

Get Reading!

C

# New School: Day One

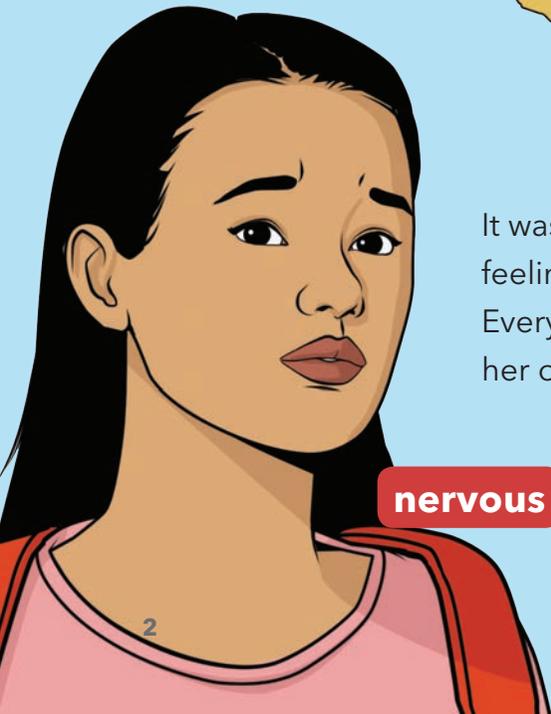


**VISTA**<sup>®</sup>  
HIGHER LEARNING

Boston, Massachusetts

ELA

Rita moved to her new home in Texas just a few months ago. She **immigrated** to the United States from Mexico with her mother. They found a nice house in a quiet **suburb** of Dallas and settled in very nicely. There were a lot of young people in her new neighborhood, but Rita hadn't gotten to know any of them yet. Everything had changed, and now she was going to a new school.



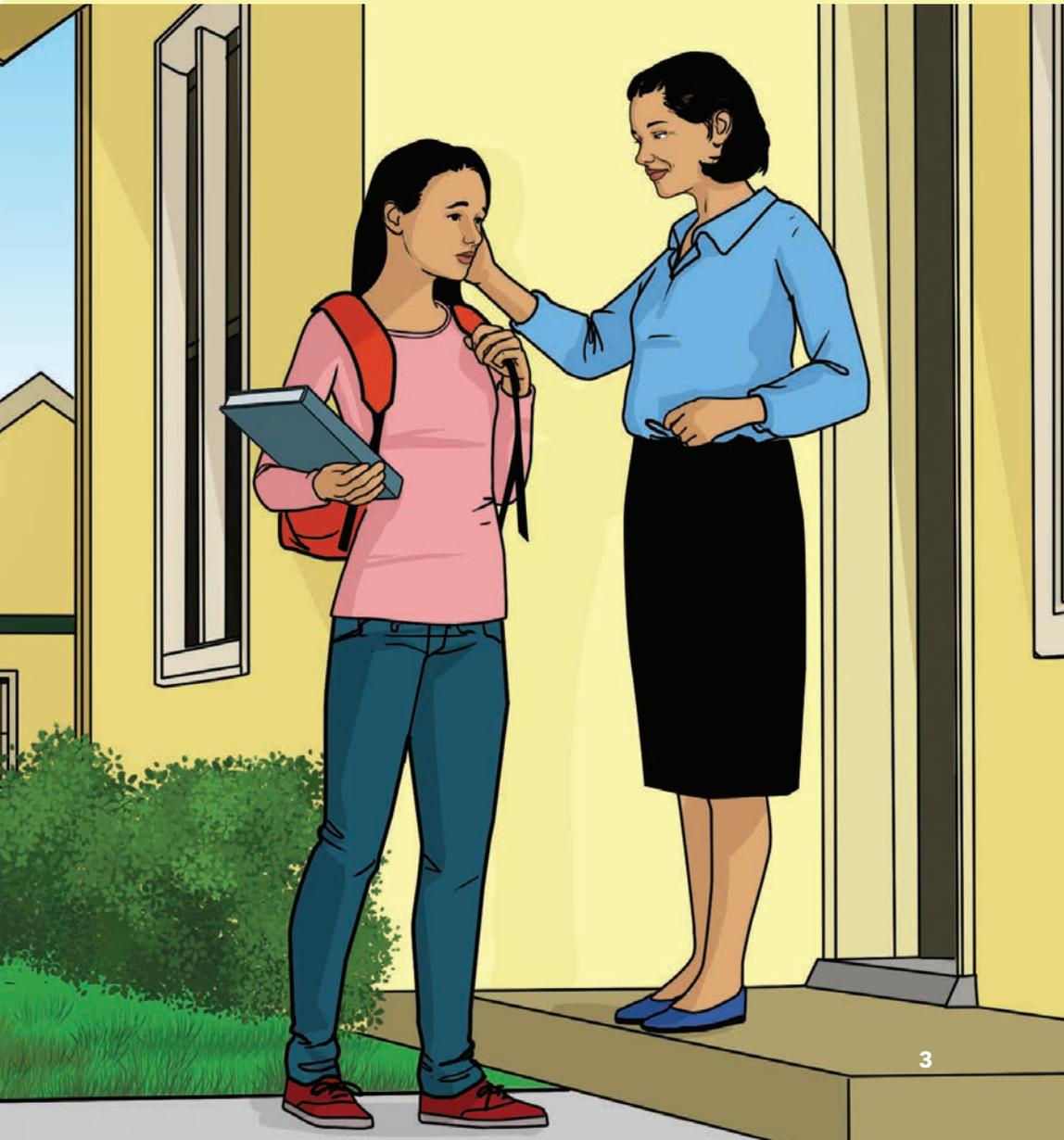
It was the first day, and Rita was feeling scared and nervous. Everything was so different from her old life!

**nervous**

As Rita was leaving, she paused and looked at her mother. "I'm really nervous," she admitted.

