THINK SCHOOL
Little Minds, revolutionary learning

SUMMER ASSIGNMENT

MUST BE SUBMITTED BY:
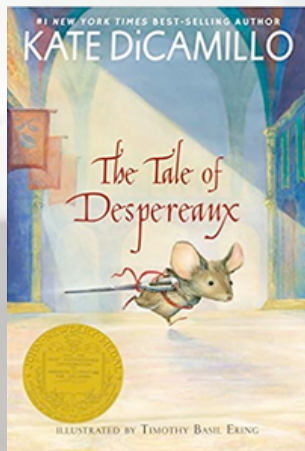## THE FIRST FRIDAY OF SCHOOL

STUDENT NAME: _____

FOR STUDENTS ENTERING FOURTH GRADE

MANDATORY SUMMER READING ASSIGNMENT

All students entering Grade 4 are required to read the following assigned book and complete a book report project - a 2-page book report, in essay format.

Assigned Book For Grade 4:
The Tale of Despereaux
https://amzn.to/3gAXTAc

Tips on Writing a Book Report

FOR GRADES 4-5

Always include the following elements in any book report:
- the title & author of the book
- the setting (time & place) of the book
- the names and a brief description of each main character
- quotations and examples from the book to support your opinions

A Plot Summary
When you are writing a plot summary for your book report you don't want to simply retell the story. You want to explain the plot and what your opinion on it is. Make sure that you use plenty of examples from the book to support this summary and your opinions. Try starting the report with a sentence similar to:

The plot of I Married a Sea Captain, by Monica Hubbard, is interesting because it gives the reader a sense of being a wife during the 19th century.

A Character Analysis
You should write briefly about physical and personality traits of different characters and the way their actions affect the plot of the book.
- Explore the way a character dresses and why.
- What positive characteristics does the character have?
- Does the character have a flaw that gets him/her into trouble frequently?
- Finally, tie all of your observations together by explaining the way the characters make the plot move forward.

You can start this section of your book report like:
In the novel Charlotte's Web, by E. B. White, Templeton the rat may seem like an unnecessary character but his constant quest for food moves the plot forward.

Themes
Exploring the themes (or big ideas that run throughout the story) in a book can be a great way to make your book report even better! Try bringing some of your thoughts and feelings as a reader into the report as a way to show the power of a theme. Before you discuss your own thoughts, however, be sure to establish what the theme is and how it appears in the story.

- Explain exactly what theme you will be exploring in your book report.
- Use as many examples and quotations from the book as possible to prove that the theme is important to the story.
- After you have established the theme and thoroughly examined the way it affects the book, include a few sentences about the impact the theme had upon you and why it made the book more or less enjoyable to read.

Try starting this part with a sentence similar to the following:

In the novel The Wizard of Oz, by L. Frank Baum, the theme of friendship and inner strengths helps the reader understand the characters better.

Your book report should be at least 2 pages, typed, and printed. Be sure to check the writing structure and grammar to the best of your ability!

Each book report must also include an illustrated cover created by the student!

LITERACY & LANGCOM

GRAMMAR

A **VERB** is a word showing an action.
A **SUBJECT** is the noun in a sentence that is doing the action.
An **OBJECT** is the noun in a sentence that receives the action.

Ex. Sarah eats the pizza.
Verb: eats --> who is eating?
Sarah is eating so Sarah is the subject. --> what's being eaten?
Pizza is being eaten so Pizza is the object.

Directions: Circle the Subject, underline the Verb, and put a star under the Object in each sentence.

1. Ryan drank some water

2. Marla walked to the park.

3. Angela returned the library book.

A **MAIN CLAUSE** is the main point that you are trying to get across in a sentence. It is a complete sentence that can be stated on its own. A **SUBORDINATE CLAUSE** is the additional information in a sentence. It is usually a fragment, or an incomplete sentence, that doesn't make sense on its own.

Directions: Double underline the main clause (MC) and single underline the subordinate clause (SC) in each sentence below.

1. When my father arrives, he will give the directions.

2. The president will give a speech when he arrives in town.

3. According to the news, the election will be next week.

4. Because my alarm clock broke, I was late to school.

GRAMMAR

: The following section provides sets of 4 sentences. Read each group of four sentences to find the one that contains an error. Circle which one is wrong.

Part 1: Fragments, Comma Splices, Fused Sentences

1. A.   His final exam was returned.
    B.   Because she never fully realized how important a physical exam could be.
    C.   Two hours before the performance, he was nervous.
    D.   After she had made a list of the cleaning supplies which she needed, she left for the store.

2. A.   There are two conditions for accepting Harrington as the nominee.
    B.   The woman who had been our family dentist for many years.
    C.   Since she had access to the key and had been seen in the neighborhood, she was arrested.
    D.   I enjoy chocolate cake, especially when it is topped with ice cream.

3. A.   Besides being a loving mother, she is a loyal friend.
    B.   Finally, I woke up.
    C.   He had wanted to see a rodeo before he left Texas.
    D.   Knowing that her money was limited.

4. A.   If there is a crisis, call the nurse immediately.
    B.   Make your choice based on the job you really want.
    C.   Since any choice may or may not be the "right" choice.
    D.   Hoping the answer was the correct one, Bob hesitantly marked A on the test.

5. A.   Knowing what to buy for a campsite is vital.
    B.   Talking too little can be more of a problem than talking too much.
    C.   Rob often goes hiking for several weeks, climbing higher into the mountains each day.
    D.   Although some items are not for the body but for the soul.

