{\hspace{1cm}}$

Compare. Write <, >, or = for each $\bigcirc$.

17. $60 \div 12 \bigcirc 55 \div 11$

18. $22 \div 2 \bigcirc 48 \div 4$

19. $96 \div 8 \bigcirc 84 \div 12$

Problem Solving REAL WORLD

20. Mrs. Green bought 72 pencils for her class. There were 12 pencils in each box. How many boxes of pencils did Mrs. Green buy?

_____

21. Henry baked 33 cookies. He put the same number of cookies in each of 11 bags. How many cookies did he put in each bag?

_____

Multiplication and Division Relationships

Complete the related multiplication and division equations.

1. $4 \times 12 = \underline{48}$

$\underline{12} \times 4 = 48$

$48 \div \underline{4} = 12$

$\underline{48} \div 12 = 4$

2. $5 \times \underline{\quad} = 55$

$11 \times 5 = \underline{\quad}$

$\underline{\quad} \div 5 = 11$

$55 \div \underline{\quad} = 5$

3. $\underline{\quad} \times 12 = 72$

$\underline{\quad} \times 6 = 72$

$72 \div \underline{\quad} = 12$

$\underline{\quad} \div 12 = 6$

4. $\underline{\quad} \times 11 = 88$

$\underline{\quad} \times 8 = 88$

$\underline{\quad} \div 8 = 11$

$88 \div \underline{\quad} = 8$

5. $3 \times \underline{\quad} = 36$

$12 \times \underline{\quad} = 36$

$36 \div 3 = \underline{\quad}$

$36 \div 12 = \underline{\quad}$

6. $4 \times 11 = \underline{\quad}$

$11 \times \underline{\quad} = 44$

$44 \div \underline{\quad} = 11$

$44 \div 11 = \underline{\quad}$

7. $8 \times 12 = \underline{\quad}$

$\underline{\quad} \times 8 = 96$

$96 \div \underline{\quad} = 12$

$\underline{\quad} \div 12 = 8$

8. $\underline{\quad} \times 11 = 22$

$11 \times 2 = \underline{\quad}$

$22 \div \underline{\quad} = 11$

$22 \div 11 = \underline{\quad}$

9. $1 \times \underline{\quad} = 12$

$\underline{\quad} \times 1 = 12$

$\underline{\quad} \div 1 = 12$

$12 \div \underline{\quad} = 1$

Problem Solving REAL WORLD

10. Lisa put 66 flowers in vases. She put the same number of flowers in each of 6 vases. How many flowers did Lisa put in each vase?

_____

11. Lisa used 84 flowers to make bouquets. She used 7 flowers in each bouquet. How many bouquets did Lisa make?

_____

Name _____

Use Multiplication Patterns

Use a basic fact and a pattern to find the products.

1. $3 \times 10 =$ __30__
   $3 \times 100 =$ __300__
   $3 \times 1,000 =$ **3,000**

2. $10 \times 2 =$ _____
   $100 \times 2 =$ _____
   $1,000 \times 2 =$ _____

3. $8 \times 10 =$ _____
   $8 \times 100 =$ _____
   $8 \times 1,000 =$ _____

4. $10 \times 6 =$ _____
   $100 \times 6 =$ _____
   $1,000 \times 6 =$ _____

5. $5 \times 10 =$ _____
   $5 \times 100 =$ _____
   $5 \times 1,000 =$ _____

6. $10 \times 7 =$ _____
   $100 \times 7 =$ _____
   $1,000 \times 7 =$ _____

Find the product.

7. $10 \times 3 =$ _____

8. $9 \times 100 =$ _____

9. _____ $= 6 \times 100$

10. $1,000 \times 9 =$ _____

11. _____ $= 5 \times 10$

12. $4 \times 100 =$ _____

13. _____ $= 2 \times 10$

14. _____ $= 1,000 \times 1$

15. $7 \times 1,000 =$ _____

Problem Solving REAL WORLD

Use the picture graph for 16–17.

16. How many rocks does Eva have? **Explain** how you found your answer.

_____

_____

17. Sam has 30 more rocks in his collection than Tim. Draw rocks in the picture graph to show the number of rocks in Sam's collection. **Explain** your answer.