"I know," her mother answered. "But you're strong. Remember when you were a little girl? You used to say something special when you had to do something difficult."

Rita smiled. She remembered.



"I can do it!" she joked putting her hands on her hips.  
"I'm Super Rita!"

The joke made both Rita and her mother laugh. Then, her mother looked at her and said, "You can do it, Super Rita. Day one at your new school might not be so bad after all."

Rita smiled and replied, "We'll see." Then she waved her hand and walked out the door.





When Rita arrived at her new school, she was **overwhelmed** by how big it was! There were several long hallways with lots of doors. There were also students hanging out and talking everywhere. "Do they *all* know each other?" she wondered. Rita started getting really nervous, but she stopped herself. "OK, calm down," she thought. "I just have to find the school office; I can do that. No problem. Now, where is it?" Rita looked around. Then, she **took a deep breath** and walked down the crowded hallway.



## The Beautiful Blue Balloon

Do you sometimes feel **anxious** before doing something new? Maybe on your first day of a class or before a big presentation? There are many times in life when you might feel a little nervous, anxious, or even scared. So here's a secret tip: It's all in the breathing!

Try doing the following exercise the next time you're feeling anxious, nervous, or afraid. By following these easy steps, you'll be ready to do your best in no time!



**Step 1:** Find a quiet place to be by yourself, like an empty classroom or a quiet corner.

**Step 2:** Sit down in a chair or on a mat and close your eyes.

**Step 3:** Imagine that there is a beautiful blue balloon in your stomach.

**Step 4:** Breathe in slowly and deeply through your nose. Imagine the blue balloon is getting full of air as you breathe.

**Step 5:** Breathe out slowly from your mouth. Imagine that the blue balloon is getting smaller and smaller as you let the air out of your body.

**Step 6:** When the balloon is empty, say the number "10."

**Step 7:** Repeat steps four through six ten times, reducing the number you say each time until you get to zero (10, 9, 8, 7...).

**Step 8:** Open your eyes and say to yourself, "I am ready!"

**Step 9:** Go and do your best!

Rita soon found the office at the end of the hall. The school secretary was standing behind a long counter.

"Good morning!" she said.

Rita returned the greeting and said, "I'm Rita Flores. It's my first day. Where should I go?"

"Welcome, Rita!" replied the secretary. She looked on her computer and then gave Rita some papers and a map. "You're in class 11A, room 18," she explained. "You'll have to find it yourself. Just follow the map!"



Rita checked her watch and knew she had to move quickly. Class started in five minutes! She began to feel nervous again. She took another deep breath. "I can do it!" she said to herself.

Several students **rushed** by. One boy almost hit her! He smiled and called, "Sorry!" Rita smiled back as he rushed away. Maybe her new school wouldn't be so bad after all....

Rita looked at her map. "OK," she said. "There's the music room, and there's room 18. So I go straight, then left at the gym."

She walked quickly down the hallway.





After a short time, Rita saw a big room with the door open. The gym! "I did it!" she laughed. Then, she looked inside. "Basketball!" she said excitedly. "Yes!"

Rita loved basketball and had played on a local team in Mexico. "Maybe I can join the team," she thought. She wanted to ask the gym teacher, but then she checked her watch. "I can't be late on my first day!" she thought and continued to rush down the hallway.



Rita looked at her map again. "OK, room 18. Where are you?" she said, looking around. Down the next hallway there were several doors. Some were open, some were closed. She looked carefully at the numbers above each. "There's room 15," she thought. "I'm getting closer."

She continued down the hall. "There's room 16, room 17, and... there it is! Room 18!"

Rita was so happy that she forgot her nervousness. "I did it!" she said and walked **confidently** toward the room.

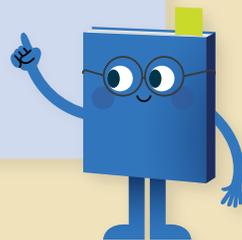


Before she walked in, Rita **hesitated**. She looked around the room. There were so many students! Some were standing, some were sitting, and almost all were talking and laughing with one another. It seemed like they were all friends. "And I don't know anyone," thought Rita sadly.

She started to feel nervous again. Then, she stopped herself and focused on her mother's words. "I can do it. I'm Super Rita!" she said. The thought made her laugh, and she walked into the classroom with a big smile on her face.

## KNOW IT ALL

Trying something new? Think of something happy or funny. It can make you forget about being nervous or scared.



Rita walked up to the teacher and said, "Hi. I'm Rita Flores. It's my first day here."

"Good morning, Rita," replied the teacher. "Welcome! Please take a seat."

Rita found an empty desk and sat down. She put her map into the pocket of her bag before placing her pencil and notebook on her desk. She wanted to be able to write down any important information she needed to know. She didn't feel nervous now. She felt ready and excited!

