

4 Language



“Speak a new language so that the world will be a new world.”

—RUMI, PERSIAN POET

What does this quote mean to you?

Look at the photo and caption. Discuss the questions.

1. What are the visitors at the museum viewing? What is on the stone?
2. Why do you think the Rosetta Stone is important?

◀ Visitors view the ancient Egyptian Rosetta Stone at the British Museum in London, England. The Rosetta Stone displays the same message in three different ancient languages.

ESSENTIAL QUESTION

What effect can words have?

Theme Vocabulary

Use these words to express your ideas throughout the unit.

PRACTICE 1 Read the conversation. Think about the meaning of each word in **bold**. Then write each word next to its definition in the chart below.

Words can have a **positive effect** on people. In a poem, words can be beautiful and make people feel happy. Though they can also make people sad, which can have a **negative** effect.

That's true. Words can also sometimes **cause** problems or confusion. My friends sometimes think my text messages have a negative **meaning** when I am trying to make a joke. After we **communicate** more, we can usually solve the problem.

Theme Vocabulary

- cause (v.)**
- communicate (v.)**
- effect (n.)**
- meaning (n.)**
- negative (adj.)**
- positive (adj.)**

Word	Definition
<i>positive</i>	relating to good instead of bad
	to exchange information using words or gestures
	relating to bad instead of good
	a change resulting from an event or action
	the thing or idea represented by words or gestures
	to make something happen

PRACTICE 2 Work with a partner. Answer the questions about the conversation.

1. What examples of the positive effects of words do the students give?
2. What examples of the negative effects of words do the students give?
3. What effects of words do the speakers agree about?

Explore the Essential Question

Think Is it easy or hard to find the right words in these situations? Check (✓) the answers that are true for you.

	Easy	Hard
talking to friends		
talking to people I don't know		
speaking another language		
writing an email		
writing a poem		
giving a presentation to an audience		

Discuss With a partner, discuss your answers to the activity above. Explain why you chose your answers.

Example: *Talking to new people is easy for me. I love meeting new people.*

Respond Circle the words that might have a positive or negative effect on someone. Add your own ideas. Then use some of the words to complete the sentences below. Share your ideas with a partner.

painful **communicate** **beautiful**
share **useful** **learn** **translate**
meaning
useless **wonderful** **talk** **colorful**
powerful **message**

Words can be _____ when _____.

_____ words can make you feel _____.

Key Vocabulary

PRACTICE Look at the photos and read the sentences. Discuss the meaning of the words in **bold** with a partner. Then ask and answer the questions.



collect (verb)
This woman **collects** shells.
What other things do people collect?



familiar (adjective)
Babies smile at **familiar** people, such as a parent.
Can you recognize a familiar voice on the phone?



messenger (noun)
This **messenger** is delivering a package.
What do messengers deliver in your community?



print (noun)
A bird left **prints** in the sand.
What kinds of animal prints have you seen?



shout (verb)
People **shout** when they are excited.
What are other reasons people shout?



translate (verb)
A dictionary can help you **translate** words.
Can you translate *hello* into another language?

Grammar: Relative Clauses

A **relative clause** (also called an *adjective clause*) gives more information about a noun. Relative clauses start with a **relative pronoun**, such as *who* (for people) or *that* (for people, animals, or things). The relative pronoun usually comes after the noun it refers to. The verb agrees with the noun (*words **sound**, the student **writes***).

I like words **that** sound funny.

Nora is the student **who** writes poems.

PRACTICE 1 Underline each relative clause. Circle each relative pronoun. Draw an arrow from the relative pronoun to the noun it refers to.

- I like people who are kind.
- I study words that are hard to spell.
- I like poets who write about love.
- My class learns words that are useful.
- My friend writes text messages that are really funny.

PRACTICE 2 Use all the words and phrases to write sentences with relative clauses. Use the correct form of each verb.

I have a friend	that	be exciting
She writes stories	who	sing beautiful songs
I like birds		play the guitar
I eat food		be (not) hot and spicy
We met some people		live near us

- I have a friend who plays the guitar.
- _____
- _____
- _____
- _____

ESSENTIAL QUESTION

What effect can words have?

First Thoughts

1. Find and circle the nine words. Say each word aloud when you find it. Use a dictionary to help you, if necessary. Then answer the questions below.

Q	I	W	T	M	O	O	K	M	R	R	E
R	A	M	B	U	N	C	T	I	O	U	S
K	R	C	K	H	I	C	C	U	P	A	X
W	I	S	T	A	R	S	X	A	C	A	K
M	C	O	L	D	S	N	A	K	E	C	A
B	U	M	B	L	E	B	E	F	E	M	G
Q	C	I	N	N	A	M	O	N	Y	K	U
E	A	K	Q	Q	V	C	A	G	E	D	R

- bumblebee ✓
- caged
- cinnamon
- cold
- hiccup
- moo
- rambunctious
- snake
- stars

2. Which word is a sound (onomatopoeia) made by cows? _____
And which is a sound made by people? _____
3. Which words are animals? _____, _____
4. Which word is a flavor? _____

Discuss Put the words from Activity 1 into categories. You can write the same word in more than one category. Then discuss your answers with a group.