_____

_____

_____

Rock Collections	
Name	**Number of Rocks**
Eva	◔ ◔ ◔ ◔ ◔ ◔ ◔
Tim	◔ ◔ ◔ ◔ ◔
Sam	
Key: Each ◔ = 10 rocks.	

Name _____

Model Division with Remainders

Complete.

1. Divide 15 hats into
   4 equal groups.

   There are __3__ hats in each

   group and __3__ hats left over.

2. Divide 50 forks into
   6 equal groups.

   There are _____ forks in each

   group and _____ forks left over.

3. Divide 29 cookies into
   groups of 3.

   There are _____ groups

   and _____ cookies left over.

4. Divide 46 paper cups into
   groups of 5.

   There are _____ groups

   and _____ paper cup left over.

Find the total number of objects.

5. There are 8 books in each of
   3 groups and 4 books left over.

   There are _____ books in all.

6. There are 7 muffins in each of
   5 groups and 1 muffin left over.

   There are _____ muffins in all.

Problem Solving REAL WORLD

Use the bar graph for 7–8.

7. If Sarah divides the white shells evenly onto
   2 shelves, how many shells will be on each
   shelf? How many shells will be left over?

   _____

8. If Sarah puts an equal number of tan shells
   into some boxes and has 1 shell left over,
   how many boxes will she use? How many
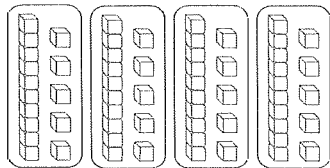   shells will be in each box?

   _____

Shell Collection

Number of Shells

14
12
10
8
6
4
2
0

White Gray Tan

Color
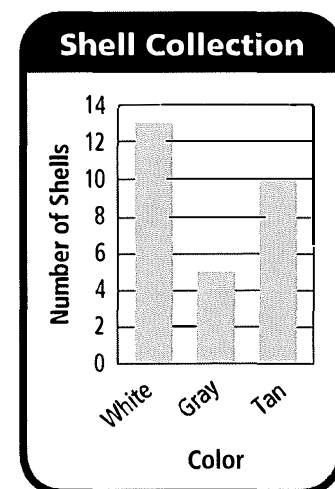
Name _____

Use Models to Divide Tens and Ones

Use base-ten blocks and your MathBoard to divide.

