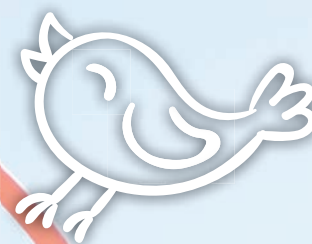
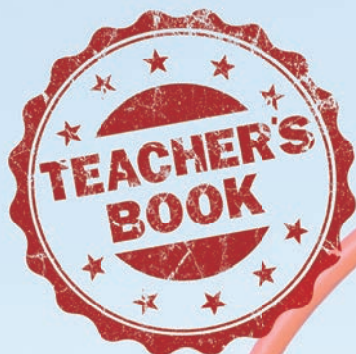


NEXT STATION

4

CLIL BOOK

Ana Elisa Martins



CONTENTS

SUBJECT

THEME

LANGUAGE

MY LEARNING GOALS

UNIT
1

FRACTIONS AND PERCENTAGE

Math

Numbers

- fractions (fraction of a whole, fraction of a set, equivalent fractions, numerator, denominator, one half, one third, one fourth, one fifth, two ninths)
- percentage
- She ate $\frac{2}{8}$ of the pizza.

Calculate percentages using personal strategies, mental math, and / or a calculator

PAGES 4-9

UNIT
2

POLLUTION

Geography

Nature, Environments, and Quality of Life

- renewable energy, littering, deforestation, recycling, burning of fossil fuels, green area
- pollution (air pollution, water pollution, land pollution, carbon dioxide, gas, artificial fertilizers, dumping of litter, chemical substances)
- There are three main forms of pollution.

Recognize and compare forms of pollution

PAGES 10-15

UNIT
3

BODY FUNCTIONS

Science

Life and Evolution

- living organisms (cell, tissue, organ, system, organism)
- respiratory system (nose, mouth, trachea, lungs, bronchi, diaphragm, alveoli)
- digestive system (esophagus, stomach, small intestine, large intestine)
- Teeth chew the food and saliva helps dissolve it.

Understand why the respiratory and digestive systems are important for the body

PAGES 16-21

UNIT
4

CITIZENSHIP

History

People and Culture: My Place in the World and My Social Group

- citizenship (rights, duties, vote, pay taxes, democracy, freedom, equality, fraternity, Code of Hammurabi)
- Citizens have rights, duties, and responsibilities.

Associate the concept of citizenship with respect for diversity and human rights

PAGES 22-27

UNIT
5

MARTIAL ARTS

PE

Combat Sports

- Martial arts (Karate, Aikido, Judo, Capoeira, Taekwondo, self-defense, competition, mental and spiritual development)
- Capoeira (*roda*, *berimbau*, drums, dance, acrobatics, music)
- Taekkyeon (low kicks, jump)
- Martial arts can be practiced for self-defense, competition, or mental and spiritual development.

Recognize the difference between martial arts and other body practices

PAGES 28-33

UNIT
6

TYPES OF CITIES

Geography

Connections and Scales

- landscapes (rural, urban)
- types of cities (emergent, planned)
- functions of cities (financial center, security, religious center, government administration, manufacturing center, service center)
- urbanization (employment and education opportunities, social services, urban growth, housing, water supplies, sanitation, health care facilities, living conditions)
- Cities can develop differently. / London is known for its function as a financial center.

Identify the types and functions of cities analyzing social, economic, and environmental changes

PAGES 34-39

SUBJECT	THEME	LANGUAGE	MY LEARNING GOALS
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UNIT 7
GRAPHS
PAGES 40-45

Math	Statistics and Probability	<ul style="list-style-type: none"> graphs (line graph, bar graph, quantities, pattern, trend, data, values, axis, points) Is the population going to increase or decrease? / This graph shows how data sets vary over time. 	Read, interpret, and create graphs
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UNIT 8
A HEALTHY DIET
PAGES 46-51

Science	Life and Evolution	<ul style="list-style-type: none"> food groups (nutrients, nutritional properties) health (muscle, infections, bones, teeth, healthy, illness) vitamins and minerals (diseases, metabolism, calcium, iron, zinc) Protein builds muscle, helps us grow, and fights infections. / Dairy products make our bones and teeth healthy. 	Identify healthy habits
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UNIT 9
GYMNASTICS
PAGES 52-57

PE	Gymnastics	<ul style="list-style-type: none"> abilities (do a cartwheel, do a handstand, do a somersault, do a split, juggle) gymnastics (rhythmic, acrobatic) gymnastic equipment (apparatus, rope, hoop, ball, ribbon) movements in gymnastics (cartwheel, backward somersault, straight jump, round off) She / He can do a split. 	Understand basic concepts related to gymnastics
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UNIT 10
ART AND TECHNOLOGY
PAGES 58-63

Art	Integrated Arts	<ul style="list-style-type: none"> visual arts (painting, drawing, sculpture, photography), applied arts (architecture, fashion design, wood crafts), performing arts (dance, singing, films), 3D printed art, virtual Internet art and electronic art, Internet art, augmented reality, stop motion Technology has provided artists with new tools for expression. 	Explore different technological resources
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ICONS



ZOOM IN

Activities to interpret the picture of the unit opener pages



LISTEN

Audio tracks to practice listening skills



THINK



BE



LEARN



ACT



COLLABORATE / COMMUNICATE


UNIT

1

FRACTIONS AND PERCENTAGE.





