

Name:

Mentor, Room 1 – Mrs. Neff

Week of: March 16, 2020

Remember to check Seesaw daily! Complete activities and post your work. Mrs. Neff and Ms. Nikki will both be checking Seesaw.

MATH

- Resources: multiplication chart, divisibility rules, reducing fractions, area and perimeter
- Area and Perimeter – complete problems 1-16
- Multiplying Fractions – worksheet, complete all problems

ELA

- Writing Prompt: Write a story from the perspective of a leprechaun who lives in Ireland. Your leprechaun is trying to hide a pot of gold at the end of the rainbow, so you need to create a story about how he accomplishes his goal. Remember that he has to face a few challenges along the way! Be creative and be ready to share your story.
 - Complete the graphic organizer
 - Draft story
 - Complete the editing and revising checklist
 - Write final copy – ink or typed

SCIENCE/SOCIAL STUDIES

- Read article-NASA unveils "astonishing" details of most distant object ever visited
 - Answer quiz questions 1-5
- Lesson 1 – The Geography of China
 - Read the lesson
 - Answer questions 2-4 in complete sentences on page 103 on a separate sheet of paper or post on Seesaw

Don't forget to go on Freckle for fact practice and adaptative practice, typing or any other program we use at school! Use your password sheet for the login information.

Multiplication Table

X	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60
5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
6	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90
7	7	14	21	28	35	42	49	56	63	70	77	84	91	98	105
8	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120
9	9	18	27	36	45	54	63	72	81	90	99	108	117	126	135
10	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
11	11	22	33	44	55	66	77	88	99	110	121	132	143	154	165
12	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180
13	13	26	39	52	65	78	91	104	117	130	143	156	169	182	195
14	14	28	42	56	70	84	98	112	126	140	154	168	182	196	210
15	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225

Notes



Reducing Fractions (Simplest Form)



Strategies:

1. Divide by numerator – if possible, guaranteed lowest term.

Example:

$$\frac{5}{15} \div \frac{5}{5} = \frac{1}{3}$$

2. Divide by GCF Greatest Common Factor

Example:

$$\frac{16}{44} \div \frac{4}{4} = \frac{4}{11}$$

$$\begin{array}{r|l} 16 & 44 \\ \hline \textcircled{1} 16 & \textcircled{1} 44 \\ \textcircled{2} 8 & \textcircled{2} 22 \\ \textcircled{4} 4 & \textcircled{4} 11 \end{array}$$

GCF = 4

3. Divide by any number that works and keep dividing until nothing else works.

Example:

$$\frac{600}{1000}$$

$$\frac{24}{50} \div \frac{2}{2} = \frac{12}{25}$$

$$\frac{60}{100} \div \frac{2}{2} = \frac{3}{5}$$

Notes

Divisibility Rules

Divisible by:	Rule	Example	Non-Example
2	If the last digit is even, (2, 4, 6, 8, or 0)	<u>724</u>	<u>423</u>
3	If the ⁺ sum of the digits is divisible by 3	<u>345</u> $3+4+5=12$	<u>317</u>
4	If the last 2 digits are divisible by 4	<u>712</u>	<u>710</u>
5	If the number ends with 5 or 0	<u>45</u>	<u>92</u>
6	If the number is divisible by BOTH 2 and 3	<u>144</u>	<u>517</u>
7	\div No Rule	n/a	n/a
8	If the last 3 digits are divisible by 8	<u>3,840</u>	<u>6,428</u>
9	If the ⁺ sum of the digits is divisible by 9	<u>6,939</u> $6+9+3+9=27$	<u>6,923</u>
10	If the number ends in 0	<u>7,200</u>	<u>4,258</u>

Notes



AREA AND PERIMETER

PERIMETER: The distance around the outside of a shape.

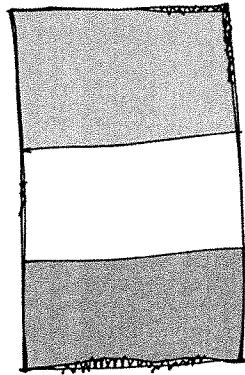
Formula: Side + Side + Side + Side

AREA: The measure of space inside a shape.

Formula: Length x Width



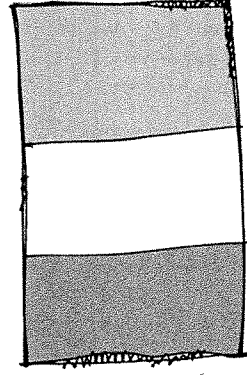
1. Determine the area of the flag.



1 ft.

$1 \frac{3}{4}$ ft.