1. 60 ÷ 4 = __15__

2. 65 ÷ 5 = _____

3. 54 ÷ 3 = _____

4. 90 ÷ 5 = _____

5. 74 ÷ 2 = _____

6. 98 ÷ 7 = _____

7. 75 ÷ 5 = _____

8. 60 ÷ 3 = _____

9. 78 ÷ 6 = _____

10. 84 ÷ 4 = _____

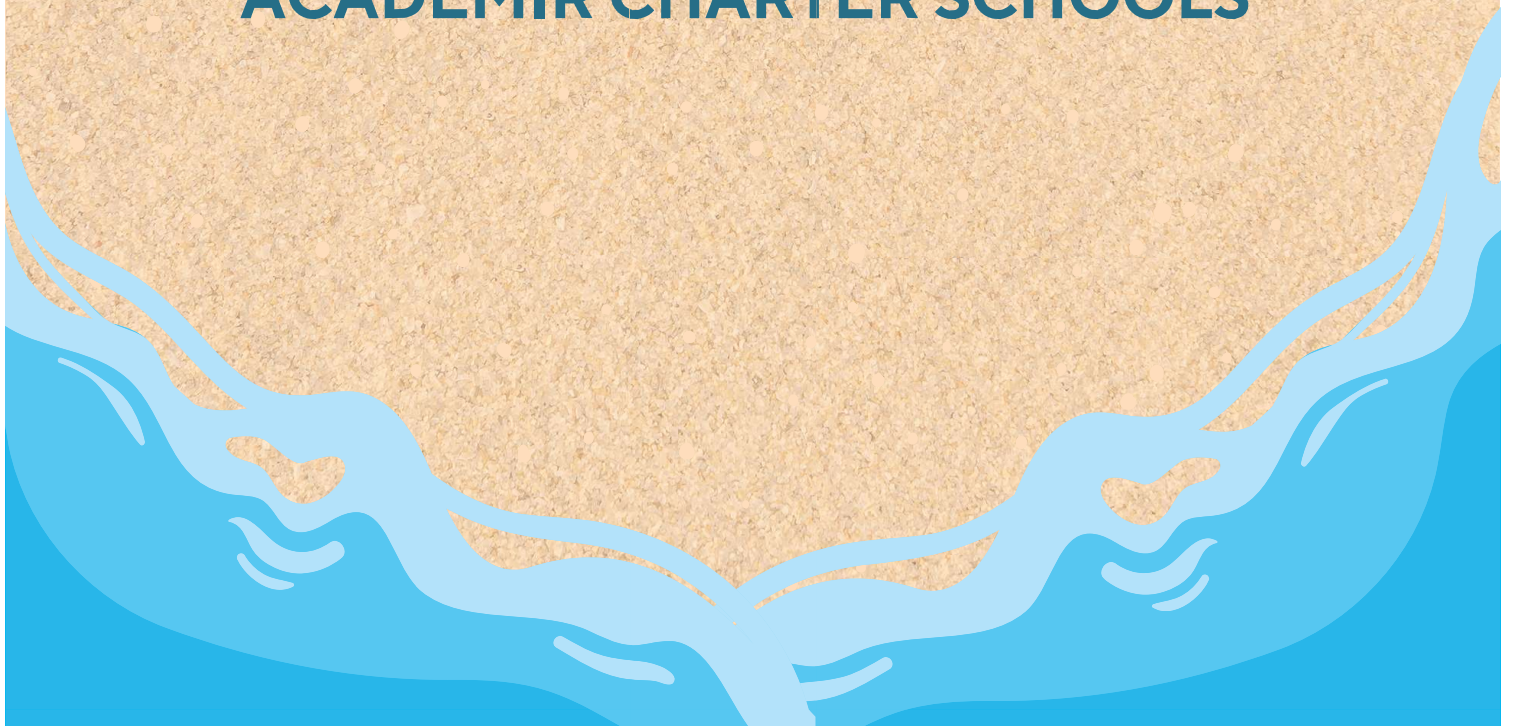**11.** 96 ÷ 6 = _____

12. 95 ÷ 5 = _____

Problem Solving

13. The third-grade students collected 90 cans of food for a food drive. They want to put an equal number of cans into each of 6 boxes. How many cans will they put into each box?