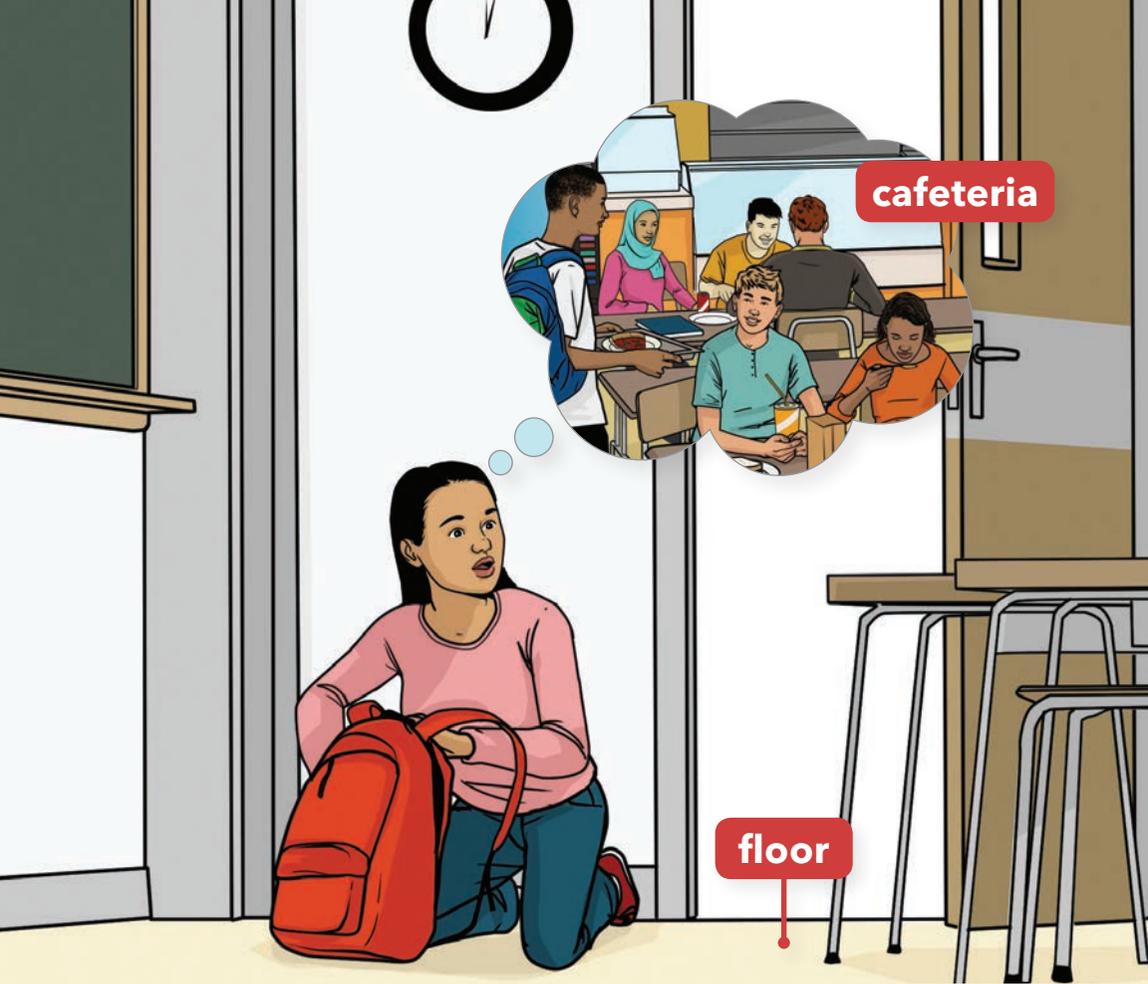




"I'm Mr. Curran," began the teacher. Then, he told the students about the school, its rules, and even what they were expected to do for homework. After that, he started talking about the **clubs** and activities at the school. Rita wrote everything down.

Soon it was time for lunch and the students started exiting the room. As they left, Mr. Curran announced something that made Rita pay attention. "Don't forget! Basketball practice is Monday at 3:00 P.M. **sharp!**"

"Perfect!" thought Rita excitedly as she wrote down the information.



Rita finished copying the details from the whiteboard into her notebook. She grabbed her bag and walked towards the door.

"OK. So now where's the cafeteria?" she wondered. "I'd better get my map," she thought. She reached into her bag and checked the pocket. The map wasn't there! She looked around the room in a **panic**. It wasn't on her desk or on the floor. It wasn't anywhere that she could see.

"Oh no!" she cried. "How could I lose my map on my first day?"



## The Finlay High School Times

# What a First Day!

Everyone has had a first day, right? Sometimes good, sometimes bad, but either way, we get through it. We asked a few students about their most interesting first day experiences, and this is what they said:



**Name:** Dave Jones

**Age:** 16

On my first day of high school, I met two people with **a lot in common!** My teacher **was taking attendance** and called out "David Jones?" I said, "Here!" But then I realized I wasn't the only one talking! There were two other boys there who had also answered, "Here!" There were three people named "David Jones" in my class! We all ended up hanging out together, and now everyone calls us "The Daves."



**Name:** Aisha Williams

**Age:** 17

I remember the exact date of my first day at my new school –Monday, September 4<sup>th</sup>. I had gotten to school early because I was worried I'd get lost. Nobody was there! No teachers. No students. So I thought, "OK. I'm just too early." So I waited. And waited. And waited. Then, I saw a security guard and asked him when the school opened. He laughed and said, "Sorry, but today is a holiday. School starts on Tuesday!" I was so **embarrassed!**



**Name:** Carlo DiStefano

**Age:** 16

Everybody gets new stuff for the first day of school, right? So I asked my mom for new shoes, and she got me these dress shoes. They were super **slippery**, but I had to wear them. And do you know what happened? I walked into the classroom, slipped, and fell right onto the teacher's desk! My books, papers, pens, and everything went flying. It was so embarrassing but funny at the same time.

Rita walked into the long hallway and looked both ways. There were only a few students who were far down the hall.

“OK. So no problem. I can do it,” she said to herself trying to calm down. “So, there’s the music room and the science room is next to that. . . so where is that cafeteria?”

She finally decided to turn left down the hallway. Then, she went straight and turned right down another hallway. There was no cafeteria. She walked and walked and walked. Finally, she stopped. She had to **give up**. “I am definitely lost,” she said to herself quietly. “New school, day one: total failure!”



*Rita thinks her first day has been a total failure. She thinks it has gone completely wrong.*



“What am I going to do?” thought Rita. Then she saw a girl walking towards her. She started to get nervous, but then she stopped and said to herself, “I can do it. I’m Super Rita.”

She walked over to the girl with a smile and said confidently, “Hi there. It’s my first day. Do you know where the cafeteria is?”

The girl smiled shyly and held up a paper. It was a school map!