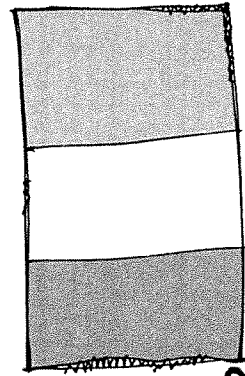
2. Determine the perimeter of the flag.



$7 \frac{1}{3}$ in.

$15 \frac{1}{4}$ in.

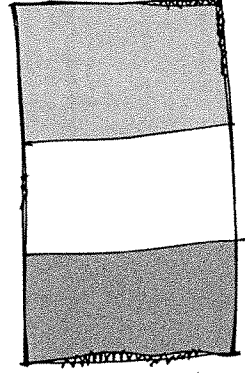
3. Determine the area of the flag.



$15 \frac{1}{2}$ ft.

$20 \frac{2}{3}$ ft.

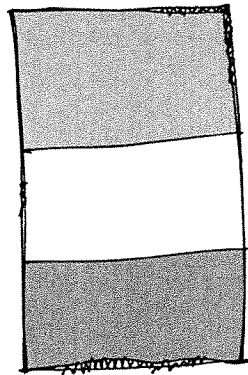
4. Determine the perimeter of the flag.



$6 \frac{1}{3}$ in.

$12 \frac{1}{4}$ in.

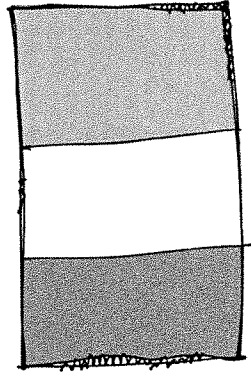
5. Determine the area of the flag.



$8 \frac{2}{3}$ yards

$15 \frac{5}{8}$ yards

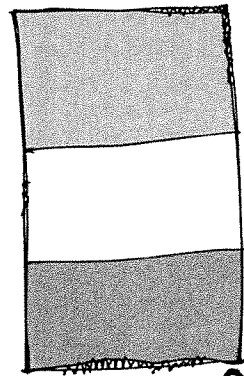
6. Determine the perimeter of the flag.



$4 \frac{1}{3}$ ft.

$6 \frac{3}{4}$ ft.

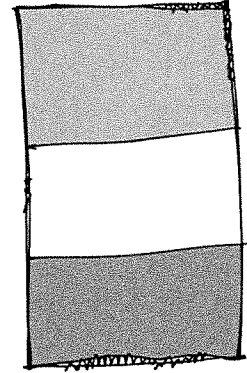
7. Determine the area of the flag.



7 ft.

$9 \frac{6}{9}$ ft.

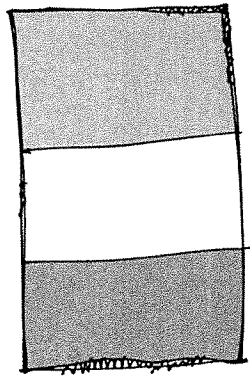
8. Determine the perimeter of the flag.



$18 \frac{1}{3}$ in.

$22 \frac{4}{7}$ in.

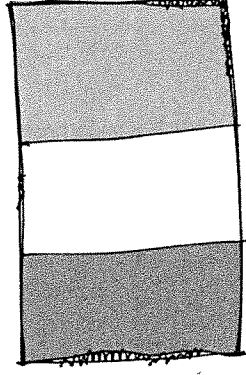
9. Determine the area of the flag.



$3 \frac{1}{8}$ meters.

$6 \frac{2}{3}$ meters

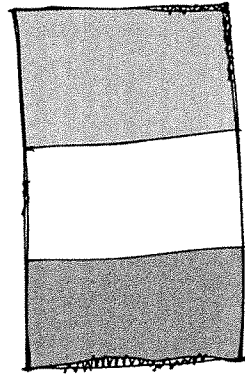
10. Determine the perimeter of the flag.



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

$1 \frac{9}{10}$ in yards

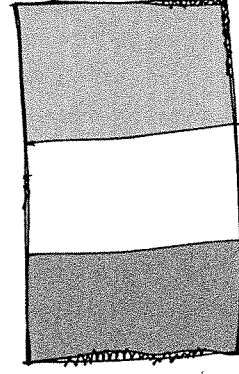
11. Determine the area of the flag.



3 in.

$5 \frac{4}{5}$ in.

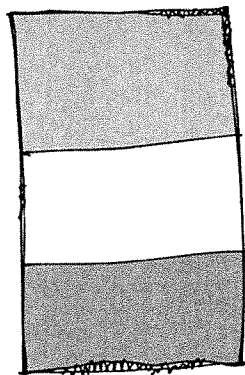
12. Determine the perimeter of the flag.