_____

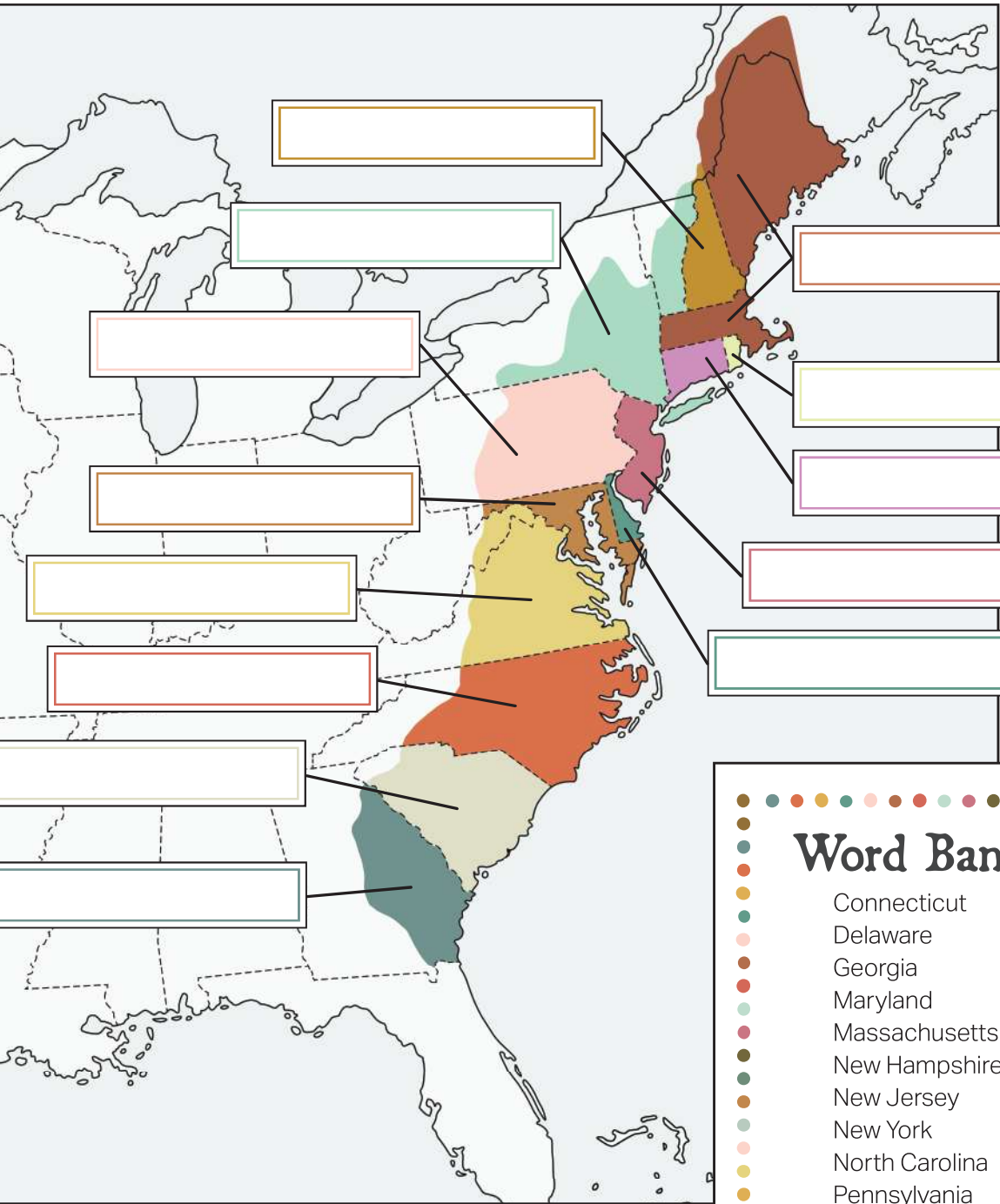# SOCIAL STUDIES

ACADEMIR CHARTER SCHOOLS

Name _____   Date _____

Name the 13 Colonies

Use the word bank below to label the map of the 13 colonies.

During the age of exploration - a new land was discovered by the Europeans. Although there were people already living on this continent, the Europeans wanted to colonize this land for a umber of reasons. Some people were searching for religious freedom, some kings wanted the resources that this new land had to offer and others just wanted a new opportunity and some adventure. The 13 colonies were the result and years later these colonies came togther to form the United States of America.

Word Bank:

Connecticut
Delaware
Georgia
Maryland
Massachusetts
New Hampshire
New Jersey
New York
North Carolina
Pennsylvania
Rhode Island
South Carolina
Virginia

Name: _____ Date: _____

Florida

Florida (FL) is a state in the **southeastern region** of the **United States** on the coast of the **Atlantic Ocean** and **Gulf of Mexico**. It is bordered by the states of Georgia and Alabama. The capital of Florida is **Tallahassee**. Some of the most populous cities are Jacksonville, Miami, Tampa, and Orlando.
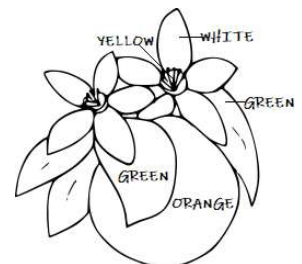
The **Flag of Florida** is white with a red X and the **state seal** at the center. The state seal includes a bright sun, a palmetto tree, a steam boat and a native American woman scattering flowers, with the words GREAT STATE SEAL OF THE STATE OF FLORIDA and IN GOD WE TRUST. The flag represents Florida as the land of sunshine, palmetto trees, rivers, lakes and flowers.