"Hi, I'm Amira," the girl replied softly. "It's my first day, too. You can use my map if you want."

"Really? My name's Rita. Nice to meet you," said Rita.

"Nice to meet you, too," said Amira. "I'm really nervous. I don't know anyone here."

Rita smiled and gently took the map. "Yes, you do. You know me," she announced. "Now come on. Let's find the cafeteria together."

Rita and Amira worked together and were quickly able to find the cafeteria. "We did it!" they both cried out excitedly as they arrived.

Rita laughed and looked around. Suddenly, she noticed the boy who had run into her earlier. He was standing nearby and smiling. She waved. He waved back.

"Well," she thought to herself. "Mom was right again. This new school isn't going to be so bad after all!" Then, she smiled and walked over to meet another new friend.



New Message



To fernandezRosa@mx\*lingo.com

From ritashappy@mx\*lingo.com

Subject New School: Day 1

Hi Rosa,

How are you? How's life going with you guys? I hope school started OK. My first day here was hard! My new school is HUGE! And you know how I lose everything? I lost my map and couldn't find the cafeteria! I ended up having to ask someone. She was really nice, though. Her name is Amira. She's new, too. She's a lot like you—funny and kind. We're going to be on the basketball team together!

I also met this really nice guy. His name is Daniel. He's really friendly. Maybe you can meet him when you visit!

Now tell me about your first day. I want to hear everything, OK?

Miss you!