$10 \frac{4}{5}$ in.

$18 \frac{3}{6}$ in.

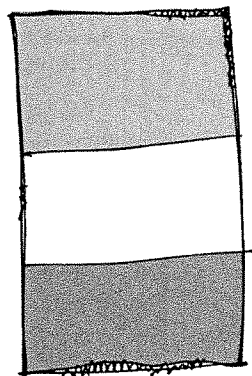
13. Determine the area of the flag.



$1 \frac{3}{4}$ ft.

$3 \frac{1}{9}$ ft.

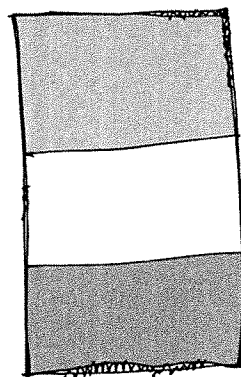
14. Determine the perimeter of the flag.



$6 \frac{1}{12}$ ft.

$10 \frac{4}{5}$ ft.

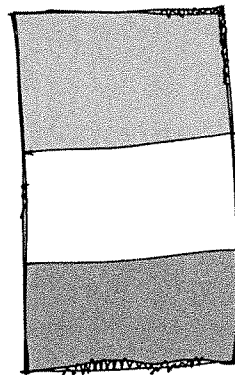
15. Determine the area of the flag.



2 ft.

$4 \frac{9}{10}$ ft.

16. Determine the perimeter of the flag.



$10 \frac{2}{5}$ yards

$20 \frac{2}{3}$ yards

IRISH AREA AND PERIMETER

Name: _____ Date: _____

1.	2.
3.	4.
5.	6.
7.	8.
9.	10.
11.	12.
13.	14.
15.	16.

SKILL 10: Practice**Multiplying Fractions**Find each product in simplest form.

1. $\frac{1}{2} \times \frac{1}{2} =$ _____

2. $\frac{2}{3} \times \frac{9}{10} =$ _____

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

4. $\frac{1}{4} \times \frac{1}{2} =$ _____

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

6. $\frac{5}{8} \times \frac{1}{9} =$ _____

7. $\frac{1}{7} \times \frac{1}{2} =$ _____

8. $\frac{2}{3} \times \frac{4}{9} =$ _____

9. $\frac{5}{8} \times \frac{3}{8} =$ _____

10. $\frac{1}{2} \times \frac{4}{13} =$ _____

11. $\frac{1}{3} \times \frac{2}{7} =$ _____

12. $\frac{13}{15} \times \frac{1}{4} =$ _____

13. $\frac{2}{5} \times \frac{4}{5} =$ _____

14. $\frac{1}{11} \times \frac{2}{5} =$ _____

15. $\frac{7}{9} \times \frac{2}{11} =$ _____

16. $\frac{3}{4} \times \frac{1}{2} =$ _____

17. $\frac{1}{2} \times \frac{14}{15} =$ _____

18. $\frac{1}{5} \times \frac{1}{3} =$ _____

19. $\frac{11}{15} \times \frac{1}{10} =$ _____

20. $\frac{8}{9} \times \frac{2}{7} =$ _____

21. $\frac{7}{8} \times \frac{11}{14} =$ _____

22. $\frac{1}{2} \times \frac{5}{7} =$ _____

23. $\frac{3}{4} \times \frac{1}{3} =$ _____

24. $\frac{1}{2} \times \frac{7}{8} =$ _____

25. $\frac{12}{13} \times \frac{3}{10} =$ _____

26. $\frac{2}{3} \times \frac{1}{3} =$ _____

27. $\frac{2}{3} \times \frac{7}{9} =$ _____

Solve.

28. The total weight of all of the insects in the world is about $\frac{7}{20}$ billion tons. The total weight of all humans is about $\frac{1}{3}$ of this amount. Find the total weight of all humans.
- _____

29. A recipe for granola bars calls for $\frac{2}{3}$ cup of oats. How much of the oats would you use to make $\frac{1}{2}$ of the amount in the original recipe?
- _____

TEST PREP

30. Multiply: $\frac{8}{9} \times \frac{3}{10}$.

A $\frac{2}{9}$

C $\frac{11}{90}$

B $\frac{4}{15}$

D $\frac{27}{80}$

Skill 10

31. Which is the best estimate of $1\frac{8}{9} \times 2\frac{6}{7}$?

F 2

H 6

G 4

J 8

Skill 9

Name _____ Date _____

Story Map 2 *Graphic Organizer*

Write notes in each section.

