

The Adventures of Inanaka and Tuni

Learning to Write in Ancient Babylonia



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Inanaka

WELCOME TO NIPPUR

Hi! I am Inanaka. I live with my father, Adda; my mother, Ama; and my dog, Tuni, in Nippur. Nippur is an important city in Babylonia where our main god, Enlil, has his temple. I can see his ziggurat, the temple tower, from our house! Our king, Hammurabi, often comes to Nippur to celebrate important festivals for Enlil. Those times are always exciting, as my father is a priest and brings home great food during holidays.



Tuni



WHAT COULD THOSE SIGNS MEAN?

One day, I asked my father about the small, blue stone cylinder with the shiny golden caps that he always wears on his belt. When I asked what it was, he explained:

“This is my **seal**. I use it as my signature! The picture shows me greeting Enlil on his throne!”

“What are those symbols?”

“This is our script. It says my name and that I am a scribe and servant of Enlil! Scribes are important because they write down all the stories about the gods and keep track of everything going on at the temple.”

I knew then that I wanted to become a scribe, just like my father. I wanted to learn how to write so I could record our lives, too. He was delighted:

“Then you need to go to scribal school and learn reading, writing, Sumerian, and everything else about the scribal arts.”



Leaving an Impression

Ancient Babylonians used their own personal cylinder seals to leave their mark on texts and objects. These seals were made from stones, often quite valuable ones, in a range of colors. When they rolled the seal out on clay, it would leave behind an impression of the unique design carved into each one. Here, you can see a seal and the impression it creates (along with a penny shown for scale).



ISACM A7468

Inanaka's World

Inanaka's story takes place in ancient Iraq about 3,800 years ago. She lived in a land between two rivers, the Tigris and the Euphrates, ruled by the king **Hammurabi**. Hammurabi was in charge of justice and order in the land, a responsibility given to him by the sun god Shamash, who watched over the whole land, seeing and judging everything.

The Code of Hammurabi

As king, Hammurabi created his famous **Law Code**, which recorded rules and beliefs about how to behave and treat other people in society. The **stela** (a large stone slab or pillar) of the **Code of Hammurabi** is now in the Louvre Museum in Paris, but there are copies of it all around the world, including one in the ISAC Museum, pictured here!

At the top of the stela, the god Shamash gives symbols of kingship to Hammurabi, and the text below the image lists the laws. Can you spot the rays of sunlight behind Shamash's shoulders?

Cuneiform

The stela was written down in the Babylonian writing system, **cuneiform**, which was three-dimensional, carved or impressed into objects made from stone or clay.

Ancient Babylonian scribes wrote in two languages, **Akkadian** and **Sumerian**. When Inanaka lived, no one spoke Sumerian anymore, even though they still wrote it, so she had to learn it at school. Now no one has spoken either language for thousands of years. When modern people figured out how to read this script and these languages again, a whole world of the ancient past opened up to us—a world very different from and yet similar in some ways to our own.

Thanks to documents written by scribes, we know some of the things that people in ancient Babylonia thought about, the stories they told, the things they bought, the messages they sent each other, and even their jokes.



ISACM C478



GOING TO SCHOOL

When I turned eleven, it was finally time: I was going to school, or the **edubba'a** (𒂗𒅗𒂗𒅗), as my father called it. After I had breakfast, I headed out with Tuni and my favorite toy, my ram on wheels. I am quite proud of it, as I made it myself from scratch.

School was nearby in a house in our neighborhood. It was easy to miss because it looked like all the other houses. Our homes are built of bricks made from clay, the same material we use for pottery and toys. The windows are small to keep us cool, so it was hard to see inside. But when I approached school, I heard the students speaking in a language I did not know yet, **Sumerian**!



I snuck in through the archway. The teacher spotted me immediately and welcomed me. He showed me a box with clay and gave me some.

“Do you know what this is?”

“Clay, of course!”

“You’re right, but we call it **im** (𒂗𒅗) in Sumerian!”

He told me that, at school, we would not speak or write in **Akkadian**, like I do at home, but rather in **Sumerian**. He then instructed me to make a tablet for writing. It was an easy task, as I had made so many toys from clay already. When I showed it to my teacher, he said:

“Well done! Now you can start writing!”

Digging Through the Past:

How Do We Know What We Know?