Positive	Negative	Beautiful	Fun to Say

Reading Skill: Identify Theme

In a story or poem, the **theme** is the message or lesson the author wants the reader to learn. The theme might be stated in a sentence, or you may need to look more closely at the words the author uses in order to determine the theme. To identify the theme of a poem, ask yourself these questions:

1. What is the topic of the poem?
2. What details about the topic are included in the poem?
3. How does the poet think or feel about the topic?
4. What is the main message or lesson of the poem?

Skill in Action

Read the poem “Words Bounce Back” and a reader’s thoughts. Think about the topic, details, thoughts, and feelings in the poem. With a partner, decide on the theme of the poem. Write it below.

Words Bounce Back

Sometimes my words bounce right back at me.
I am surprised when my words come back
dirty, sad, upset
without friends.
They smack against me, word after word,
sentence after sentence.
They don’t understand what went wrong,
They only know that they are
unhappy
unwanted
lost
and so alone.
I pick them up, clean them off
and put them back in my pocket so
I can try again tomorrow.

The poem mentions a feeling: surprise.

The descriptive words the poet uses are negative.

These words are also negative.

The title can help me determine the topic. Maybe the topic is the effect of words.

This detail shows that even though words can have a negative effect, the speaker in the poem will try to use words again.

Read and answer the question: **How does each poet feel about words?** As you read, underline any parts of the text you have questions about or find confusing.

Collecting Words

by Pat Mora

4.1

1 All day, I **collect** words,
words that move, like *wiggle*,
glowing¹ words, *candle*,
drifting² words, *butterfly*,
5 singing words, *ding-dong*.

I collect words that make me smile, like *tiny*,
that fill my mouth, *bubble* and *bumblebee*,
that float along, *river*,
that have a brown scent, *cinnamon*,
10 that sweetly stretch, *car-a-mel*.

I collect short, hard words, like *brick*,
soft words, *lullaby*,
cozy words, *snug*,
funny words, *rambunctious*,
15 scary words, *sssssssssssnake*,
jumpy words, *hic-cup*,
big words, *onomatopoeia*—moo moo.

I whisper, say, **shout**,
write, and sing my words.

20 What words will you collect today?

¹ **glowing** shining

² **drifting** slowly moving

STOP & THINK

Review A stanza is a group of lines in a poem (like a paragraph in a story or an article). How many stanzas are in this poem?

STOP & THINK

Describe Poems look different from other texts. How does this poem look different from a story or an article? What is different about the punctuation?

Butterflies on a riverbank in
Tambopata National Reserve, Peru



About the Poet (b. 1942)

Pat Mora is an American poet and writer. She has written more than thirty books for young people and adults. She has received many awards for her work.

Words Are Birds

by Francisco X. Alarcón

4.2

1 words
are birds
that arrive
with books
5 and spring

they
love
clouds
the wind
10 and trees

some words
are **messengers**
that come
from far away
15 from distant lands

for them
there are
no borders
only stars
20 moon and sun

some words
are **familiar**
like canaries
others are exotic
25 like the quetzal bird

STOP & THINK
Give examples
In what ways does the poet say words are similar to birds?



A quetzal on a tree branch
in Monteverde Cloud Forest
Biological Preserve, Costa Rica

30 some can stand
the cold
others migrate¹
with the sun
to the south

35 some words
die
caged² —
they're difficult
to **translate**

40 and others
build nests
have chicks
warm them
feed them

45 teach them
how to fly
and one day
they go away
in flocks³

50 the letters
on this page
are the **prints**
they leave
by the sea

¹ migrate travel
² caged in a cage
³ flocks groups

STOP & THINK
Recognize The first stanza on this page has five lines. How many lines are in the other stanzas on this page?

About the Poet (1954–2016)

Francisco X. Alarcón was a poet and writer. He grew up in Mexico. He wrote multiple books for both young people and adults. He believed that children are “natural poets.”

Close Read

Work with a partner.

1. Determine the meanings of your underlined words and phrases.
2. Discuss the question:
How does each poet feel about words?

Apply the Skill: Identify Theme

Complete the theme chart for “Words Are Birds.”

Poem title:
Poem topic:
Details about the topic:
Thoughts or feelings shared in the poem:
Theme (message or lesson):

Understand

Read each statement and check (✓) the correct answer for Poem 1 (“Collecting Words”), Poem 2 (“Words Are Birds”), or both poems.

- | | Poem 1 | Poem 2 | Both |
|--|--------------------------|--------------------------|--------------------------|
| 1. The poem compares words to birds. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. The poem includes examples of words that the poet likes. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. The poem describes different types of words. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. The poem describes how words grow and change. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. The poem shares the poet’s thoughts and feelings about words. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Read Again and Analyze

Read the poems again and respond to the questions. Use evidence from the text to support your responses.

1. **Deduce** Why does the poet of “Collecting Words” end with a question to the reader?
2. **Compare** What patterns do you see in “Collecting Words”? Are some of the lines in the poem similar? Are some words repeated in more than one line?
3. **Classify** In “Words Are Birds,” does the line “some words die caged” cause a positive or negative feeling in you? Are there other lines in the poem that cause the same feeling?
4. **Examine** Birds have “no borders.” How can words “cross borders”?
5. **Contrast** How are the two poems similar? How are they different?