COMMAS AND SEMICOLONS

Commas are used in lists,

We need eggs, milk, butter, and sugar to make the cookies.

to break up long sentences,

But, since I had forgotten to bring my lunch with me, and since my sister didn't have any money to lend me, I had to call my Dad and ask him to bring it to school.

after quotes,

"Let's take a break from homework and get a snack," my mom suggested.

and to break up quotes.

"Hey," she said, " That roller coaster wasn't so scary after all!"

Semicolons are used in place of conjunctions

I exercise three days a week because it helps me stay in shape. I exercise three days a week; it helps me stay in shape.

We went to the movies but they were closed.
We went to the movies; they were closed.

or to combine short sentences that are related to one another.

My aunt loves to cook; she makes dinner for us every week.

Directions: Figure out whether these sentences need commas or semicolons. Write them into each sentence.

1. "Remember it's your turn to do the dishes " said my dad.

2. I like pepperoni olives and mushrooms on my pizza.

3. I didn't need braces like my sister I have very straight teeth.

4. Our dog has short legs and a long body he is part dachshund.

5. We were told the test was canceled we all cheered.

Your turn! Write two sentences, one using a comma and the other using a semicolon.

_____

_____

_____

SEQUENCING

Directions: Read each sentence below and number them to put them into sequential order. Then, when you're sure they're in order, rewrite the paragraph correctly.

I tried so many different types of baked goods that the staff had to practically roll me out of there when I was done, but it was well worth it.

Not only did I find amazing desserts at Delicious Treats, I found great customer service as well. The staff was friendly, helpful, and gave out samples freely.

I highly recommend that you try out Delicious Treats. Whether you decide to eat in their bakery, or take it to go, you won't be disappointed.

Foodies, are you ready for another great place to grab dessert? I searched high and low for the perfect chocolate chip cookie, and I think I finally found it.

Besides the great food and great service, Delicious Treats is also unique because all of their ingredients are organic and come from local companies.

In my search for the perfect cookie, I asked many people who they thought sold the perfect morsel. The name Delicious Treats on 4th Ave., kept coming up, so I went down to check it out for myself.

_____

_____

_____

_____

_____

_____

_____

_____

PERSON

Jesse was asked to write an article from the first person, second person, and third person perspectives. When he was done, he forgot which one was which.

DIRECTIONS: Please help Jesse by writing first, second, or third by the correct version of each story.

REMEMBER: First person is when a character narrates the story with I, me, my, mine in his or her speech.

Second person is when the author uses the words you and your. S/he is talking directly to the reader.

Third person is when the reader is an outsider that is able to see the thoughts of everyone in the book. Most writers choose this point of view.

1 As you walk up the hill, you realize that it's just too quiet. There's no sound from the bird you know is almost always singing from the top of the maple tree. You think you see a shadow move high up on the slope, but when you look again it's gone. You get goose bumps on your arms.

----

2 As I walked up the hill, I realized that it was just too quiet. There was no sound from the bird who was almost always singing from the top of the maple tree. I thought I saw a shadow move high up on the slope, but when I looked again it was gone. I felt goose bumps pop up on my arms.

----

3 As she walked up the hill, she realized that it was just too quiet. There was no sound from the bird who she so often heard singing from the top of the maple tree. She thought she saw a shadow move high up on the slope, but when she looked again it was gone. She felt goose bumps pop up on my arms.

MAKING INFERENCES

Read the scenario. Use what you already know about life, then search for clues in the text to make an inference about what is happening.

Jake's heart was beating so fast, he felt like it might come right out of his chest. He ascended one step at a time, getting further and further from the ground below him.

"You can do it!" his mom yelled.

He glanced over at the lifeguard as he approached the edge of the highest possible platform. She nodded, as if to say, "it's all clear, go ahead!"

He counted to three in his head, closed his eyes, and stepped on the platform. He knew he could do it!

Use what you know about life combined with the clues in the text to make an inference and answer the following questions.

1. Where was Jake?

_____

2. What was Jake trying to accomplish?

_____

3. How do you think Jake feels after he steps off the platform? How do you know?

_____

_____

_____

4. Write one more clue that could have been included in this scenario to help the reader understand what is happening.

_____

_____

READING COMPREHENSION

The History of Fireworks

Fireworks were invented in China in the 7th century. Legend has it that a group of Chinese monks were trying to create a medicine that would give people immortality. Instead, they accidentally invented gunpowder, which is the explosive used in fireworks.

Gunpowder was eventually used for guns and bombs, but since its invention it has always been used for fireworks, too. The Chinese would use the gunpowder as signal flares and for celebrations. Over time, people learned that if certain metals were mixed with the gunpowder, brilliant colors could be made when it was ignited. Many more advancements took place that allowed fireworks to create all sorts of shapes and sounds, but they still work in the same way today. For a long time, fireworks have been a big part of Fourth of July celebrations in the United States. This is partly because they symbolize the rockets and explosions that Francis Scott Key wrote about in his song "The Star Spangled Banner."

1. Gunpowder is mostly made out of sulphur and charcoal. If the story about the monks is true, why do you think they chose to experiment with those chemicals?

_____

_____

2. Why do you think fireworks are so popular for celebrations all over the world?

_____

_____

3. What special importance do fireworks have in Fourth of July celebrations in the U.S.? What do they symbolize?

_____

_____

READING COMPREHENSION

HIDING IN PLAIN SIGHT

Red-Eyed Tree Frog

Have you ever wished you could melt into the background? Or find a way to hide so no one would see you? That's an adaptation that some animals have. They have ways to blend into their surroundings. This helps them. They can avoid predators. They can catch prey!