Rita



Send

**immigrate** to come to another country to live

**suburb** a small town where people live that is near a larger city where they work

**overwhelmed** having the feeling that something is too much to handle or deal with

**take a deep breath** to bring air slowly and deeply into the lungs, often done to relax

**anxious** nervous and worried

**rush** to move very quickly

**confidently** with a feeling of belief in oneself and one's abilities

**hesitate** to slow or stop because of a feeling of nervousness or uncertainty

**club** an organization of people with shared interests

**sharp** exactly at a certain time

**panic** with a feeling of fear that stops you from thinking clearly

**have (something) in common** to have characteristics or likes that are the same

**take attendance** to check who is in a group by calling out names from a list

**embarrassed** feeling very shy or bad about something that happened

**slippery** wet or smooth so that something slides easily

**give up** to stop trying

Get Reading! C

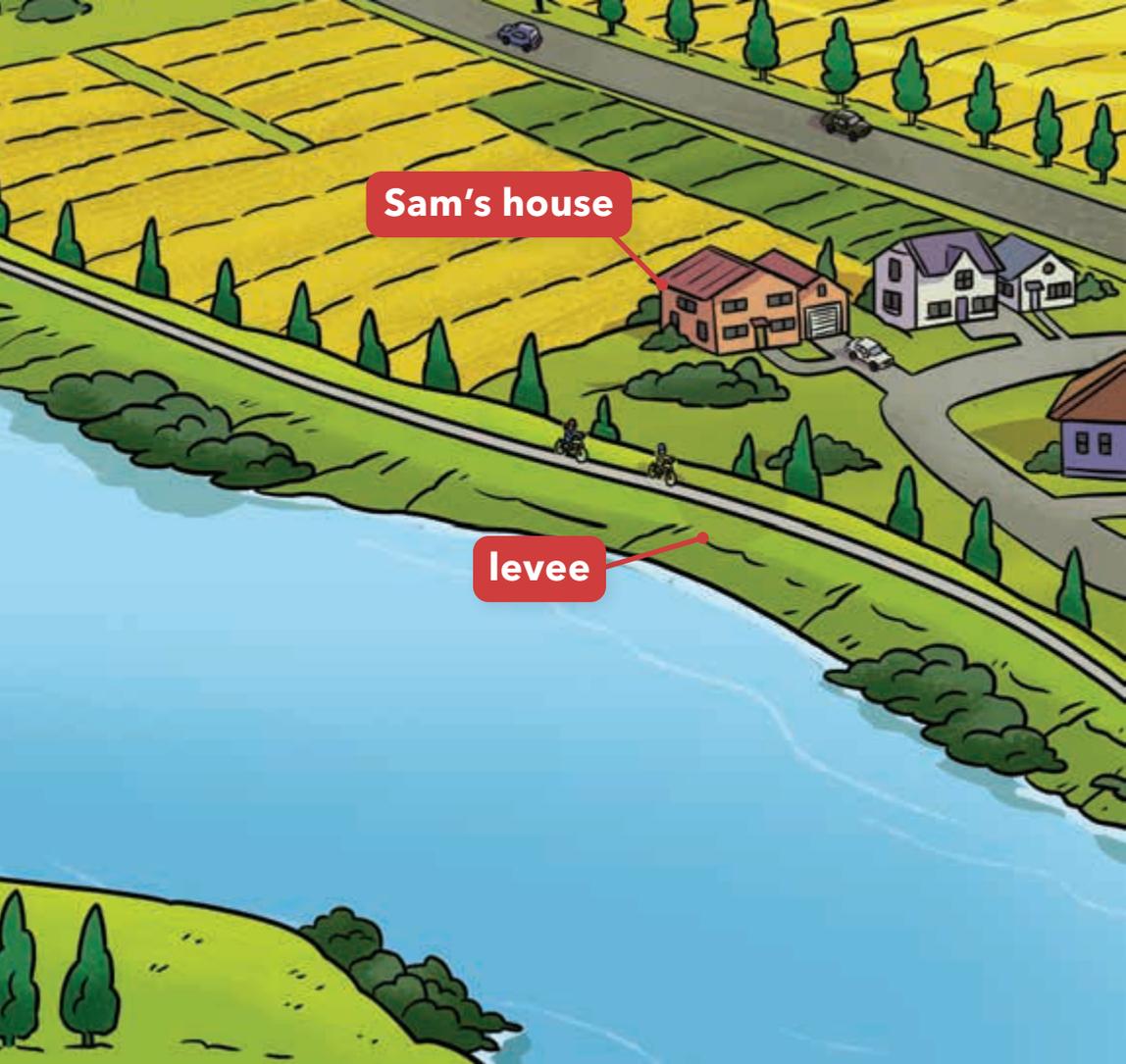
# RIVER DANGER



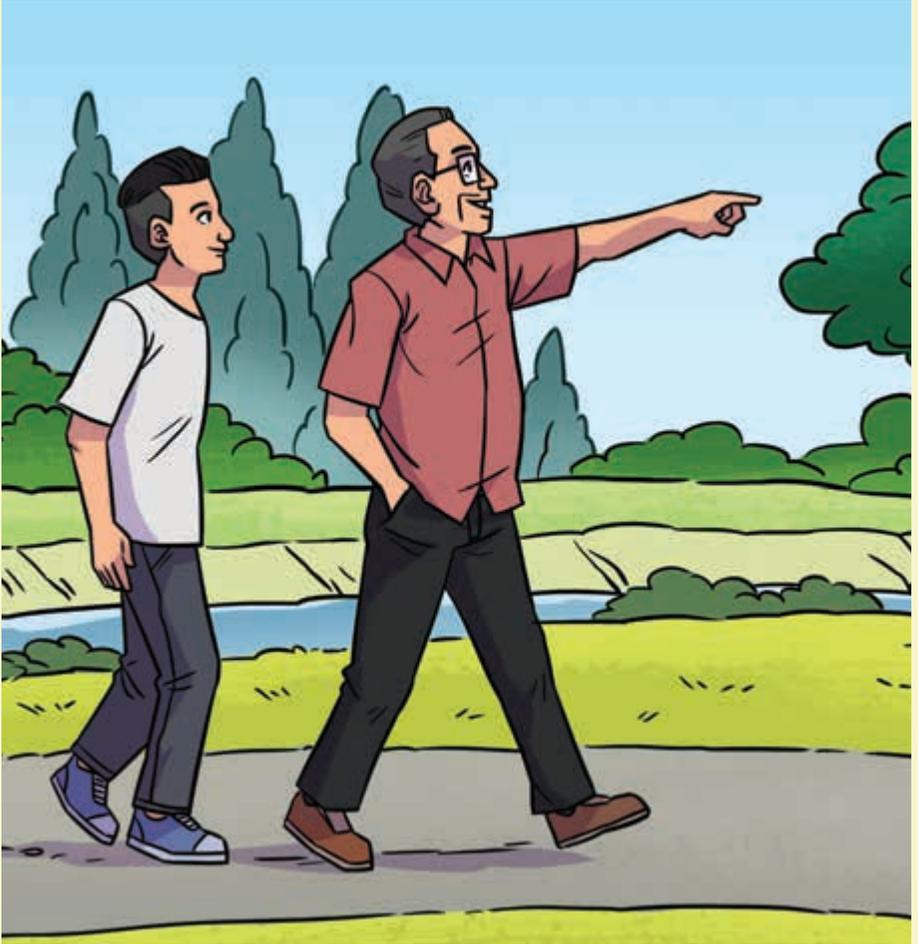
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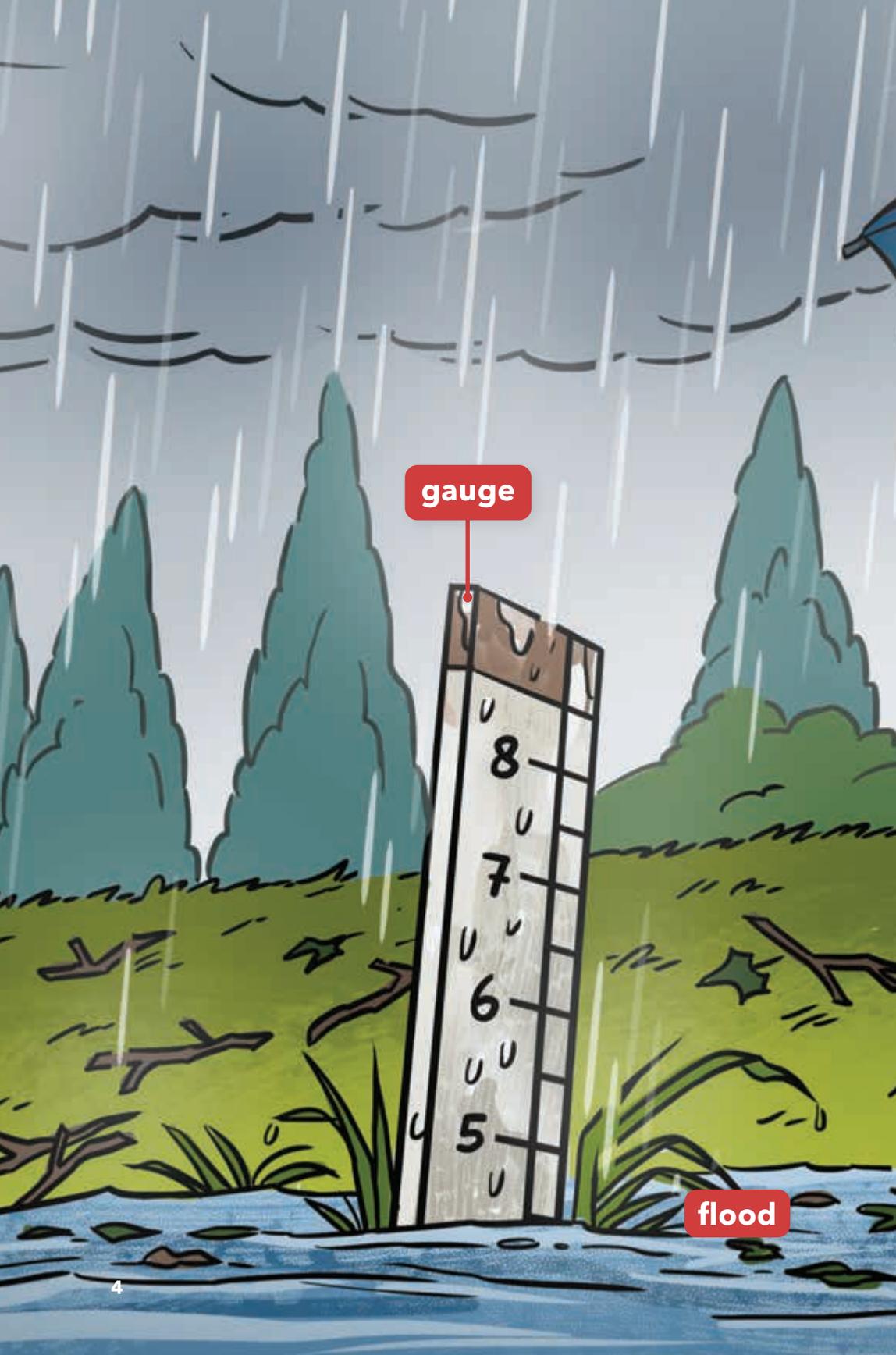
Boston, Massachusetts