Share Your Perspective

Discuss the questions in a small group.

1. What emotions do certain words make you feel? Give an example and explain.
2. What kinds of words would you collect? Why?
3. What other animal or object could you compare words to? Why?

Reflect

How do “Collecting Words” and “Words Are Birds” help you understand the effect words can have? With a partner, use some of the words to write sentences about words and language.

Nouns	Verbs	Adjectives
effect	cause	familiar
meaning	collect	positive
messenger	communicate	negative
print	shout	
	translate	

Discussion Frames

Words like ... make me feel ...
 I would collect words that ...
 I could compare words to ...

NO WORDS

pana po'o (HAWAIIAN)

When you scratch your head to help you remember something



verschlimmbessern (GERMAN)

To make something worse when you are trying to improve it



depaysement (FRENCH)

The feeling of being away from home, or being in a foreign place



ya'arburnee (ARABIC)

When you say to someone you love that you hope you die before they do because you cannot possibly live without them



pochemuchka (RUSSIAN)

A person who asks too many questions



chi ku (CHINESE)

When someone can go through very difficult experiences and not become angry or unhappy



tsundoku (JAPANESE)

When you have many books that you never read



jayus (INDONESIAN)

When someone tells a joke that is so *unfunny* that you cannot help but laugh



Examine the Graphic

Use details from the image and the text to respond to the questions. Discuss your responses with a partner.

1. What does this graphic show?
2. What is special about each of these words or phrases?
3. Choose two or more words or phrases, and tell a partner how to say the same thing in a language that you speak. Is it possible?

Make Connections

Use details from your life, stories you've read, and the graphic to respond to the questions. Then discuss your responses with a partner.

1. Which word or phrase makes you smile? Which do you think is the funniest? The prettiest? The most interesting? Explain why.
2. Choose one of these phrases to describe a situation you have experienced. Explain the situation.
3. Do words or expressions in one language always translate into another? Why do you think this is the case?

Reflect

Use ideas from the graphic and your responses to answer the question:

What is a feeling or experience you might want to express, but do not have a word for? Make up one or more words or phrases to express it. Then share them with a partner.

Key Vocabulary

PRACTICE Look at the photos and read the sentences. Discuss the meaning of the words in **bold** with a partner. Then ask and answer the questions.



clear (adjective)

This street sign is **clear**.

What clear signs do you see every day?



confusing (adjective)

This street sign is **confusing**.

Why is the sign in the photo confusing?



correct (adjective)

The **correct** answer to this problem is 68,894.

How many correct answers did you get on your last test?



order (noun)

Dictionary words are in alphabetical **order**.

What are the names of your family members in alphabetical order?



rule (noun)

The **rule** is no cell phones in class.

What are the rules in your classroom?



switch (verb)

If you **switch** the 2 and 4 in the number 24, you get the number 42.

What new number can you make if you switch the digits in 63?

Vocabulary: Signal Words for Comparison and Contrast

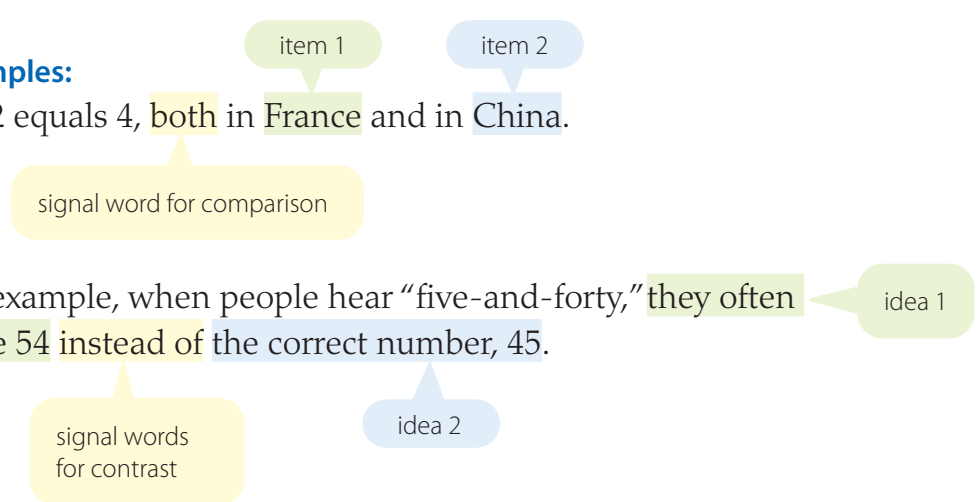
Signal words for comparison connect two or more similar items or ideas.

Signal words for contrast connect two or more different items or ideas.

Signal Words	
Comparison	Contrast
same	different (from)
also	however
equally	instead (of)
both	although

Examples:

2 + 2 equals 4, **both** in France and in China.



For example, when people hear "five-and-forty," they often write 54 instead of the correct number, 45.

PRACTICE 1 Read each sentence. Circle the signal word. Then check (✓) whether it is a comparison or contrast word.