United States of America

ZOOM IN

State Flower

YELLOW — WHITE
GREEN
GREEN
ORANGE

Orange Blossom

State Bird

GRAY
BLACK
WHITE

Northern Mockingbird

Alabama   Georgia

ATLANTIC OCEAN

*   Jacksonville

FLORIDA

Orlando

Tampa

GULF OF MEXICO

Miami

N
W   E
S

Florida Keys
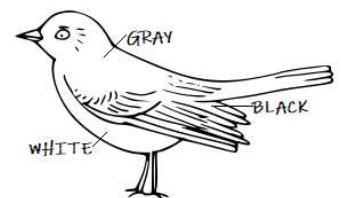
Directions: Write '**Tallahassee**' next to the star on the map to show the capital of Florida. Color the Gulf of Mexico and Atlantic Ocean BLUE. Color Florida the colors of the flag.

1

Name: _____ Date: _____

Directions: Based on the reading passage and the maps and compass, circle **True** or **False** for each of the following questions about Florida.

1. The capital of Florida is Jacksonville.

    A) True
    B) False

2. Florida is located in the northwestern region of the United States.

    A) True
    B) False

3. Florida is on the coast of the Gulf of Mexico and Pacific Ocean.

    A) True
    B) False

4. Florida is bordered by Georgia and Alabama.

    A) True
    B) False

5. Georgia borders Florida to the south.

    A) True
    B) False

6. The Florida Keys are in south Florida.

    A) True
    B) False

7. Miami is a city in north Florida.

    A) True
    B) False

8. Jacksonville is a city in north Florida.

    A) True
    B) False

9. The capital of Florida is located in the northern part of the state.

    A) True
    B) False

10. The Orange Blossom is the state flower of Florida.

    A) True
    B) False

SCIENCE

ACADEMIR CHARTER SCHOOLS
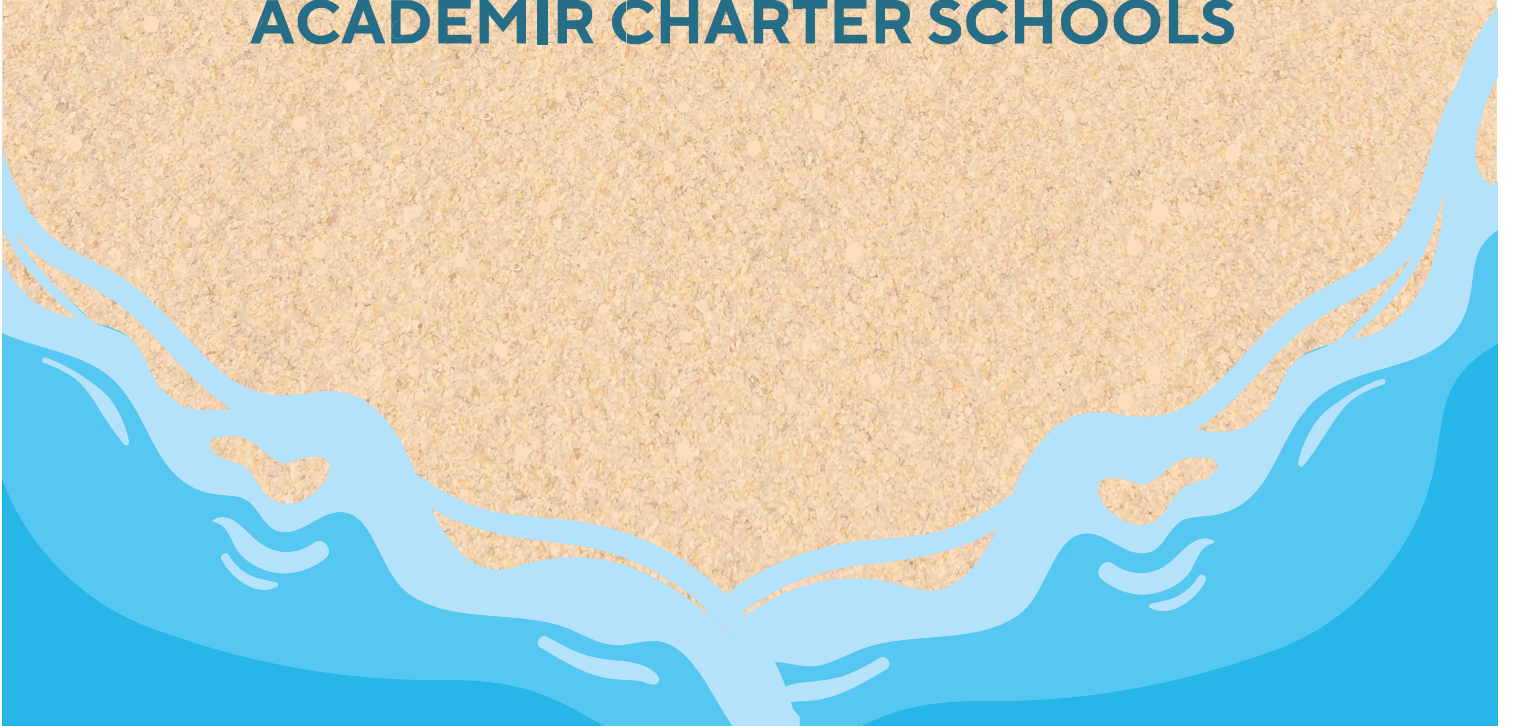
Atmospheric Pressure & Light