We can learn about the ancient past by digging into the ground. Today, the remains of ancient Babylonian cities often look like big mounds of dirt called **tells**, like the one in the photo below, but inside, they contain the ruins of houses, palaces, and temples, and the objects that their ancient residents left behind. On top of these mounds, we find the most recent remains, and in the bottom layers of the mounds, we find the oldest. So, when **archaeologists**, or people who study the past using objects, buildings, and other physical records, dig deeper and deeper into a Babylonian mound, they are digging deeper into the past!

By uncovering the remains of buildings, which are usually only preserved as a series of low clay walls, archaeologists can reconstruct what houses and neighborhoods in ancient Babylonia may have looked like. Based on the objects found within these houses, we can learn about the daily activities of the people who lived there:

pottery can show us how people ate their meals and stored food and water;

tools like needles can show us how people made crafts and what kinds of jobs they may have done;

toys, game boards, and musical instruments can show us how people in ancient Babylonia liked to have fun!



a tell in Iraq

Making Things from Clay

By the time Inanaka made her first clay tablet, she already had lots of practice making figurines. The person who made this dog figurine (which happens to look a lot like Tuni) probably based it on an animal they saw in their everyday life.

Grab a piece of moldable dough or clay. What animals can you make with it?



ISACM A30997

Reflect

Pick up an object near you—a pencil, a cup, or a book, for example. As you hold the object, examine it. Are there any signs of use on the object, such as a stain or chip in the material?

What would an archaeologist from the future be able to figure out about you and your life by looking at this object?



WRITING MY NAME

Writing was so much harder than I expected, and there was so much to consider. I had to hold the **stylus**, or the **gi-duba** (, properly and angle in it lots of different ways to make the different shapes and directions of the signs.

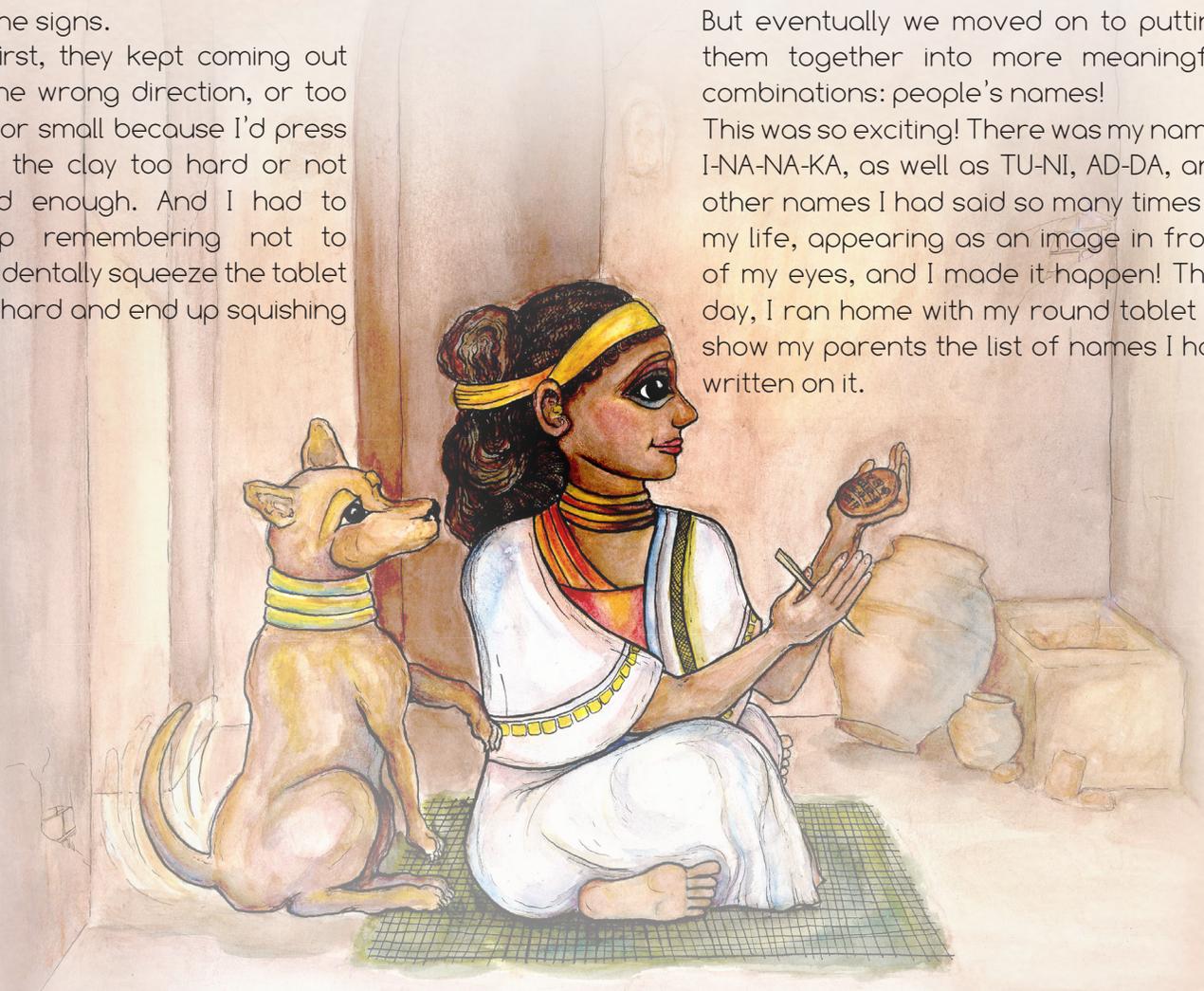
At first, they kept coming out in the wrong direction, or too big or small because I'd press into the clay too hard or not hard enough. And I had to keep remembering not to accidentally squeeze the tablet too hard and end up squishing it.