- | | Comparison | Contrast |
|--|--------------------------|--------------------------|
| 1. Both my brother and my sister have red hair. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Although most deserts are hot during the day, those same deserts can be very cold at night. | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. I like to drink orange juice instead of tea. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. 22 is a multi-digit number. 99 is also a multi-digit number. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. We don't have school on Monday. However, we still have homework. | <input type="checkbox"/> | <input type="checkbox"/> |

PRACTICE 2 Underline the two ideas that are being compared or contrasted in each sentence in Practice 1.

ESSENTIAL QUESTION

What effect can words have?

First Thoughts

1. What numbers do you see in the photo? Tell a partner.



2. With a partner, write the word for each number in English and in another language.

English	Another Language
12	
19	
22	
309	

3. Look for patterns in the number words above. Circle the words you see repeated in each column. For example, is *nine* used more than once?

Discuss Check (✓) the statements you agree with. Then discuss your answers with a group.

- Numbers are easy to say and write in English.
- All languages have similar patterns for number words.
- Saying numbers in different languages is confusing.

Reading Strategy: Interpret Charts and Tables

Charts and **tables** include information, or data, that can be read quickly and easily. Authors use charts and tables to support the information or ideas in the text. To understand the content and purpose of a chart or table, ask yourself these questions:

1. What is the topic of the chart or table?
2. How is the chart or table labeled? What information do the labels provide?
3. Which section of the text does the chart or table support?
4. Which word, phrase, or sentence in the text explains the purpose of the chart or table?
5. How does the chart help you understand the text?

Strategy in Action

Read the paragraph from “Learning Math in Different Languages” and a reader’s thoughts. Then review the chart. What is the topic of the chart? How does the chart help you understand the text?

Multi-digit numbers follow the place-value rule. The place-value rule allows us to write any number with only ten symbols. For example, the value of the 9 in 92 is 90 (9×10), and the value of the 2 in 92 is 2 (2×1). However, in 29 it is reversed. The value of the 9 is just 9 (9×1), and the value of the 2 is 20 (2×10). This is why 92 is different from 29, although both have the same digits!

The topic is the place-value rule. This sentence explains the purpose of the chart.

The chart includes seven examples of place value.

Place Value Chart for the number 4,521,392

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
4	5	2	1	3	9	2
Place Value of 4 =	4,000,000					
Place Value of 5 =	500,000					
Place Value of 2 =	20,000					
Place Value of 1 =	1,000					
Place Value of 3 =	300					
Place Value of 9 =	90					
Place Value of 2 =	2					

→ 4 5 2 1 3 9 2

The text includes two examples of place value.

The title helps me understand the topic of the chart.

The chart labels explain the place value of each digit in the example.

Read and answer the question: **Why are some number words difficult to learn?** As you read, underline any parts of the text you have questions about or find confusing.

Learning Math in Different Languages

by Julia Bahnmueller, Hans-Christoph Nuerk, and Krzysztof Cipora



4.3

1 We all do basic math. You do it. I do it. Young children do it. For instance, they do it when they count marbles. And they do it with addition. $2 + 2$ equals 4, both in France and in China. 7×8 equals 56, both in the United States of America and in Germany.

5 Most countries use the Hindu-Arabic numeral system to write numbers. We use ten symbols to write single-digit numbers (0–9). We combine them to write multi-digit numbers (10,235).

Multi-digit numbers follow the place-value **rule**. The place-value rule allows us to write any number with only ten symbols.

10 For example, the value of the 9 in 92 is 90 (9×10), and the value of the 2 in 92 is 2 (2×1). However, in 29 it is reversed. The value of the 9 is just 9 (9×1), and the value of the 2 is 20 (2×10). This is why 92 is different from 29, although both have the same digits!

Having the same rules and symbols is great. It makes it easy to talk about numbers. It almost looks like there is one math language for the whole world. You don't need to learn it again in another country. $2 + 2$ equals 4, wherever you are.

The Hindu-Arabic numeral system

- includes ten symbols: 1, 2, 3, 4, 5, 6, 7, 8, 9, and 0.
- is the most common numeral system used today.

STOP & THINK

Illustrate What is the value of the 4 in 423?

Place Value Chart for the number 4,521,392

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
4	5	2	1	3	9	2
Place Value of 4 =	4000000					
Place Value of 5 =	500000					
Place Value of 2 =		20000				
Place Value of 1 =			1000			
Place Value of 3 =				300		
Place Value of 9 =					90	
Place Value of 2 =						2

→ 4 5 2 1 3 9 2

There is just one little problem. Although most of us use the same symbols to write numbers, we use very different words for these numbers. This is because we speak different languages. Look at the number words for 0–10 in Table 1. These number words differ a lot between languages. It is important for young children to know the names and the **meanings** of the numbers 0–10 in their language. And learning eleven number words is equally hard no matter what language they speak.

The number words for larger numbers can be very different in different languages. In some languages, the names for multi-digit numbers are **clear** and regular. Mandarin is one of these languages. The Mandarin number word for 29 means “two-ten-nine.” The number word for 97 means “nine-ten-seven.”

Scientists discovered that working with multi-digit numbers is easier for children who speak a language with clear number words. However, not all languages have clear number words. What do unclear number words look like? Look at the words for the

STOP & THINK
Compare
 Which number words for the numerals 0–10 are the same or similar across languages?