Setting: Where: When:		
↓		
Major Characters: Minor Characters:		
↓		
Plot/Problem:		
↓	↓	↓
Event 1:	Event 2:	Event 3:
↓	↓	↓
Outcome:		

Editing and Revision Checklist

Before writing out your final draft, please check to make sure you have edited and revised your piece for the elements on this list.

Conventions and Mechanics

- ☐ I have checked for spelling.
- ☐ I have checked for capitalization.
- ☐ I have checked for punctuation.
- ☐ I have checked for grammar.

Word Choice and Sentence Fluency

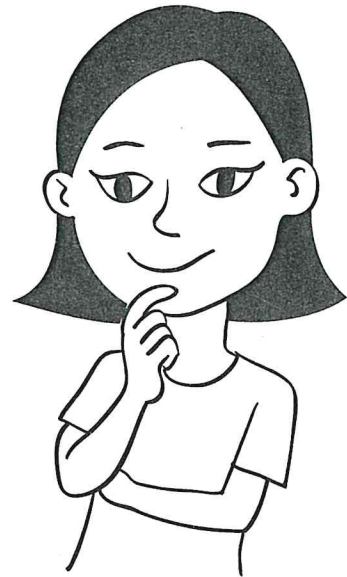
- ☐ I have checked for dull, overused words.
- ☐ I have used interesting and exciting words.
- ☐ I have used descriptive and figurative language.
- ☐ I have used a variety of transition words.
- ☐ I have varied the length and type of sentences so that the writing is smooth and flows well.

Voice, Tone, and Style

- ☐ I have used a consistent voice throughout, from the original story starter to my ending.
- ☐ I have maintained a consistent point of view and tone throughout the piece.
- ☐ I have thought about who my audience is and how to connect to readers.

Presentation

- ☐ For my final draft to be presented or published, I have used my best penmanship, and have not crossed-out or made eraser marks.



NASA unveils "astonishing" details of most distant object ever visited

By Hannah Devlin, The Guardian, adapted by Newsela staff on 03.13.20

Word Count 727

Level 830L



Image 1. An artist's impression of NASA's New Horizons spacecraft encountering Arrokoth, a Kuiper Belt object that orbits 1 billion miles beyond Pluto, on January 1, 2019. Image: NASA/Johns Hopkins University Applied Physics Laboratory/Southwest Research Institute/Steve Gribben

NASA is the U.S. space agency. It released details of the most distant object visited by a spacecraft. The information could help explain how the planets got their start in the early solar system.

The distant object is called Arrokoth. It is red and peanut-shaped. It sits 1 billion miles beyond Pluto in the Kuiper Belt. The belt is a region that is home to thousands of dwarf planets and icy objects. NASA's New Horizons spacecraft made a flyby on New Year's Day 2019. However, the extreme distance from Earth means the space agency's probe is still sending back data from the brief visit.

Bill McKinnon is a scientist at Washington University in St. Louis, Missouri. He wrote about the latest work on the object. He said the findings from Arrokoth are valuable. The information is so

important that the New Horizons team was debating if it would be viewed as more important than the probe's first visit with Pluto in 2015, he said.

A Remarkable World That's Told A Remarkable Story

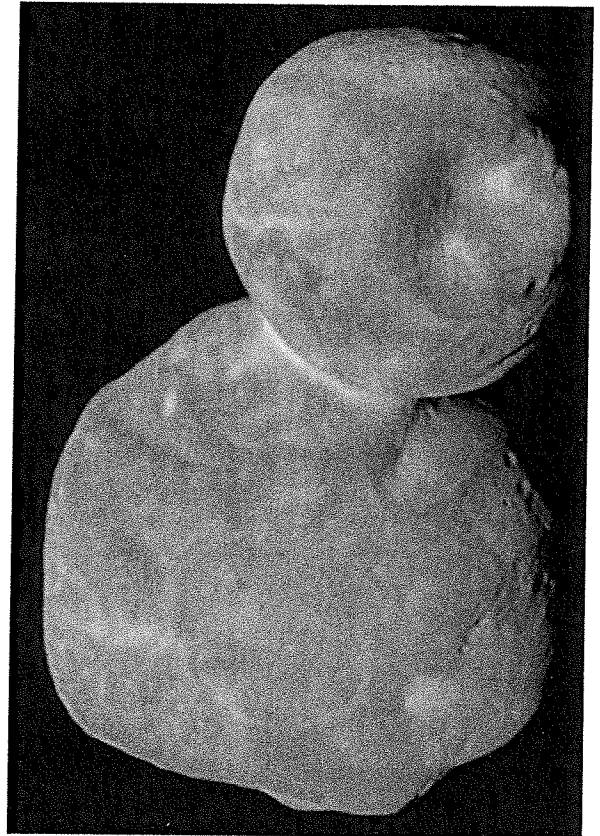
"Arrokoth has turned out to be astonishing in terms of what we've learned from it," he said before a meeting of the American Association for the Advancement of Science in February. "It tells us some profound truths about our solar system. This is not just a space potato. It's a remarkable world that's told us a remarkable story."