The Red-Eyed Tree Frog is an example. It lives in rainforests. It is a small frog. It has bright green skin. It blends in with tree leaves. Its toes are sticky. This frog can cling to the underside of leaves. It becomes hidden. Predators may still find it. That's when the frog's bright red eyes help! When they flash their eyes, the change scares the predators. It makes the predators run away!

There are several fish who can blend in, too. The Stonefish is one. Flounder is another. The Stonefish has skin that looks bumpy and textured. It resembles the stone on the ocean floor. Predators swim right past! Prey might try to swim past, too. The Stonefish will suddenly dart out from its hiding place. It will snatch up smaller sea life. Flounder use similar tricks. They have skin that is speckled to look like the pebbles and stones on the ocean floor. They snuggle into the rocks and wait for prey. Sea worms or shrimp pass by. The Flounder springs into action to catch its dinner.

There are several reptiles that can blend in. Some amphibians can, too! Even a few fish have the ability to camouflage. Many mammals rely on their fur. They have fur that helps them remain unnoticed by predators. In the case of birds, females often have plain feathers. Males are brighter. The male may attract more attention from predators. This risk has a benefit. Colorful males may also use their feathers to gain mates.

One mammal who excels at hiding is the Arctic Fox. This animal is snowy white. It lives on the frozen tundra. A tundra is a snowy climate. It lives in constant snow and ice. The Arctic Fox's white coat conceals him perfectly. The coat is also thick. It helps the fox survive the cold weather.

Humans have learned a lot from the animals in our world. Clothes for hunters are now made in camouflage patterns. Humans can blend into the forest and hunt their prey. Military uniforms have patterns that help soldiers. They stay safe from enemies. They have specific designs for different areas. There are uniforms for the desert, mountain, and jungle. However, no matter how much humans try, they will never be as skilled as animals at physical adaptations. They can wear outfits to help us hide. Some animals are always in disguise!

Directions: Use evidence from the text to find the correct answer. Then, fill in the bubble of the correct answer.

1. What is one purpose of the adaptation of animal camouflage?

A to help them stand out

B to help them avoid predators
C to keep them from looking alike
D to tell other animals to watch out

2. Why are female birds not as brightly colored as the males?

A so they won't attract predators

B because the males would feel self-conscious if they had dull feathers
C because female birds would scare their chicks if they are brightly colored
D because their mates prefer the duller colors

3. In what way does Red-Eyed Tree Frog's adaptation protect them against predators?

A Green skin has a calming effect.
B Lighter bellies are intimidating.
C Bright red eyes flash to scare predators.
D Rapid movements startle predators.

4. How do the Stonefish and Flounder blend into their environment?

A They look like other fish.

B Their eyes reflect the color of the water.

C Their shape makes them look like coral.
D Their skin resembles stones and pebbles .

5. What is not one way that humans are using camouflage in the passage?

A using it to hide from large predators

B using it to hide from military enemies
C using it to hunt prey
D using it to blend in different environments

6. What is another purpose of the adaptation of animal camouflage?

A to make it easier to change environments
B to make them more confident
C to help them attack prey
D to give other animals an advantage

7. How have humans been influenced by animals' adaptations?

A They make more brightly-colored clothes to stand out.
B They start dancing around potential mates to be more like birds.
C They try to stay on the bottom of the ocean so sharks don't notice them.
D They create military uniforms and hunting outfits in camouflage patterns.

8. What adaptations do mammals rely on for camouflage?

A feathers

B fur
C spikes
D tentacles

9. What would be a perfect "blending in" outfit to be camouflaged in a grassy region?

A green colors
B bright red
C large spots
D a gray, rocky pattern

10. What type of climate is in a tundra?

A warm and tropical
B hot and dry
Ccold, freezing temperatures
D wet and warm

Directions: Use evidence from the text to come up with correct answer and write it down in complete sentences.

1. What is one purpose of the adaptation of animal camouflage? Cite evidence from the text in your answer.

_____

_____

_____

_____

2. What is the other purpose of the adaptation of animal camouflage? Cite evidence from the text in your answer.

_____

_____

_____

_____

3. The text says that male birds are often more brightly colored and females are more plain. Based on your background knowledge and the text, infer one reason why females are not as brightly colored.

_____

_____

_____

_____

4. Explain how humans have been influenced by animals' adaptations.

_____

_____

_____

_____

5. Describe how Red-Eyed Tree Frogs use their adaptations to drive away predators.

_____

_____

_____

_____

From the Sun to Your Food

by Caitlyn Meagher

vegetables and fruits
Image courtesy of LustrousTaiwan, via Pixabay

All living things need energy to move and grow. Energy can come in many different forms. For example, light energy, heat energy, and chemical energy are all different forms of energy. While energy cannot be created nor destroyed, it can be converted between different forms.

Where do plants get their energy? They get their energy from the sun. Plants absorb sunlight with their leaves. They use the sun's energy to change water and carbon dioxide into plant food and oxygen. This chemical process is called photosynthesis. Photosynthesis means, "making out of light." The energy from the sun, light energy, is converted into chemical energy through photosynthesis.