	Mandarin	English	German	Hindi	
0	líng	zero	null	shuniye	0
1	yī	one	eins	ek	1
2	èr	two	zwei	do	2
3	sān	three	drei	teen	3
4	sì	four	vier	chaar	4
5	wǔ	five	fünf	panch	5
6	liù	six	sechs	chah	6
7	qī	seven	sieben	saat	7
8	bā	eight	acht	aath	8
9	jiǔ	nine	neun	nao	9
10	shí	ten	zehn	das	10

Table 1: Number words 0–10 in different languages

number 97 in Table 2. These number words are really complicated. Other numbers are also complicated. Hindi includes a few number words that use subtraction instead of addition! For example, the number word for 29 is “unatis.” It means “one before thirty” (30 – 1).

The teen numbers (11–19) are especially difficult to learn in many languages. Isn’t “one-ten-two” clearer to say than “twelve” for 12? “Twelve” is a new word. “One-ten-two” uses a rule. Saying “fourteen” instead of “teenfour” is also not clear. Why do we sometimes **switch** the **order** of numbers?

STOP & THINK
Give examples What is an example of a clear number word? What is an example of an unclear number word?

	Mandarin	English	German	Hindi	
11	shí yī [ten one]	eleven	elf [eleven]	gyaarah [oneteen]	11
12	shí èr [ten two]	twelve	zwölf [twelve]	baarah [twoteen]	12
13	shí sān [ten three]	thirteen	dreizehn [three ten]	tehrāh [thirteen]	13
16	shí liù [ten six]	sixteen	sechzehn [six ten]	saulah [sixteen]	16
17	shí qī [ten seven]	seventeen	siebzehn [seven ten]	satrah [seventeen]	17
20	èr shí [two ten]	twenty	zwanzig [twenty]	bees [twenty]	20
21	èr shí yī [two ten one]	twenty-one	einundzwanzig [one and twenty]	ikis [one and twenty]	21
29	èr shí jiǔ [two ten nine]	twenty-nine	neunundzwanzig [nine and twenty]	unatis [one before thirty]	29
48	sì shí bā [four ten eight]	forty-eight	achtundvierzig [eight and forty]	adtaalis [eight and forty]	48
75	qī shí wǔ [seven ten five]	seventy-five	fünfundsiebzig [five and seventy]	chayahatar [five and seventy]	75
97	jiǔ shí qī [nine ten seven]	ninety-seven	siebenundneunzig [seven and ninety]	sataanave [seven and ninety]	97
100	yī bǎi [one hundred]	one hundred	(ein)hundert [(one) hundred]	ek sau [one hundred]	100

Table 2: Number words greater than 10 in different languages

In English, only a few numbers (thirteen to nineteen) are switched. In other languages, such as German or Arabic, most two-digit numbers are switched. For example, in German, 97 is “siebenundneunzig.” It means “seven-and-ninety.” Larger numbers are even more **confusing**! The German number word for 234 means “two-hundred-four-and-thirty.” The digit on the left is named first. Then the digit on the right is named. Finally, the one in the middle is named. Complicated, isn’t it?

Children who speak languages with switched number words have a hard time with multi-digit numbers. German has switched number words. Japanese does not. German children make many more mistakes when they write numbers than Japanese children do. About half of the errors¹ German children make are switching mistakes. For example, when they hear “five-and-forty,” they often write 54 instead of the **correct** number, 45. So a child who learns a clearer number word system has an easier time learning numbers.

We use numbers and number words every day. It is fascinating² to see how languages name multi-digit numbers. Although number words differ, in most cases they follow specific rules. It’s something most people never think much about, but it’s complicated enough to **cause** lots of errors for children learning languages with unclear number words. Once you know the facts about clear and unclear number words, $2 + 2$ and 7×8 don't seem so basic anymore!

2 3 4
zwei hundert vier und dreißig
(two hundred four and thirty)

STOP & THINK

Summarize Why do German children make more mistakes when they write number words than Japanese children?

¹errors mistakes

²fascinating very interesting



A Thai pharmacist uses a homemade abacus measuring 5.5 meters (18 feet). It may be the world’s largest abacus.

Close Read

Work with a partner.

1. Determine the meanings of your underlined words and phrases.
2. Discuss the question:

Why are some number words difficult to learn?

Apply the Strategy: Interpret Charts and Tables

Review Table 1 in the text. Answer the questions.

1. What is the table title or caption?	
2. What information do the labels provide?	
3. Which lines of the text does the table support?	
4. Which word, phrase, or sentence in the text explains the purpose of the table?	
5. How does the table help you understand the text?	

Understand

Read each statement. Write *C* for clear number words, *U* for unclear number words, or *B* for both clear and unclear number words.

1. ____ Are more complicated
2. ____ Are written with symbols
3. ____ Can be single-digit or multi-digit numbers
4. ____ Don't switch the order of numbers
5. ____ Make it harder to learn numbers
6. ____ Are the only kind of number words in Japanese

Read Again and Analyze

Read the text again and respond to the questions. Use evidence from the text to support your responses.