It took a lot of practice—writing the signs over and over again:

A A
A A A
A KU

But eventually we moved on to putting them together into more meaningful combinations: people's names!

This was so exciting! There was my name, I-NA-NA-KA, as well as TU-NI, AD-DA, and other names I had said so many times in my life, appearing as an image in front of my eyes, and I made it happen! That day, I ran home with my round tablet to show my parents the list of names I had written on it.



ISACM A30213

Learning How to Write

We know students like Inanaka had to start by practicing writing out syllable signs over and over again, because they left behind tablets like this one! **Can you identify any of the signs she was practicing on this tablet?**
Hint: Look at the chart on the next page for help!

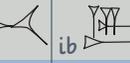
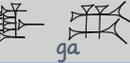
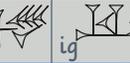
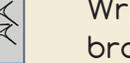
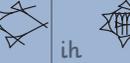
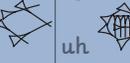
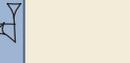
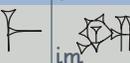
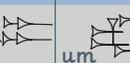
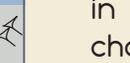
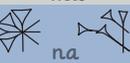
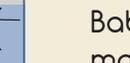
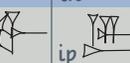
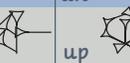
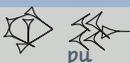
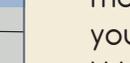
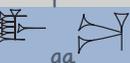
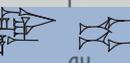
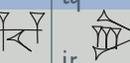
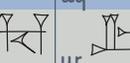
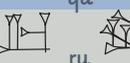
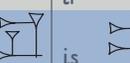
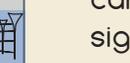
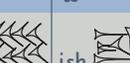
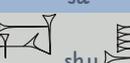
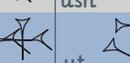
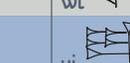
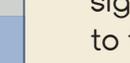
Reflect

How did you learn how to write? What kinds of activities did your teachers make you do to practice? Do you remember what you found easy or difficult?

Putting the Pieces Together:

Learning to Write Your Name

The first things Inanaka learned in school were how to write signs representing syllables and how to combine them into people's names. Now it's your turn: can you write your name in cuneiform?

	A	E	I	U
B	a 	e 	i 	u 
D	ab  ba 	eb  be 	ib  bi 	ub  bu 
G	ad  da 	ed  de 	id  di 	ud  du 
H	ag  ga 	eg  ge 	ig  gi 	ug  gu 
K	ah  ha 	eh  he 	ih  hi 	uh  hu 
L	ak  ka 	ek  ke 	ik  ki 	uk  ku 
M	al  la 	el  le 	il  li 	ul  lu 
N	am  ma 	em  me 	im  mi 	um  mu 
P	an  na 	en  ne 	in  ni 	un  nu 
Q	ap  pa 	ep  pe 	ip  pi 	up  pu 
R	aq  qa 	eq  qe 	iq  qi 	uq  qu 
S	ar  ra 	er  re 	ir  ri 	ur  ru 
Sh	as  sa 	es  se 	is  si 	us  su 
T	ash  sha 	esh  she 	ish  shi 	ush  shu 
W	at  ta 	et  te 	it  ti 	ut  tu 
Y	wa 	we 	wi 	wu 
Z	ya  za 	ye  ze 	yi  zi 	yu  zu 