Plants are called producers because they *produce* their own food. Producers form the base of every food chain in an ecosystem. Plants are eaten by animals, which are eaten by larger animals. Through this process, energy from the sun is transferred from one living thing to another. For example, a plant captures energy from the sun and turns it into plant food. Later, that plant might be eaten by a rabbit, giving the rabbit energy. Then, a human eats the rabbit. The energy the human gets from the food was originally energy from the sun!

The food humans eat provides us with energy. When we chew and digest food, a chemical reaction takes place. The energy produced from this reaction fuels our bodies. We require energy from food for basic functions like moving and breathing. Energy from food also helps our body repair itself and stay warm.

The amount of energy we get from food depends on which nutrients are in the food we eat. Whole foods, like kale, contain lots of important nutrients, such as calcium and potassium. Sugary foods, like candy, do not contain as many nutrients. Whole foods can help us sustain our energy over long periods of time. Notice how you feel when you eat whole foods like vegetables and fruits. Are you more energized throughout the day?

Vocabulary

Here are the vocabulary words that will be in this reading. Let's see how well you already know them. Check the box that shows how well you know each word. It's ok if you don't know them yet.

	Don't know it	Have heard of it but not sure of its meaning	Know something about its meaning	Know it well
convert				
ecosystem				
nutrient				
process				

convert

verb definition: to change into another form or state.
He converted the sofa into a bed.

forms: converted, converting, converts

ecosystem

noun definition: a community of living things, together with their environment.
A pond makes an interesting ecosystem to study.

nutrient

noun definition: something in food that helps people, animals, and plants live and grow.
If you don't get enough nutrients, you may become sick.

process

noun definition: a series of changes or acts that happen one after another.
The process of growing up takes many years.

Word Changer   Words have different forms when we use them in different ways. Write the correct vocabulary word, in its correct form, in each blank.

He _____ the sofa into a bed.

A pond makes an interesting _____ to study.

If you don't get enough _____ , you may become sick.

The _____ of growing up takes many years.

READING COMPREHENSION

Answer the following questions based off of the article.

1. According to the passage, why do all living things need energy?

  A) to read and write   **B)** to watch a movie   **C)** to move and grow   **D)** to smell good

2. What happens after plants absorb energy from the sun?

    A. They overheat and die so new plants can grow in their place.
    B. They change colors and humans pick the flowers to sell.
    C. They turn it into chemical energy through photosynthesis.
    D. They gain energy and are used for charging cell phones.

3. Read the following sentences from the text.

"Plants are eaten by animals, which are eaten by larger animals. Through this process, energy from the sun is transferred from one living thing to another. For example, a plant captures energy from the sun and turns it into plant food. Later, that plant might be eaten by a rabbit, giving the rabbit energy. Then, a human eats the rabbit. The energy the human gets from the food was originally energy from the sun!...We require energy from food for basic functions like moving and breathing. Energy from food also helps our body repair itself and stay warm."

What conclusion can you draw from this evidence?

    A. The sun has an important role in keeping humans alive by giving us energy.
    B. Eating a rabbit does not give a human any energy but eating plants does.
    C. If living things don't get energy from the sun, they can get it from the moon.
    D. Rabbits are an important source of energy for all living things, including plants.

4. Why are whole foods good for your body?

    A. They haven't been eaten by anyone else yet so there is more food to eat.
    B. They do not have many nutrients so your body turns them into energy faster.
    C. They taste better than all other foods so you are more excited to eat them.
    D. They give you important nutrients and energy for long periods of time.

5. What is the main idea of this text?

    A. The sun helps plants turn light energy into chemical energy which is then passed on to other living things, like humans, to live.
    B. Photosynthesis is when plants absorb sunlight with their leaves and use it to change water and carbon dioxide into plant food and oxygen.
    C. Plants are called producers because they make their own food and this makes them the last living thing in every food chain.
    D. Whole foods have a lot of important nutrients, like calcium and potassium, and sugary foods do not have as many nutrients.

MATHEMATICS

Least Common Multiple
[smallest]   [same]   [multiple]

*a multiple is a number that can be divided by another number without a remainder. It is the answer to a number being multiplied by another. The numbers that multiply by each other are the factors

Greatest Common Factor
[biggest]   [same]   [factor]

*a factor is a number that is multiplied by another number to equal a multiple

$$(3) \times (5) = \boxed{15}$$

factors   multiple

Example:
Find the LCM of 4 and 5.

You start by making a table for each number. Stop at multiplying each factor by the other factor in the set. Meaning, for multiples of 4, stop at x5 and for multiples of 5, stop at x4. The LCM can be what both factors equal to when multiplied, but never more than that.

	x1	x2	x3	x4	x5
4	4	8	12	16	20
5	5	10	15	20	
	x1	x2	x3	x4	

Example:
Find the GCF of 18 and 30.

You start by making a table for each number. Start with 1 and go in order. 1 x ? = each multiple? Leave some space in between each factor pair. 1 and 18; 2 and 9, 3 and 6. Now that you see two factors very close to each other in value, like 3 and 6, you can ask yourself: "the only numbers between 3 and 6 are 4 and 5. are those factors of this multiple? If no, then you're done finding factors for that number. You'll see that multiples may have more than one common factor, but don't forget that you're looking for he biggest one!

18	1, 2, 3, 6, 9, 18
30	1, 2, 3, 5, 6, 10, 15, 30

Find the Least Common Multiple and Greatest Common Factor for each set of numbers. Show all work on a separate piece of paper.