1. **Focus** Why is the German number word for 234 described as “complicated”?
2. **Differentiate** Which languages discussed in the article have unclear number words? Which have only clear number words?
3. **Conclude** What effect do unclear number words have on children?
4. **Relate** What should teachers know about unclear number words?
5. **Outline** What rules do the English “teen” number words (13–19) follow?

Share Your Perspective

Discuss the questions in a small group.

1. What is interesting or difficult about learning math?
2. Is math easy or difficult in the language you learned/are learning it in? Why?
3. When is math used outside of math class? Give three examples.

Reflect

How does “Learning Math in Different Languages” help you understand the effect words can have? With a partner, use some of the words to write sentences about the text.

Nouns	Verbs	Adjectives
effect meaning order rule	cause communicate switch	clear confusing correct negative positive

Discussion Frames

Learning math is interesting/difficult because ...

Math is easy/difficult in English/Spanish/... because ...

We use math outside of math class when we ...

Shakespeare's Impact on English



A Shakespeare fan celebrating his 450th birthday in Bryant Park, New York City

First Thoughts

Read the sentence that includes the phrase “have a heart of gold.” With a partner, discuss the idiom. Then write a sentence or two describing someone you know who “has a heart of gold.”

*My uncle **has a heart of gold.** He helps everyone in the neighborhood.*

Viewing Skill: Understand Key Concepts

It's important to understand the key concepts in a video. One way to do this is to identify and define important words or phrases. When you don't understand them, listen and watch for examples or definitions and note them. Determining the meaning of these key words or phrases will help you better understand the key concepts.

Example: *have a heart of gold = to be very kind, good*

Apply the Skill

▶ 4.1 Watch the video. Listen for these phrases. Write their meanings.

1. break the ice _____
2. go on a wild goose chase _____
3. see ... in your mind's eye _____
4. too much of a good thing _____

Understand and Analyze

▶ 4.1 Watch again. Answer the questions. Support your responses with evidence from the video.

1. **Explain** Why is the knock-knock joke at the beginning of the video clever or funny?
2. **Summarize** What effects has Shakespeare had on the English language?
3. **Deduce** Shakespeare lived more than 400 years ago, but people still use his words and perform his plays. What does this tell you about language?

Share Your Perspective

Discuss the questions in a small group.

1. Which of Shakespeare's idioms reminds you of a situation you have experienced? Explain the situation.
2. What words or phrases were created in your lifetime? Where did they come from?

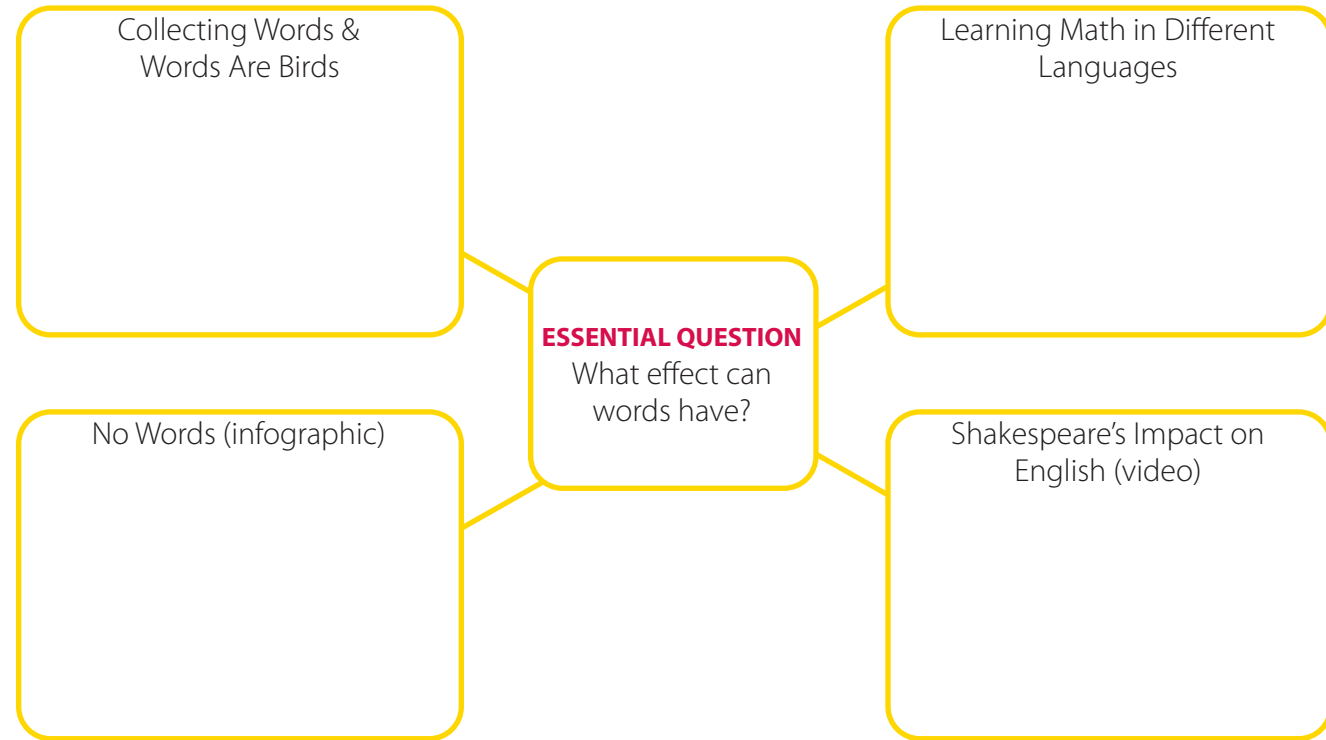
Discussion Frames

The idiom “...” reminds me of a time when ...