Arrokoth's position in the Kuiper Belt marks what was once the edges of the cloud of dust and gas around the newly formed sun. The cloud is known as the solar nebula. In this region, planets stopped developing at an early stage. Exploring these frozen areas allows scientists to look back. They can study a time when the seeds of today's planets were being planted.

Very Far From Sun

"This place is very far from the sun," with very low temperatures, said Alan Stern. He is New Horizons' main investigator. The cold keeps objects in a kind of time capsule, he said.

For many years, scientists have compared two ideas on how planets began to be formed. The first is called hierarchical accretion. In it, small grains and pebbles zipped around, occasionally crashing into each other with enough force to stick. They made bigger and bigger objects. Slowly, over millions of years, planets grew through these collisions.



The second idea is known as cloud collapse. In it, certain regions of the nebula had clumps of particles that were drawn toward each other, until they collapsed together. Collisions were gentle and the planets were "born big." Objects got huge within hundreds of years.

Arrokoth's appearance and makeup give evidence to support the cloud collapse idea. There are no signs that the object's two parts smashed together, said Stern.

A Gentle Joining

Everything about Arrokoth points toward a gentle joining, he said. The object's two parts are the same in color and makeup. They both have red surfaces with similar material. That suggests the fragments were near each other, rather than coming from different parts of the nebula.

The findings appear in the journal *Science*.

Andrew Coates works at the Mullard Space Science Laboratory, University College London. It is in the United Kingdom. He said there are signs that Arrokoth's two parts came together gently and stuck. He said it was more like the speed of a person walking than a high-speed crash.

Coates said there are signs of "faster collisions in the inner solar system later." An example was when the moon formed from a large object hitting Earth, he said. However, he said, this work shows more about the early history of the solar system. It shows that much slower events were important then, he said.

New Horizons was launched in 2006. It did a six-month flyby study of Pluto and its moons in 2015. Then it fired its engines to swing its route toward Arrokoth.

The spacecraft will continue to sail through the Kuiper Belt and beyond. Its fuel is expected to keep communication open until the 2030s.

Quiz

1

Read the following statements.

1. Information about Arrokoth could help explain how the planets got their start in the early solar system.
2. Planets slowly grew over millions of years through hierarchical accretion.
3. Arrokoth's appearance and makeup provide evidence to support the idea of cloud collapse.
4. New Horizons spacecraft will continue to travel through the Kuiper Belt and beyond.

Which two statements are main ideas from the article?

- (A) 1 and 2
- (B) 2 and 3
- (C) 1 and 3
- (D) 2 and 4

2

Read the paragraph from the article.

The distant object is called Arrokoth. It is red and peanut-shaped. It sits 1 billion miles beyond Pluto in the Kuiper Belt. The belt is a region that is home to thousands of dwarf planets and icy objects. NASA's New Horizons spacecraft made a flyby on New Year's Day 2019. However, the extreme distance from Earth means the space agency's probe is still sending back data from the brief visit.

Which statement summarizes the paragraph?

- (A) The New Horizons spacecraft recently passed Arrokoth and is sending information back to Earth.
- (B) Arrokoth is an odd, peanut-shaped object in the Kuiper Belt that is a great distance away from Earth.
- (C) The NASA probe is sending information from a 2019 flyby of Arrokoth back to Earth.
- (D) Arrokoth is far from the sun in the region of dwarf planets and icy objects.

3

According to the section "Very Far From Sun," how did Arrokoth form?

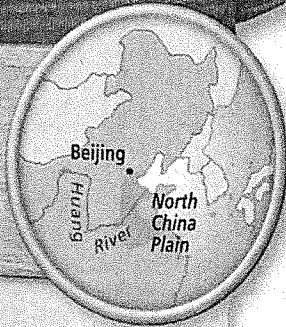
- (A) Two large parts crashed together and immediately joined.
- (B) One large object crashed into another, breaking off a large chunk.
- (C) Objects were drawn together and gently collided to form larger bodies.
- (D) Small pebbles crashed into each other, got stuck and grew bigger and bigger.

4

What is the relationship between the New Horizons spacecraft and Arrokoth?