	LCM	**GCF**
16, 10	_____	_____
14, 6	_____	_____
3, 27	_____	_____
6, 14	_____	_____
16, 5	_____	_____
8, 12	_____	_____
16, 6	_____	_____
8, 3	_____	_____

OPERATIONS REVIEW
ADDITION/SUBTRACTION

Calculate each sum or difference.

8673 − 1448	9759 − 9133	3225 − 2649	8646 + 9848	5574 − 4984
8062 − 1538	7030 + 8803	8105 + 6802	3893 + 4439	5337 − 2864
4598 + 3634	6987 − 5802	5916 − 1806	3204 − 2652	2897 + 5307
8028 − 3275	6911 + 6251	6074 + 2922	3729 − 2402	4245 − 1949
6995 − 6515	8464 + 8067	5751 + 8665	4376 − 1767	8057 + 4061

Multiply.

① 683
 × 5
_____

② 768
 × 7
_____

③ 498
 × 9
_____

④ 167
 × 3
_____

⑤ 208
 × 6
_____

⑥ 283
 × 3
_____

Divide.

① 5)409

② 3)273

③ 4)602

④ 9)405

⑤ 4)384

⑥ 7)205

Multiply and Divide

① 323
× 232

② 802
× 917

③ 652
× 312

④ 541
× 434

⑤ 462
× 578

⑥ 659
× 728

⑦ 604
× 350

⑧ 702
× 198

⑨ 21)5502

⑩ 32)7392

⑪ 24)3648

⑫ 25)5575

⑬ 25)5350

⑭ 40)3740

⑮ 18)3618

⑯ 19)5016

GEOMETRY
AREA/PERIMETER OF IRREGULAR SHAPES

To find the area of an irregular shape made of two or more rectangles, cut the shape into two or more parts and add the area of each part.

3 m

4 m

7 m

2 m

3 m

5 m
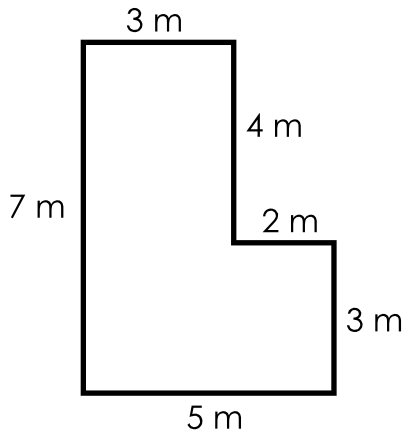
Area of Rectangle 1:
$A = l \times w$
$A = 4 \times 3$
$A = 12 \text{ m}^2$

Area of Rectangle 2:
$A = l \times w$
$A = 5 \times 3$
$A = 15 \text{ m}^2$

Total Area:
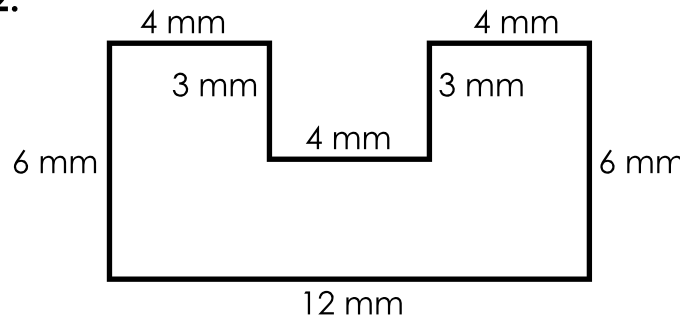$A = 12 \text{ m}^2 + 15 \text{ m}^2$
$A = 27 \text{ m}^2$

3 m

4 m

7 m

2 m

3 m

5 m
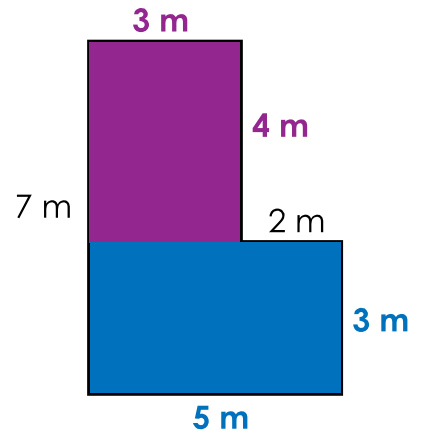
Find the area of each shape. Include units in your answer.

1.

10 cm

5 cm

8 cm

6 cm

3 cm

4 cm

2.

4 mm   4 mm

3 mm   3 mm

6 mm   4 mm   6 mm

12 mm

3.

1 m

4 m   4 m

4 m   4 m
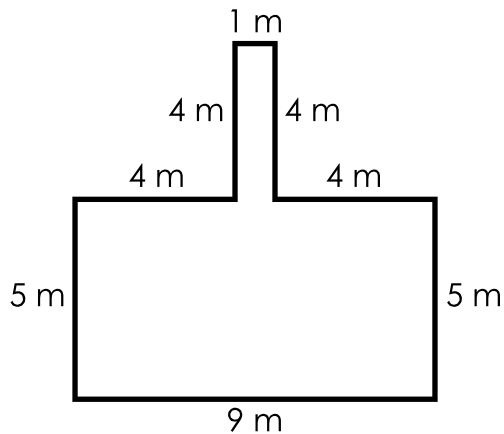
5 m   5 m

9 m

4.