**MATH**



Sam lives in a nice house next to a river in southern Texas. Many years ago, a tall levee was built nearby to protect houses by the river when the river flooded. Sam likes to walk along the top of the levee looking at the river below. Sometimes he and his father walk along the levee and look at the plants and animals that live near the river. Sam wants to be a biologist when he grows up. He finds the river very interesting as well as beautiful.





gauge

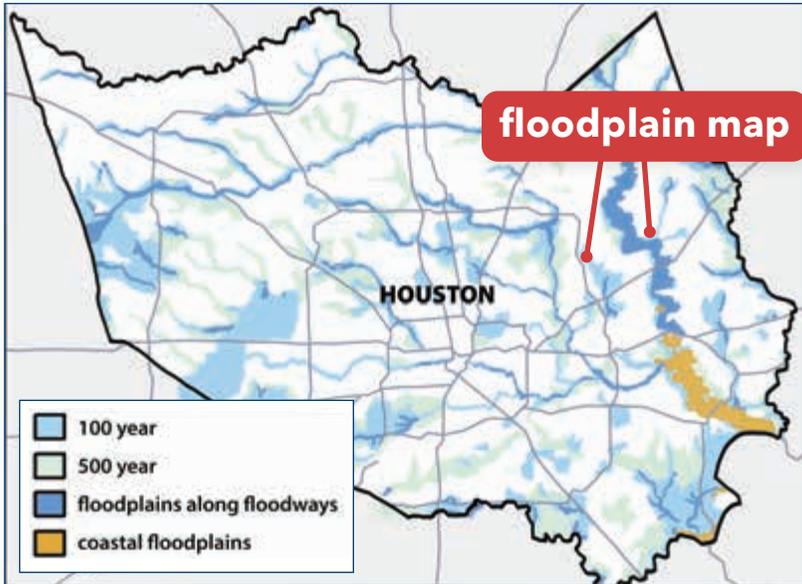
flood



The weather in south Texas is usually dry, but occasionally there are sudden, heavy rainstorms. When this happens, it can **cause** the river to rise very quickly. At those times, Sam and his family have always been grateful for the big levee that protects them from the rising water.

Sam always goes down to the river after a rainstorm. There is a **gauge** on the river, so he can easily measure the exact height of a flood. After a flood, leaves and branches on the levee also mark where the flood waters were the highest.

# Where, When, and Why *Rivers Flood*



The areas along any river are divided into floodplains. These show the places that will be covered in water if the river floods. They are often divided into different regions. Certain regions are more likely to be flooded than others. Some are called two-year floodplains. They have a 50 percent chance of being flooded every year, so they flood once every two years on average. Other places are called 100-year floodplains. They have only a 1 percent chance of being flooded every year, so they flood once every 100 years on average.

Defining floodplains is very difficult. Engineers must first **estimate** how often there will be a large amount of rain. Then, they must estimate how much of that rain will go into the river.

Often the ground will take in a lot of the rain. However, buildings and streets can prevent this from happening. When it does, more water flows into rivers.

Engineers must also estimate how quickly water will flow down a river. If a river flows quickly, then the water will be carried away and the river will not rise. However, if the river does not flow quickly, the water will build up. The river may rise very high.

The elevation of a place also affects the floodplain. An area that has a low elevation is already close to water level. It's likely to flood more easily. A place that has a high elevation will only flood if the river rises very high.



*This region has a low elevation. It is not much higher than the water level.*

Sam keeps a **journal** that he uses to note plants and animals he sees near the river. Every time there is a flood, he also **records** the date and the height of the flood.

One day Sam was reading his journal when he saw something interesting. The floods for the year seemed to be higher than they had been the previous year. It made him wonder if the heights of the floods were increasing. He decided to ask his father about it.



*The data was from the previous year. It was from the year before.*



Sam told his father about how the floods seemed higher and that he thought the heights were increasing. His father listened carefully, and then he said, "You need **statistics** to **support** your **claim**. If you really want to know the answer, look at your **data set**. What's the **mean** flood height for this year?"

Sam didn't know.

"What was the highest flood this year? What was the lowest?" his father asked. "What's the **range** of flood heights for this year?"

Sam didn't know that either.

"You need to figure all of that out. It's the only way to really know if the heights of the floods are increasing," explained his father.