- (A) New Horizons passed by Arrokoth, gathering images and data to send back to Earth.
- (B) New Horizons crashed into Arrokoth after completing the data-gathering for Pluto.
- (C) New Horizons discovered Arrokoth, a new dwarf planet, after passing by Pluto.
- (D) New Horizons' scientists worked with NASA to explain Arrokoth's potato shape.

LESSON 1



The Geography of China

PREVIEW

Focus on the Main Idea
A tour of China reveals great diversity in the land, water, and ways of life.

PLACES

North China Plain
Beijing
Huang River
Huang River Valley
Guangxi Zhungzu
Tibetan Plateau
Himalayas

VOCABULARY

loess
terrace
levee
double cropping



► From this satellite image, you can see the immense land area of East and South Asia.

You Are There

You're flying over Asia as a passenger on an airplane. As the airplane heads east, you look out the window. Below you is a vast land area of green, brown, black, and white. All of this is surrounded by the rich blue of the ocean. It all looks close enough to touch! You make out the rocky surface of tall mountains, topped by silvery snow. Reddish plateaus, or raised areas of flat land, separate the sharp mountain ranges.

Some areas seem dry like sandy deserts. From mountainous areas in the west, long winding rivers begin.

Small streams lead to rivers as they flow eastward to the ocean. Lowland areas near the coasts in the south are lush and green. Land surrounded by water juts out into the sea. Islands look like dots in the deep, dark water.

Welcome to China.



Summarize As you read, combine the most important facts about China's geography.

A Land of Differences

You are going to explore a land where civilizations emerged about 3000 B.C. In Lesson 2, you will read about its history. Unlike ancient Egypt and Nubia, which are now several African countries, ancient China developed into modern China. China's borders have changed during its history, as well as its name. You will read more about these changes in Units 5 and 7.

China is the largest country in Asia, and the third largest country in the world. Its landmass is almost as large as the entire continent of Europe! More people live in China than in any other nation. With its geographic size and the way it spreads across Earth, China is a land of contrasts—in landforms, climate, and the ways of life of the people who live there.

REVIEW Did civilization emerge in China before or after it did in Egypt? *Sequence*

The North China Plain

Historians trace human settlement and culture in China to the **North China Plain**. Look at the map below. Today, this plain is heavily populated. It is a center of agriculture and industry. A large portion of China's food comes from this region.

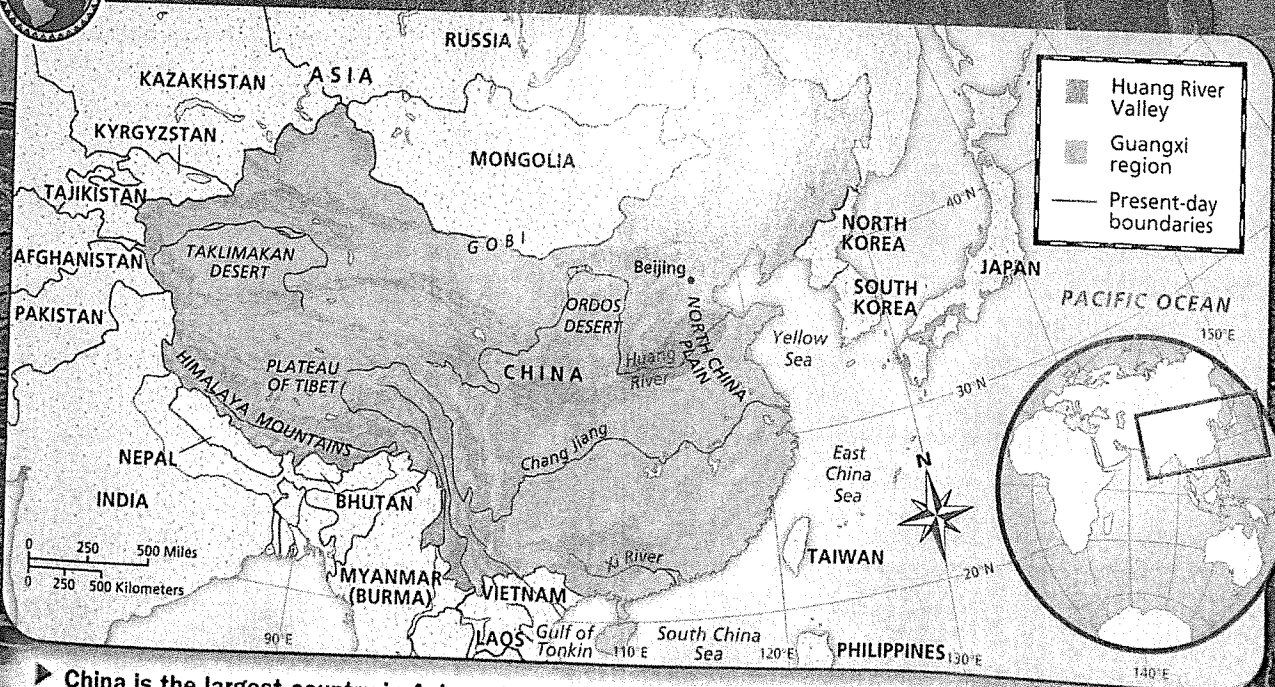
Land is fertile on the plain because it is enriched by **loess**, or a yellowish brown soil that blows in from the desert. Winters are cold and summers are hot on the plain. Soybeans, wheat, and cotton are grown here. From the air you might see miles of crops on broad **terraces**, or flat-forms of earth that look like stairs.