3 cm

4 cm

2 cm   3 cm

5 cm   2 cm   6 cm

9 cm
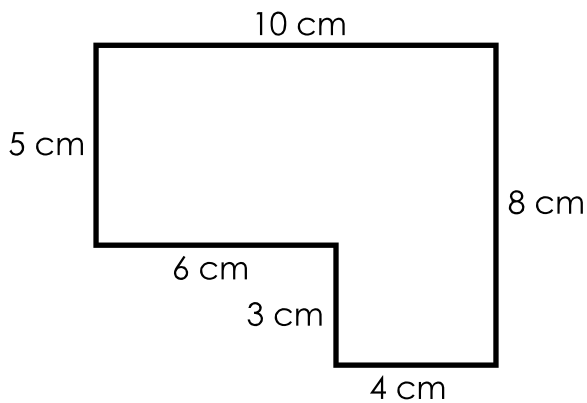
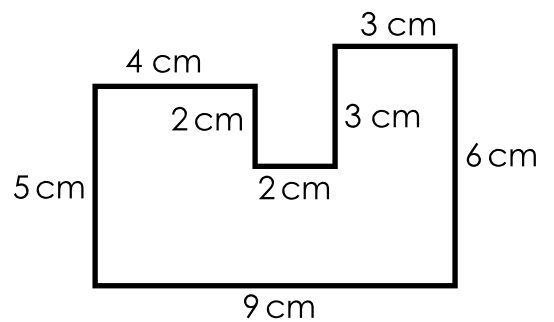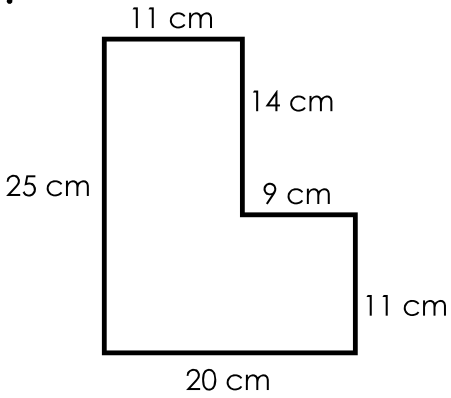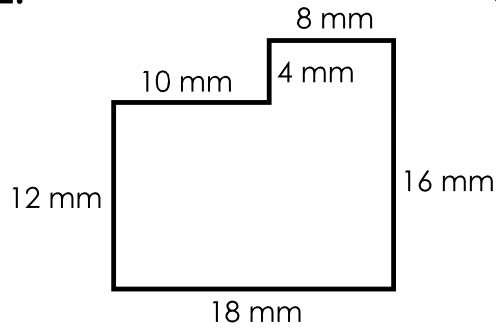**Find the area and perimeter of each shape. Show all work on a separate sheet of paper.**

1.

11 cm

14 cm

25 cm

9 cm

11 cm

20 cm

Perimeter: _____
Area: _____

2.

8 mm

4 mm

10 mm

12 mm

16 mm

18 mm

Perimeter: _____
Area: _____

3.

7 m

6 m

15 m

4 m

9 m

3 m

Perimeter: _____
Area: _____

4.

10 m

2 m

6 m

6 m

12 m

4 m

4 m

8 m

Perimeter: _____
Area: _____

5.

4 cm

3 cm

2 cm

3 cm

9 cm

2 cm

3 cm

8 cm

Perimeter: _____
Area: _____

6.

10 mm

8 mm

3 mm

4 mm

12 mm

3 mm

8 mm

4 mm
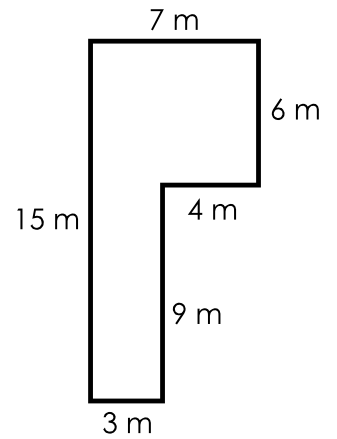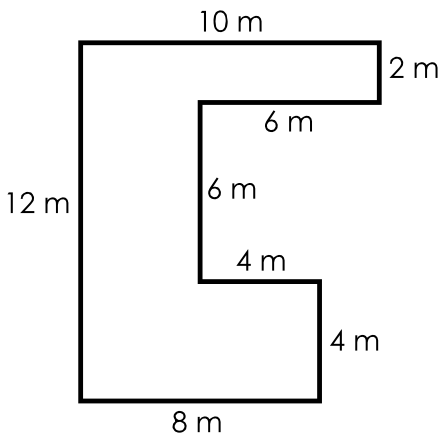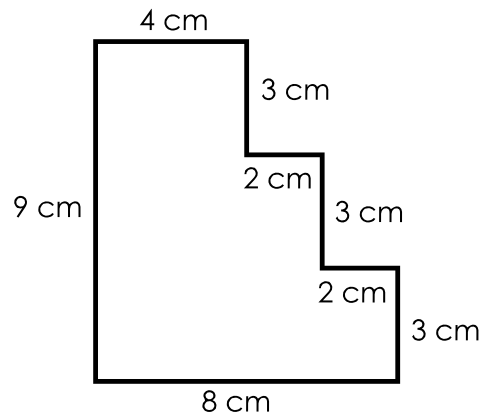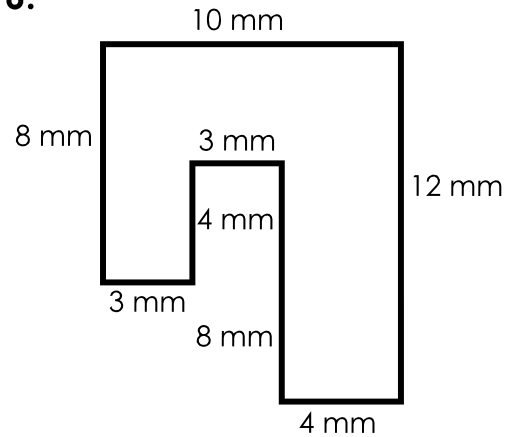
Perimeter: _____
Area: _____

Simplifying Fractions

Example: $\dfrac{24}{36}$

STEP 1:

Find the GCF of the numerator and the denominator.