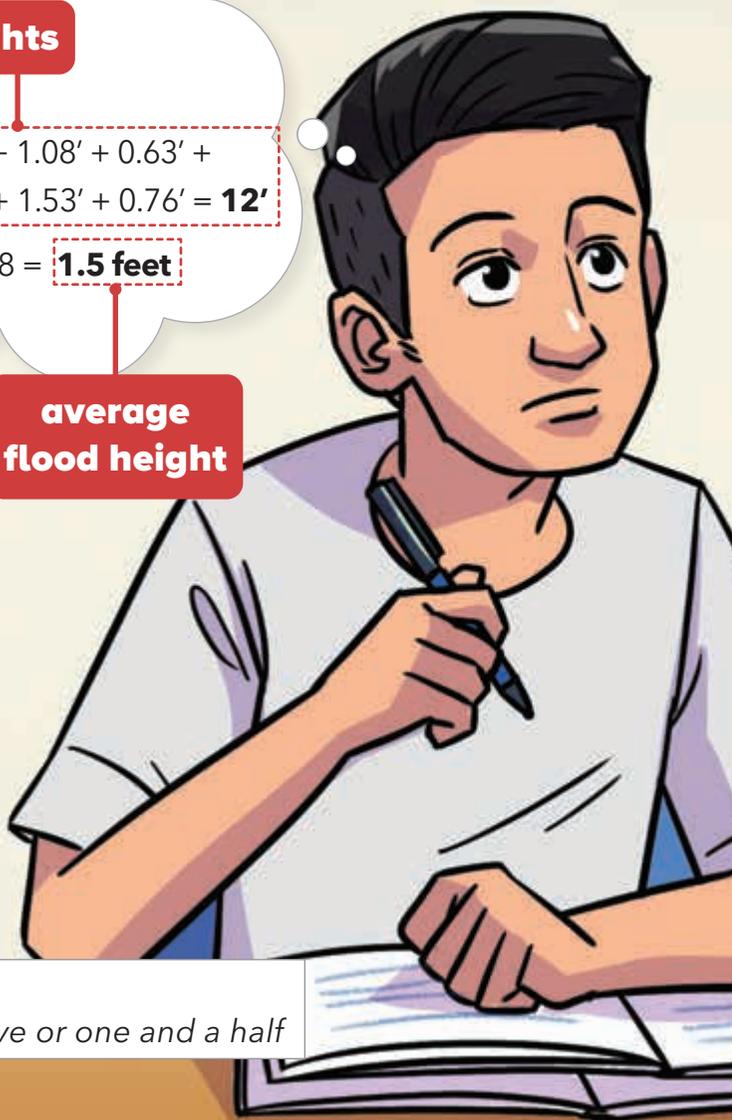
Sam looked at his journal and made a list of the eight floods during the year. This was his data set. He added the numbers together and came up with a **total** of 12 feet. Then he found the **average** flood height for the last year by dividing this number by 8. The mean was only 1.5 feet.

**flood heights**

$$0.89' + 1.47' + 1.08' + 0.63' + \\ 4.5' + 1.14' + 1.53' + 0.76' = 12'$$

$$12' \div 8 = 1.5 \text{ feet}$$

**average  
flood height**



' = feet

1.5 = one point five or one and a half

After that, Sam looked at the flood range. The lowest flood was 0.63 feet, and most of the other floods were also low. However, there was one very big flood that was 4.5 feet. "That's so much bigger than the other floods," Sam thought, "It's 3 times higher than the mean flood height. That might cause a problem. I'd better check it out!"

4.5'  
1.53'  
1.47'  
1.14'  
1.08'  
0.89'  
0.76'  
0.63'

**flood range**

4.5 feet  $\div$  1.5 feet

**= 3x higher**

**possible  
flood height**

Sam looked in his journal to find data about the previous year. There had been only seven floods. This was his new data set. He did some **calculations** and found that the mean flood height for the previous year had been lower. It was only 1.3 feet. "The mean flood height this year is higher than it was last year," Sam thought. "But it shouldn't be a problem. It's still pretty low."

Sam was still worried about the floods becoming much higher than the average. He decided to talk to his father about it. "We may someday have an even bigger flood," Sam insisted to his father. "That could be dangerous!"

"Hmm, well, 4.5 feet is a big flood," admitted Father. "But the levee is 8 feet tall. A dangerous flood would have to be much bigger, so I think we're safe."

## Flood Data Set Last Year

Date:	Height:
April 8	0.48 feet
May 17	1.61 feet
June 28	0.73 feet
July 4	0.81 feet
September 13	3.24 feet
October 21	1.41 feet
November 8	0.82 feet

### Total Last Year

$$0.48 + 1.61 + 0.73 + 0.81 + 3.24 + 1.41 + 0.82 = 9.10 \text{ feet}$$

### Average Flood Height Last Year

$$9.10 \div 7 = 1.3 \text{ feet}$$

Sam felt much better after his father said this. Then, his father said, "We'd better check to be sure. I still have my old journals where I recorded flood heights just like you do. I also have your grandmother's journals. Maybe she recorded flood heights in them, too. They could give us a bigger data set to help you support your claim. Would you like to read them?"

"Oh, yes, please!" said Sam.





Sam read his father's journals. He found there were fewer floods in his father's time, and that those floods were lower. Sam made a list of all the floods in his father's journals. His father had kept journals for many years, so it was a big list. Sam found that the mean flood height at that time had been only 1 foot.

Next, Sam looked in his grandmother's journals and he found flood information there, too. He made another big list and found that the average flood in his grandmother's time had been even lower—it was only 0.8 feet. "The floods *have* gotten higher!" Sam thought.

Then, Sam saw a really big flood in his grandmother's journal. It was 4.8 feet high! "Wow! That was even higher than the flood we had this year," he thought. "But the levee is 8 feet tall, so we should still be safe."

Sam thought again. "But if 4.5 feet is a big flood when the average is 1.5 feet," he thought. "Then 4.8 feet was a *huge* flood when the average was 0.8 feet. This could be really bad!"

Sam quickly went to see his father again. They might be in danger from the river!