New Zealand is one of the world's top kiwifruit exporters. 

Did you know that New Zealand's national bird is the kiwi?
Children's own answers.
Why do you think the fruit is named after this bird? *It looks like the bird. It's small, brown, and round.*

Look at the picture.

How many whole kiwifruits can you see?
Three.

How many kiwifruit halves are there?
Three.

Which fraction represents a half?

$\frac{1}{2}$

$\frac{1}{4}$

$\frac{1}{5}$





Fraction of a Whole

Fractions represent the number of **equal parts** of a **whole**.



This is an entire kiwifruit. It is represented by the number **1** (a whole).



If we divide the fruit into two equal parts, one of these parts is **1/2**.



If we divide the fruit into four equal parts, one of these parts is **1/4**.

The **numerator** shows how many parts we have.
The **denominator** shows how many equal parts the whole kiwifruit was cut into.

$\frac{3}{5}$ ← numerator
← denominator



one half



one third



one fourth or one quarter



one fifth

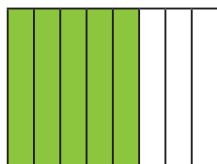
2 Match each fraction with its proper visual representation.

- ~~4/5~~ 3/9 1/4 5/6 5/8



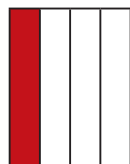
1 four fifths

4/5



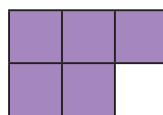
2 five eighths

5/8



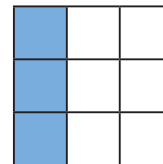
3 one fourth

1/4



4 five sixths

5/6

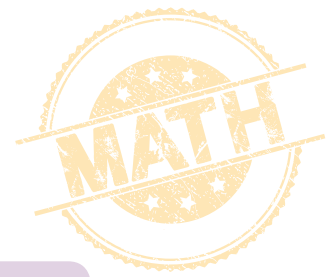


5 three ninths

3/9

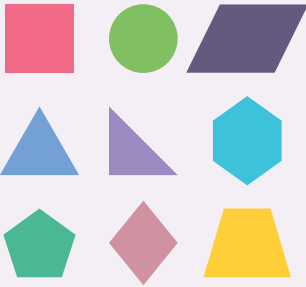


3 Listen and read.



Fraction of a Set

Fractions are also used to represent **parts of a set**.



Here is a set of 2D shapes.

How many shapes are triangles?

2 out of 9 are triangles. We can write this as a fraction: **2/9** (two ninths)

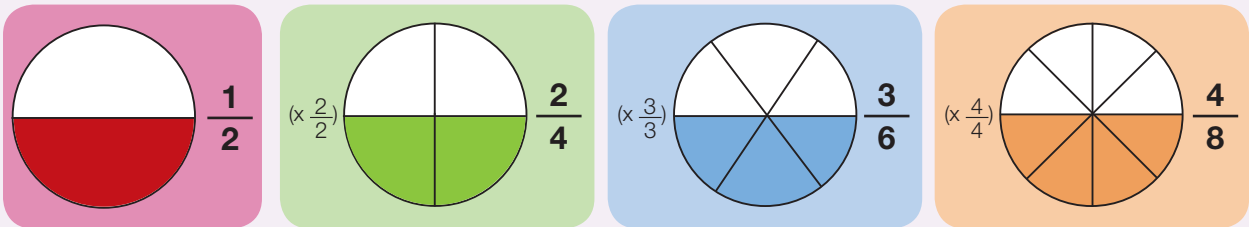
How many shapes have four sides?

4 shapes out of 9 = **4/9** (four ninths)

Equivalent Fractions

Some fractions are equivalent.

Equivalent fractions are fractions that represent the same value or proportion of the whole.



In order to get an equivalent fraction, multiply the numerator and denominator by the same number. The fractions above are represented using a circle, also called a **pie chart**.



4 Solve the problems.

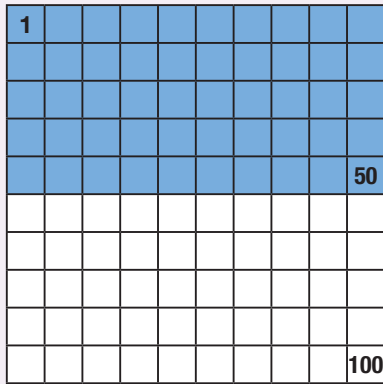
- 1 Katie opened a pizza box. Inside, there was $\frac{6}{8}$ of a pizza. She ate $\frac{1}{2}$ of what was left. How much of the whole pizza did she eat? *She ate $\frac{3}{8}$ of the pizza.*
- 2 Julia bought 9 boxes and used $\frac{1}{3}$ of them to organize her materials. James bought 6 boxes and used $\frac{2}{3}$ of them. Who used more boxes? *James.*
- 3 A student thinks that $\frac{6}{9}$ is more than $\frac{2}{3}$, since 6 and 9 are more than 2 and 3. Is this true or false? *False.*



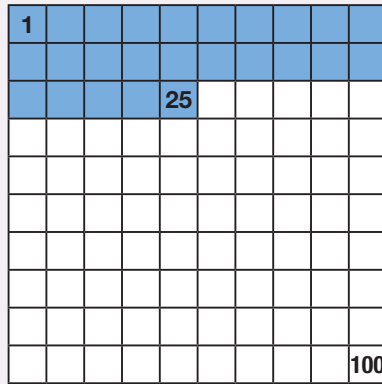
5 Listen and read.