Planet Earth is the only known planet that has conditions suitable enough for living organisms to grow, and reproduce and survive. These conditions are a combination of non-living components like water, sunlight, temperature and living components like micro-organisms, plants and animals. The non-living components (forces) of a particular environment that make the conditions ideal for sustenance of life are known as the **A-biotic factors.**

Some of the important abiotic factors that affect living organisms are:

Light

Light is the main source of energy for many organisms. Natural light plays an important part in the life of most plants as they utilize it in the process of photosynthesis. During photosynthesis, light energy is converted into chemical energy and into complex organic substances that are vital for growth, flowering and germination. Plants are a food source that indirectly transfers energy to animals. For animals, the intensity of light affects their skin color, sensitivity, and sight

Atmospheric Pressure

Because of the gravitational force of the earth, atmospheric gases are pulled towards the surface of the earth. Many organisms can only survive in particular ranges of atmospheric pressure and when air pressure is low, especially in higher altitudes some may find it difficult to breathe. This is due to the insufficient amount of oxygen present at a certain height. Deep underwater in an ocean the atmospheric pressure increases as the depth of the water increases and again this causes only certain kinds of plants and animals to survive in certain specific ocean regions.

Atmospheric Pressure & Light Multiple Choice Questions

1. **Light (sunlight) helps in the process of**
    a) Photosynthesis
    b) Reproduction
    c) Survival
    d) None of these

2. **Intensity of light affects the _____ of animals.**
    a) Skin color
    b) Sensitivity
    c) Sight
    d) All of the above

3. **The non-living components (forces) of environment that makes survival possible are known as_____**
    a) Biotic Factors
    b) A-Biotic Factors
    c) Non-Biotic Factors
    d) None of these

4. **Atmospheric gases are pulled towards the surface because of**
    a) Atmospheric pressure
    b) Gravitational Forces
    c) High temperature
    d) All of these

4th Grade Summer Science Activity

"The Power of Air Pressure"

Introduction

Air pressure is a powerful force. Here's a small, but significant example of how you can use air pressure to exert force on an object.

Materials

- 1 Raw potato
- 1 to 3 sturdy drinking straws

Procedures

1. Hold the straw without blocking the hole at the top.
2. Stab the potato with a straw. Were you able to pierce the potato with the straw?
3. Stab the potato with a straw again, BUT this time make sure you block the whole with your thumb. Were you able to pierce the potato with the straw this time?
4. Try Step #2 and Step #3 again. Did you get a different result?

Your task

On a separate sheet of paper, write your name and explain what happened when you tried step #2. Now write about what happened when you tried step #3. Give your reasoning why you think the results where different for step #2 and step #3.

Explanation

When you covered the hole with your thumb and stabbed the potato, you could push the straw deeper than before. This is because your thumb trapped the air inside the straw and created enough pressure to stab the potato successfully.