An example of a new word or phrase created in my lifetime is ...

Reflect on the Essential Question

Think about the material in this unit. What effect can words have? Write your ideas in the idea web.



Discuss the Essential Question

Look at your ideas about the Essential Question earlier in the unit and your notes in the idea web above. How have your ideas about the Essential Question changed? What changed your ideas? Discuss your answers in a group.

Respond to the Essential Question

Write your response to the Essential Question.

Response Rubric
A good response will
✓ state your opinion
✓ provide support from the texts, the discussion, and your life
✓ use theme vocabulary

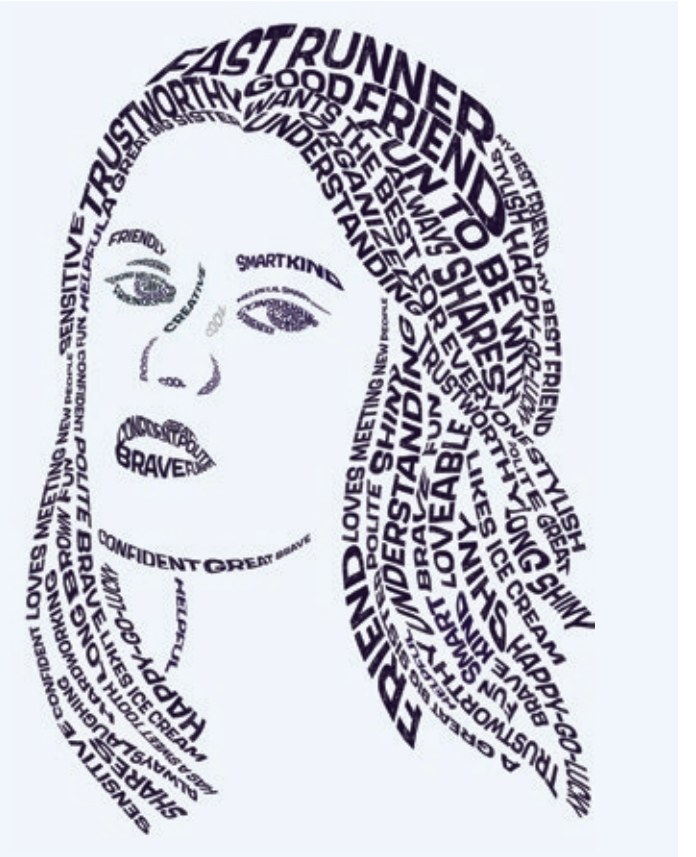
Theme Vocabulary

- cause (v.)
- communicate (v.)
- effect (n.)
- meaning (n.)
- negative (adj.)
- positive (adj.)

Option 1: Word Art

Words can describe anything, from numbers to the people you know. In this project, you will fill an image of someone you like, love, or admire with words that describe the person.

1. Create an outline of a favorite person's face. You can do this by tracing an image you have or by turning an image into line art using a computer program.
2. Think about words that describe the person. Include words that describe how the person acts, feels, and looks. Use a dictionary or thesaurus to find new words.
3. Decide whether you will use many words or repeat only a few words on your picture.
4. Plan where the words will go on the face: hair, eyes, lips, and so on.
5. Use a pencil to draft your picture. Use a pen to finalize your picture.
6. Share your finished product with the class. Give examples of the words you used. Explain why those words describe the person.



Option 2: Play with Words

Write a sentence that uses every letter of the alphabet at least one time.

Example: *The quick brown fox jumps over the lazy dog.*

1. Write a sentence with several adjectives or adverbs.
2. Identify the letters you've used in the sentence.
3. Revise the words in your sentence until all letters of the alphabet are included.
4. Read your sentence to a partner. Check that you have a subject and a verb and that the grammar and punctuation are correct.
5. Count the letters in each of your sentences. Determine which one of you used the fewest number of letters in your sentence.

Assignment: Write a Poem

Poetry is a type of literature that connects to people’s thoughts and feelings. In this assignment, you will write a poem that includes your thoughts and feelings about words, language, or numbers.

Your poem should have at least ten lines and include the following:

- a title that connects to the theme and content of the poem
- at least two stanzas
- your thoughts and feelings about words, language, or numbers
- at least two relative clauses

Explore the Model

Read the model. Look at how the poet organized the poem and developed a theme. Then answer the questions.

1. How many stanzas are there? _____ How many lines? _____
2. What is the theme of the poem?

Language for Writing

Read the model again.

1. Underline the relative clauses in stanzas 2–4. Circle the relative pronouns at the beginning of each relative clause.
2. The writer includes several examples for each type of word she likes. List the words that belong to each group.