**Average Flood Height Then**

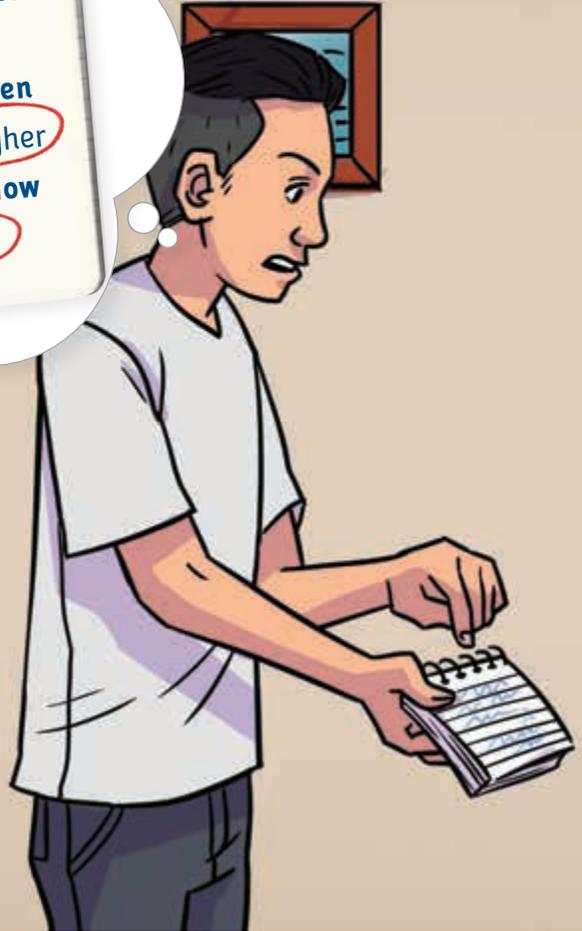
= 0.8 feet

**Highest Flood Height Then**

4.8 feet  $\div$  0.8 feet = 6x higher

**Possible Flood Height Now**

6 x 1.5 feet = 9.0 feet



"Dad? I did the calculations, and I'm really worried about a big flood again," Sam began. "There was a big flood in Grandmother's journal. It was six times higher than the average flood in her time. The flood average was only 0.8 feet then."

"Yes?" said his father. "Why is that important?"



"Now our average flood is 1.5 feet," explained Sam. "What if we have a flood that's 6 times higher than our average flood? Six times 1.5 feet is 9 feet! That would be higher than the levee!"

"Hmm, maybe you're right," noted his father, thinking quietly. "The journals show that the average floods are higher now. It's reasonable to think that the highest floods would also be higher. I think we'd better talk to the city about this."

Sam and his father put all of Sam's data into a report. After checking Sam's calculations, they went to see the town mayor. The mayor listened to Sam's father describe the problem. Then, Sam showed her the report with their statistics. The mayor was impressed—and a little worried!

"This data is very important," she said. "We'll have to check your numbers, but I think you have **identified** a real problem here. Well done!"



*The mayor was impressed. She admired and respected Sam's work.*

One year later, Sam and his father were asked to join the mayor and other town residents at a celebration on the levee. It was to mark the beginning of work on a new project. The town was building a new levee that would be high enough to protect everyone from higher floods. As part of the celebration, the mayor gave a speech.

“The river is rising and it’s becoming a danger to our town,” she began. “Today we begin work on a higher, stronger levee that will keep us all safe. But if one young man had not discovered this danger, we all may have suffered a terrible flood. Thank you, Sam Martinez!”





## River Danger Organization

# River Controls



weir

Levees are the main tool engineers use to control rivers. However, there are two big problems with levees. The first problem is that levees are made of dirt. During a flood, the river can weaken the levee by carrying away the dirt. This **process** is called erosion. If it continues for too long, it will make a hole in the levee.

The worst place for erosion is at turns in the river. Engineers fight erosion at these places by building concrete reinforcements on the levee. Another way to reduce erosion is to place large blocks in the river. These are called weirs. The weirs slow down the water, so that it carries away less dirt. Erosion can also destroy a levee if it is not high enough. When water begins to flow over the top of a levee, it carries dirt off of the top of the levee. This makes the levee shorter, so more water can flow over the top. Then, even more dirt is removed from the levee, and soon there is a large hole.

The second problem with levees is a process called silting. Because of erosion, rivers carry a lot of dirt or silt. If the river slows down, then the dirt goes to the bottom of the river. Over time, this causes the bottom

of the river to get higher. Then, when there is a flood, it's easier for the water to go over the top of the levee.

Engineers have several ways to fight silting. One way is to just make the levees higher. This works for a while, but the silting will continue. Then, the levee must be built even higher. (There are places on the Mississippi River where the bottom of the river is much higher than the surrounding land.)

Another way to fight silting is to place the levees close to the river. This makes the river narrow, so that the water flows quickly. When the river flows more quickly, dirt does not go to the bottom and there is less silting. Unfortunately, this fast-moving water can also make erosion worse.

A third way of controlling silting is to remove the dirt from the bottom of the river. This process requires large, expensive machines, and it takes a lot of time and effort. It also does not stop the silting, so the river must be cleaned every few years.



**cause** to make something happen, often something that has a bad effect

**gauge** an instrument for measuring how big or how much of something there is

**estimate** to make an educated guess about the size, cost, or worth of something

**journal** a written set of notes or information kept over a longer period of time

**record** to write down information for use in the future

**statistics** a collection of numbers, measurements, and mathematical information from real-life or experimental data

**support** to help show that something is true or a fact

**claim** a statement that you believe; a piece of information you think is true even though you can't prove it and other people may not believe it

**data set** a collection of information, often facts or numbers, that is used to help make a decision

**mean / average** the result of adding a set of numbers and dividing by the number of items in the set

**range** the difference between the highest and lowest values in a set of numbers

**total** the amount found by adding two or more numbers together

**calculation** the process of using math to find an amount or number

**identify** to find a problem, fact, or need

**process** the actions done to get a result