Beijing (BAY JING), the country's capital, is located on the northern tip of the plain. About 12 million people live there. Beijing has been a center of culture and government since the thirteenth century!

REVIEW Why is the North China Plain a good place to grow crops? *Summarize*

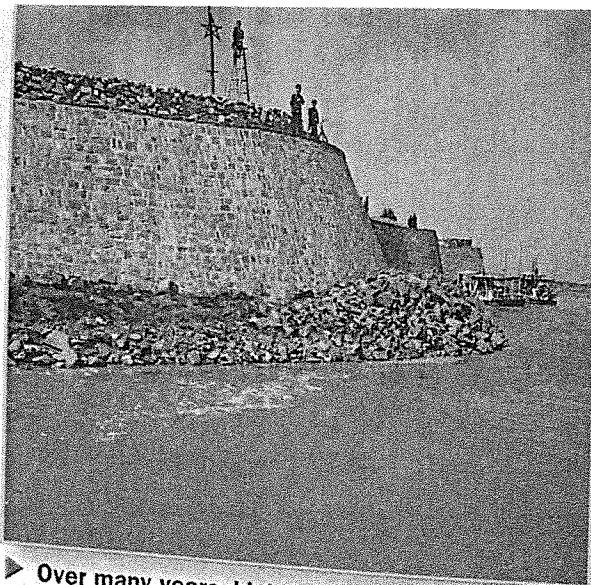


China



► China is the largest country in Asia and has a diverse landscape.

MAP SKILL Use a Locator Map What region of Asia does this map show?



► Over many years, higher and higher levees became necessary on the Huang.

China's Sorrow

The Huang He (HWAHNG HUH), or **Huang River**, cuts through the North China Plain. Follow the course of the Huang River in northern China on the map on page 101. From start to finish, you have nearly 3,400 miles to go. About 3000 B.C., early civilizations in China made their homes near the **Huang River Valley**.

Begin in the mountains of western China, south of the Gobi, a desert that stretches across parts of Mongolia and China. Follow the Huang River east through desert lands and then turn sharply to the south.

The great river picks up and carries a large amount of yellow silt, dissolved in the water. The river takes on a distinctive yellow color, which is why it is called the Huang, or "yellow," River in Chinese.

When the Huang flows onto the North China Plain, it changes from a swift river to a sluggish one. Dikes, or **levees**, wall it in within its riverbank. Floods occur when the river rises during heavy summer rains. People built levees in a centuries-long effort to control flooding. The Huang has been called "China's Sorrow" because for centuries floods have wiped out crops and left people homeless.

REVIEW What facts are important to know for people who live by the Huang River?

🌀 Summarize

Guangxi Zhungzu

Look to the south and east on your map. You are now traveling to the region called **Guangxi Zhungzu** (gwahng shee DZUHNG JOOH). Warm waters of the Gulf of Tonkin in the South China Sea wash the land's southern shoreline. The country of Vietnam lies to the southwest. Here the warm and moist winds blow in from the sea, and the weather often feels hot and steamy. There is plenty of rain and sun throughout the year.

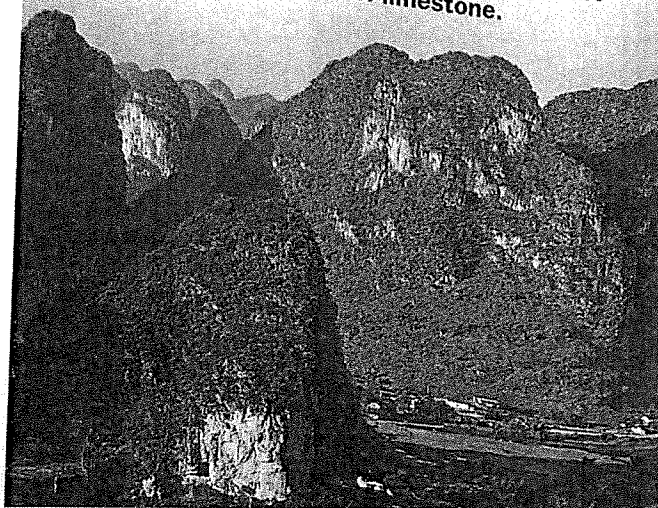
The Guangxi Zhungzu has one of the best climates for farming in China. The growing season is long in these lowlands. Farmers in this region use a cultivation system called **double cropping**, in which two crops are grown on the same land in the same year. They can double-crop rice and a vegetable or rice and sugar cane. Access to the sea makes fishing an important industry in this coastal region. People can rely on both farming and fishing.