Words from Other Languages	Soft, Cozy Words	Long, Important Words

3. Look at the example of alliteration in the model. Write words from another line in the poem that repeat the *r* sound.

r: _____, _____, _____



Friends having ice cream with a view of the Charles Bridge in Prague, Czechia

Word Love

- The poet connects the title to the theme of the poem. → I like words that are translated *Zmrzlina*, which is Czech for ice cream *Sirimiri*, which is Spanish for a very light rain *Nakakapagpabagabag*, which is Tagalog for causing worry
- The poet organizes the poem into four stanzas. → I like soft, cozy words that make me feel safe Words like *sheep*, *sleep*, and *seashore*
- The poet uses relative clauses to give more information. → I like long, important words that make me look smart Words like *advanced*, *colleague*, and *diploma*
- The poet lists examples of the words. → I like poets who write beautiful words Words that dance daintily down the page Words that make my heart run and race rapidly I like poets who make me cry Even when I don't understand all their words
- The poet uses alliteration, which is the repetition of sounds at the beginning of words. For example, *dance*, *daintily*, and *down*.

Plan Your Writing

Complete the outline.

- Decide on the words, languages, or numbers that you want to write about.
- Include examples of words that belong in each group.
- Select words and ideas that support your theme.
- Add a title that connects to the theme and content of your poem.

Outline

Title:		
Theme (What message or lesson do you want your readers to learn?):		
Group 1:	Group 2:	Group 3:
Examples of words:	Examples of words:	Examples of words:

Write and Revise

Write Use your outline to write a first draft.

- Use relative clauses to describe the groups of words and your theme.
- Try using alliteration, or repeating the sounds at the beginning of words.

Revise Exchange poems with a partner. Using the checklist, review your partner's work and give feedback. Use feedback from your partner to revise your draft.

<input type="checkbox"/>	Does the writer include a title?
<input type="checkbox"/>	Does the writer describe his or her thoughts and feelings about words, languages, or numbers?
<input type="checkbox"/>	Does the writer connect his or her thoughts and feelings to examples of words, languages, or numbers?
<input type="checkbox"/>	Does the writer include at least ten lines and two stanzas?
<input type="checkbox"/>	Does the poem have a theme? What is it?

Proofread Check the poem for accidental spelling and punctuation errors. Make edits to correct those errors.

Publish

Share your poem. Read two of your classmates' poems.

Present Your Poem

You will recite your poem. When you recite a poem, you read it with emotion or expression.

Prepare to share your poem:

- Underline the words in the poem that you want to read with feeling. Decide which emotions to express as you read. (Will you read the words with a happy voice, a sad voice, or another emotion?)
- Decide where you will pause as you read. Poets usually pause at the end of each idea instead of at the end of each line.
- Share your poem in a small group.
- Listen carefully to each person's poem.
- After each person has shared his or her poem, give positive feedback. You might comment on the specific words in the poem, the theme, or the feelings that the person expressed.

Feedback Frames

I like the stanza about ...

You could add examples such as ... and ... to support your ideas.

I like how you express the theme in the line about ...

TIP

Check that you've written your poem in lines and stanzas. Check that your relative clauses start with the correct relative pronoun.



TAKE ACTION



Linguist K. David Harrison (right) with Abamu Degio (left) and Anthony Degio (center), speakers of the endangered language Koro

Exploring Language 4.4



EXPLORER IN ACTION
K. David Harrison
is a professor of linguistics.

About half of the world's 7,000 languages will disappear in the next 100 years. Without these languages, we lose not only words, but also important knowledge about the world. K. David Harrison and other linguists record, translate, and study conversations of endangered languages. This helps them understand not only the words and grammar, but also a community's values and knowledge. For example, the Inuit people have more words for sea ice than scientists do. This tells linguists that sea ice is important to the Inuit people and they can describe it better than most people in the world. Documenting their language helps us better understand the natural world they live in. Recording dying languages will help ensure that we do not lose information about the world.

4.2 Answer the questions. Then watch the video to learn more.

- Harrison studies languages in order to _____
_____.
- If we lose a language, we also lose _____
_____.

How Will You Take Action?

Choose one or more of these actions to do.

Personal

Collect words important to your culture.

- Think about how your culture is different from other cultures.
- Brainstorm three to five words that represent these differences.
- Use pictures and symbols to illustrate your words on a poster. Present your words to a small group and explain their cultural importance.

School

Survey language use.

- Conduct a survey to determine how many languages students in your school speak. Include questions about when and for what purpose they speak each language.
- Distribute the survey to each class.
- Have a small group present the results of the survey.

Local

Share the poems and stories of local writers and storytellers.

- Find someone in your community who likes to write poetry or tell stories.
- Ask that person, "What kinds of words do you like to use in your poetry/stories?"
- In class, present a poem or story written by the person, and summarize the feelings he or she shared about language.

Global

Research an endangered language.

- Identify a language with few speakers in your country or in a part of the world you are interested in.
- Research the language. Identify why the language is dying and how many speakers are left. Learn a few words of the language.
- Share the information you learned with your class.

Reflect

Reflect on your Take Action project(s). Then complete the sentences.

- My project(s) was/were successful because _____
_____.
- One thing I wish I had done differently is _____
_____.
- Because of what I learned in this unit, one thing I will do is _____
_____.