Percentage

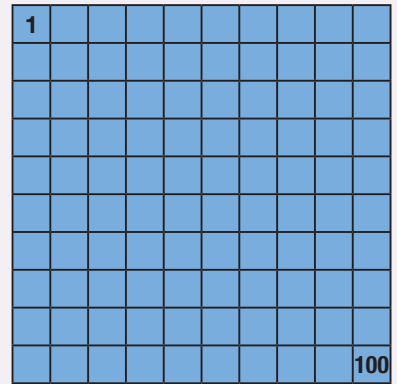
A **percentage** is a number or ratio expressed as a fraction of 100.



50% means 50 parts of 100.



25% means 25 parts of 100.



100% means the whole.

A **percentage** can be expressed as a **fraction** and vice versa.

A half can be written 50% or $\frac{1}{2}$, for example.

If you want to calculate 20% of 80, first you transform the percentage into a fraction and then multiply it by 80.

$$\frac{20}{100} \times \frac{80}{1} = \frac{1600}{100} = 16$$

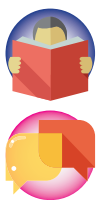
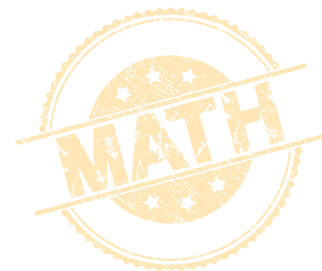
6 Fill out the table.

fraction	15/100	25/100	50/100	100/100
percent	15%	25%	50%	100%



7 Solve the problems below.

- William's allowance is \$120 per month. He spends 40% on food. How much does he spend on food every month? **\$48.**
- The price of a hat has a 25% discount and is now \$15. What was the original price? **\$20.**



8 You are going to do a survey with your classmates.

1 Create a question. Look at the example:

What is your favorite season?

2 Write three answer options.

1 _____

2 _____

3 _____

3 Ask the question and organize the data.

- How many classmates chose answer 1?

What is the percentage? _____ And the fraction? _____

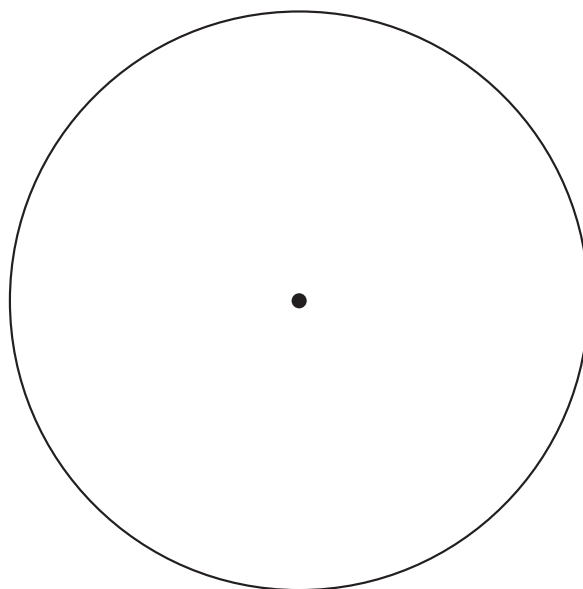
- How many classmates chose answer 2?

What is the percentage? _____ And the fraction? _____

- How many classmates chose answer 3?

What is the percentage? _____ And the fraction? _____

4 Create a pie chart and label it.

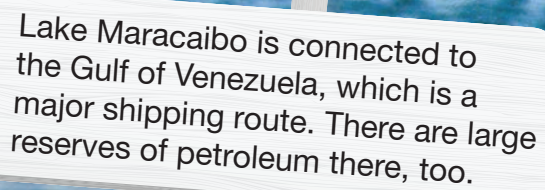


POLLUTION

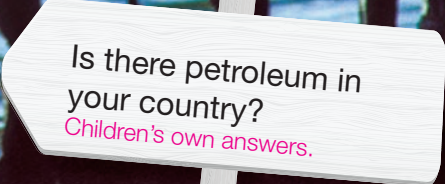




GEOGRAPHY



Lake Maracaibo is connected to the Gulf of Venezuela, which is a major shipping route. There are large reserves of petroleum there, too.



Is there petroleum in your country?

Children's own answers.



Look at the picture.

What can you see in the picture?

Oil towers and dirty birds.

What is the relationship between them?

Pollution in the lake comes mainly from oil extraction, which influences the lives of birds in the area.



ZOOM
IN