24: 1, 2, 3, 4, 6, 8, **12**, 24
36: 1, 2, 3, 4, 6, 9, **12**, 18, 36   **Your GCF is 12**

STEP 2:

Divide the numerator and denominator by the GCF and that's your simplified fraction!

$\dfrac{24 \div 12}{36 \div 12} = \dfrac{2}{3}$ **your answer! YAY!**

Converting Improper Fractions
and mixed numbers

Improper Fraction to Mixed Number

Example: $\dfrac{39}{6}$

STEP 1:

Divide the numerator by the denominator.

$\dfrac{39}{6}$ $39 \div 6 = $ 6 with a remainder of 3

STEP 2:

6 becomes your whole number and the remainder is placed over the original denominator.

$6\dfrac{3}{6}$

Mixed Number to Improper Fraction

Example: $5\dfrac{6}{7}$

STEP 1:

Multiply the whole number by the denominator.

$5\dfrac{6}{7}$ $5 \times 7 = 35$

STEP 2:

Add the numerator to the sum from step 1, and put the total over the original denominator.

$35 + 6 = 41$ $\dfrac{41}{7}$

Adding/Subtracting Fractions with
UNLIKE DENOMINATORS

Example: $\dfrac{2}{4} + \dfrac{6}{7} =$

Example: $\dfrac{5}{7} + \dfrac{2}{5} =$

STEP 1:

Find the LCM of the denominators.

4: 4, 8, 12, 16, 20, 24, **28**
7: 7, 14, 21, **28**

Your LCM is 28

STEP 1:

Find the LCM of the denominators.

5: 5, 10, 15, 20, 25, 30, **35**
7: 7, 14, 21, 28, **35**

Your LCM is 35

STEP 2:

Put both original fractions over the LCM as the denominator.

how do you multiply to get from 4 to 28 and 7 to 28? multiply 4 by 7 and 7 by 4.
Don't forget: whatever you do to the bottom, you do to the top (and vice versa!)

$$2 \times 7 = 14$$
$$\dfrac{2}{4} \begin{smallmatrix} \mathbf{x7} \\ = \\ \mathbf{x7} \end{smallmatrix} \dfrac{X}{28} = \dfrac{\mathbf{14}}{\mathbf{28}}$$

$$6 \times 4 = 24$$
$$\dfrac{6}{7} \begin{smallmatrix} \mathbf{x4} \\ = \\ \mathbf{x4} \end{smallmatrix} \dfrac{X}{28} = \dfrac{\mathbf{24}}{\mathbf{28}}$$

your new fractions

STEP 2:

Put both original fractions over the LCM as the denominator.

how do you multiply to get from 7 to 35 and 5 to 35? multiply 7 by 5 and 5 by 7.
Don't forget: whatever you do to the bottom, you do to the top (and vice versa!)

$$5 \times 5 = 25$$
$$\dfrac{5}{7} \begin{smallmatrix} \mathbf{x5} \\ = \\ \mathbf{x5} \end{smallmatrix} \dfrac{X}{35} = \dfrac{\mathbf{25}}{\mathbf{28}}$$

$$2 \times 7 = 14$$
$$\dfrac{2}{5} \begin{smallmatrix} \mathbf{x7} \\ = \\ \mathbf{x7} \end{smallmatrix} \dfrac{X}{35} = \dfrac{\mathbf{14}}{\mathbf{28}}$$

STEP 3:

Add the numerators of the two new fractions and put it over the denominator from step 2.

$$\dfrac{\mathbf{14}}{\mathbf{28}} + \dfrac{\mathbf{24}}{\mathbf{28}} = \dfrac{\mathbf{38}}{\mathbf{28}}$$

your answer! YAY!

STEP 3:

Subtract the numerators of the two new fractions and put it over the denominator from step 2.

$$\dfrac{\mathbf{25}}{\mathbf{28}} - \dfrac{\mathbf{14}}{\mathbf{28}} = \dfrac{\mathbf{11}}{\mathbf{28}}$$

your answer! YAY!

FRACTIONS AND DECIMALS
Simplify the fractions below. Use your GCF/LCM skills to help you.

1. $\frac{6}{30}$ = _____

2. $\frac{5}{10}$ = _____

3. $\frac{4}{40}$ = _____

4. $\frac{24}{30}$ = _____

5. $\frac{6}{8}$ = _____

6. $\frac{8}{12}$ = _____

7. $\frac{12}{24}$ = _____

8. $\frac{99}{108}$ = _____

9. $\frac{4}{8}$ = _____

10. $\frac{18}{90}$ = _____

11. $\frac{50}{80}$ = _____

12. $\frac{63}{72}$ = _____

Add/Subtract the fractions. Use your GCF/LCM skills to help you.
Show all your work on a separate piece of paper.