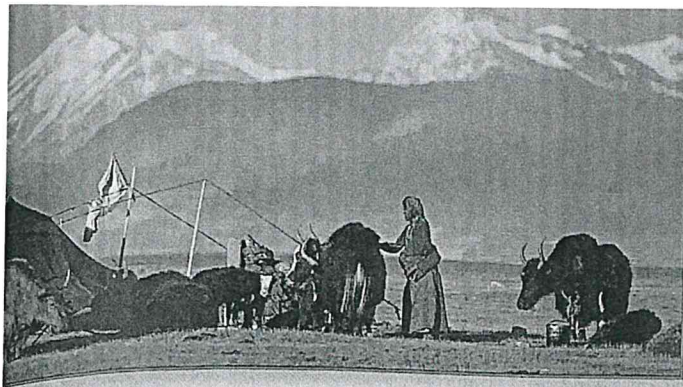
As you travel the Guangxi Zhungzu you may come across sinkholes, where rainwater collects, and caves. Rugged peaks rise before you. Small streams suddenly flow underground. The region contains much limestone, a sedimentary rock that lies beneath the region's thin soil. Over many years, limestone has eroded into many fantastic shapes.

REVIEW How can you summarize the characteristics of the Guangxi Zhungzu that make it different from other areas in China?

🌀 Summarize

► The karst hills in Guangxi Zhungzu are landforms made of limestone.





To the Roof of the World

The last stop on your tour of China is a place very different from anywhere else on Earth. The land is very rocky. You see mountain ranges to the north and south. You have reached the **Tibetan Plateau**.

The Tibetan-speaking people who live here are the Zhuang in Chinese. They are the largest minority group in China. They make their living by cultivating barley or herding sheep. Many Zhuang are nomads, who travel and live in tents alongside their livestock. Depending on where they travel, weather and food conditions change.

► A group of nomads watches over their yaks, or oxlike mammals, grazing in the landscape of Tibet.

The Tibetan Plateau is sometimes called the Roof of the World. As you may guess, it is the location of the **Himalayas** (hīh muh LAY uhz), a mountain range located on the southern border of the Tibetan Plateau. The tallest peak on Earth is located in the Himalayas. Because the Himalayas stretch so far, they are located in more than one country. In the next chapter, you will read more about them.

REVIEW What challenges do nomadic people face on the Tibetan Plateau? 🔄 Summarize

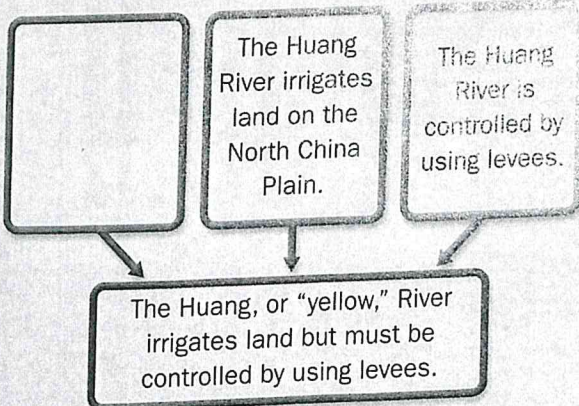
Summarize the Lesson

- China is a large country and its landforms, climate, and people are diverse.
- People have built levees to control the flooding of the Huang River.
- The Guangxi Zhungzu in the Southeast is a region of farmland.

LESSON 1 REVIEW

Check Facts and Main Ideas

1. 🔄 Summarize On a separate piece of paper, fill in the missing fact in the space provided.



2. How has the Huang River affected people living near it?

Answer in complete sentences

3. What gives the Huang River its name?
4. How does China's geography show differences within the large country?

Critical Thinking: Make Generalizations Is it possible to make generalizations about the people of China based on where they live? Explain.

Link to

Writing

Write an Article You are a geographer documenting your recent trip to China. Describe one area of China, using as many details as you can. Consider the land, landforms, and climate.