1) $\dfrac{3}{10} + \dfrac{6}{10} =$

1) $\dfrac{6}{8} - \dfrac{2}{8} =$

2) $\dfrac{2}{10} + \dfrac{7}{10} =$

2) $\dfrac{9}{11} - \dfrac{2}{11} =$

3) $\dfrac{1}{11} + \dfrac{6}{11} =$

3) $\dfrac{2}{4} - \dfrac{1}{4} =$

4) $\dfrac{2}{8} + \dfrac{3}{8} =$

4) $\dfrac{3}{9} - \dfrac{2}{9} =$

5) $\dfrac{3}{7} + \dfrac{3}{7} =$

5) $\dfrac{4}{9} - \dfrac{3}{9} =$

1) $\dfrac{8}{28} + \dfrac{2}{4} =$

1) $\dfrac{2}{3} - \dfrac{1}{12} =$

2) $\dfrac{1}{3} + \dfrac{1}{6} =$

2) $\dfrac{3}{4} - \dfrac{1}{3} =$

3) $\dfrac{7}{28} + \dfrac{6}{7} =$

3) $\dfrac{5}{9} - \dfrac{4}{27} =$

4) $\dfrac{9}{15} + \dfrac{5}{6} =$

4) $\dfrac{8}{20} - \dfrac{1}{5} =$

5) $\dfrac{3}{16} + \dfrac{2}{4} =$

5) $\dfrac{4}{12} - \dfrac{6}{24} =$

Add/Subtract the mixed numbers. Show all your work.

1. $3\frac{3}{5} + 5\frac{4}{5} = $ _____

2. $5\frac{3}{7} + 5\frac{6}{7} = $ _____

3. $1\frac{6}{18} + 9\frac{8}{18} = $ _____

4. $2\frac{8}{15} + 6\frac{2}{15} = $ _____

5. $3\frac{10}{12} + 4\frac{11}{12} = $ _____

6. $6\frac{6}{14} + 4\frac{7}{14} = $ _____

1. $9\frac{1}{3} - 2\frac{2}{3} = $ _____

2. $5\frac{1}{16} - 2\frac{9}{16} = $ _____

3. $2\frac{5}{12} - 1\frac{8}{12} = $ _____

4. $4\frac{7}{10} - 2\frac{8}{10} = $ _____

5. $4\frac{8}{25} - 2\frac{20}{25} = $ _____

6. $8\frac{3}{7} - 1\frac{6}{7} = $ _____

Convert each decimal to a fraction or each fraction to a decimal.
Simplify the fraction when possible!

1. 0.5 = _____

2. 0.81 = _____

3. 0.25 = _____

4. 0.7 = _____

5. 0.2 = _____

6. 0.3 = _____

7. 0.95 = _____

8. 0.08 = _____

9. 0.8 = _____

10. 0.35 = _____

11. 0.82 = _____

12. 0.4 = _____

1. $\dfrac{4}{20}$ = _____

2. $\dfrac{3}{5}$ = _____

3. $\dfrac{9}{10}$ = _____

4. $\dfrac{1}{4}$ = _____

5. $\dfrac{4}{5}$ = _____

6. $\dfrac{1}{2}$ = _____

7. $\dfrac{18}{25}$ = _____

8. $\dfrac{16}{20}$ = _____

9. $\dfrac{1}{10}$ = _____

10. $\dfrac{16}{50}$ = _____

11. $\dfrac{76}{100}$ = _____

12. $\dfrac{3}{4}$ = _____

SIMPLE WORD PROBLEMS

Carter has 9 comic books. Ben has 3 times as many comic books as Carter. How many comic books does Ben have?

What value makes the equation shown below true?

$\dfrac{3}{4} = \dfrac{9}{?}$

A) 3   C) 12
B) 9   D) 16

Which number, when rounded to the nearest thousand, is 17,000 ?

A) 16,129   C) 17,538
B) 16,921   D) 17,853

What is the product of 3 and 2,470?

The perimeter of a square floor is 120 feet. What is the length, in feet, of each side of the floor?

There are 40 stickers on a sheet of paper. The stickers are in rows with 8 stickers in each row. Write an expression to represent how to find the number of rows of stickers on the sheet of paper?

MULTISTEP WORD PROBLEMS

Calvin paints pictures and sells them at art shows. He charges $56 for a large painting. He charges $25 for a small painting. Last month he sold six large paintings and three small paintings. How much did he make in all?

Brayden and Gavin were playing touch football against Cole and Freddy. Touchdowns were worth 7 points. Brayden and Gavin's team scored 7 touchdowns. Cole and Freddy's team scored 9 touchdowns. How many more points did Cole and Freddy have than Brayden and Gavin?

On Thursday the Meat King Market sold 210 pounds of ground beef. On Friday they sold twice that amount. On Saturday they only sold 130 pounds. How much more meat did they sell on Friday than Saturday?

MULTISTEP WORD PROBLEMS

Grace started her own landscaping business. She charges $6 an hour for mowing lawns and $11 per hour for pulling weeds. In September she mowed lawns for 63 hours and pulled weeds for 9 hours. How much money did she earn in September?

Faith had $100. She went to the grocery store and bought three containers of ice cream for $7.29 each. Then she went to the farmers market and bought two dozen ears of corn for $5/dozen. How much money did Faith have left?

Rachel is stuffing envelopes. She has eight hours to complete the task, and there are 1,500 envelopes. The first hour, Rachel stuffs 135 envelopes. The second hour she stuffs 141 envelopes. How many envelopes will Rachel need to stuff in order to finish the job?