INSTRUCTIONS

Break up your name into syllables, like this: E-LI-ZA-BE-ET or this:

E-LI-ZA-BE-EZ. Try saying your name out loud, and focus on how many different sounds are in your name. Write how your name sounds when broken into syllables:

Match the syllable sounds in your name to the ones in this chart. Be creative, because ancient Babylonian syllables may not exactly match the sounds you use to say your name. Olivia can be made into U-LI-WI-A, or Jackson can be written as YA-AK-SU-UN. You might use lots of letters to spell your name, but in cuneiform, you might only need two signs: ASH-LI (Ashley).

Practice! Write your name, your friends' names, or your pet's name on the tablet below, using cuneiform signs from the chart that correspond to the sounds in those names.



HELPFUL HINTS

- A sounds like the "a" in father.
- E sounds like the "e" in pet.
- I sounds like the "ie" in field.
- U sounds like the "oo" in moon.

You can write consonants that are next to each other by using two signs, like KA-LE-ER for Claire.



FROM SIGNS TO MEANING

The next day, my teacher, the *adda edubba*'a (𒀭𒀭𒀭𒀭𒀭𒀭), looked at my finished tablet and read Tuni's name.

"Well done! And you already know how to write 'dog,' as well. This sign 𒄠 is *ur*. It can be used as a syllable in a larger word, but it also means dog in Sumerian.

Most cuneiform signs are words and syllables at the same time!"

On a new tablet, my teacher wrote a list of words for animals on the left side, then gave it to me. I copied the signs on the right. *Oh no. I missed a sign!* I took my fingers and rubbed out the marks before starting all over again.



I noticed that all the words at the beginning of the list share the sign 𒄠 for dog:

𒄠 𒀭	a domestic dog...	like Tuni
𒄠 𒀭𒀭	a female dog...	like Tuni's mom
𒄠 𒀭𒀭𒀭	a small or young dog...	is a puppy
𒄠 𒀭𒀭𒀭𒀭	a dog of the wilderness...	is a wolf
𒄠 𒀭𒀭𒀭𒀭𒀭	a majestic dog?	

Hmm... what is a majestic dog...? Tuni was barking and jumping up and down. I looked over and saw that he was trying to reach the lion figure on the wall. Got it! A majestic dog is a lion!

This is awesome! Now I know how to put signs together and make new words!

Many Signs, Many Meanings

In an alphabet, you build words out of individual letters, but as Inanaka's teacher told her, in cuneiform writing, there were two different ways of writing words: they could link together **syllable signs**, or they could use **word signs**, so a single sign represented a whole word. Our writing system actually has a few word signs, too, like when we write "3" or "&" instead of "three" or "and."

Ancient Babylonian students learned Sumerian word signs and vocabulary by copying out hundreds of signs organized into lists, practicing on the right side of a tablet what a teacher had written for them on the left. Some of these lists were organized by theme (wild animals, plants, or food) or by sign shape—or both!

As boring as writing out all these signs probably was, it means that we can learn from these students' schoolwork too. Even though Sumerian has long died out, modern researchers are able to figure out the language using ancient students' lists.

Let's look at some of the other entries from the list Inanaka was learning:

 a fox

 a cat

 a wild ox

 an elephant

Reflect

Which animals are written with a shared sign?
What do these animals have in common?

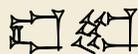
Words as Building Blocks

As Inanaka's experience with the dog-words shows, Sumerian often formed new words and phrases by putting together other words. A lot of the words she used every day at school were formed from one essential word:  dub, which means tablet.

DECODING THE SIGNS

Can you figure out what these compound words mean from the different signs they're made of? Hint: Use the word bank if you're stuck, but be careful: there's an extra word that you don't need!

Bonus: If a female dog is  , how would you write "female scribe" in cuneiform? Hint: Remember that  is "dog."



tablet + writer = _____



reed + tablet = _____



house + tablet = _____



father + house + tablet = _____



child + house + tablet = _____

WORD BANK

schoolchild	schoolteacher
stylus	clay tablet
scribal school	scribe



STRUGGLING WITH PROVERBS

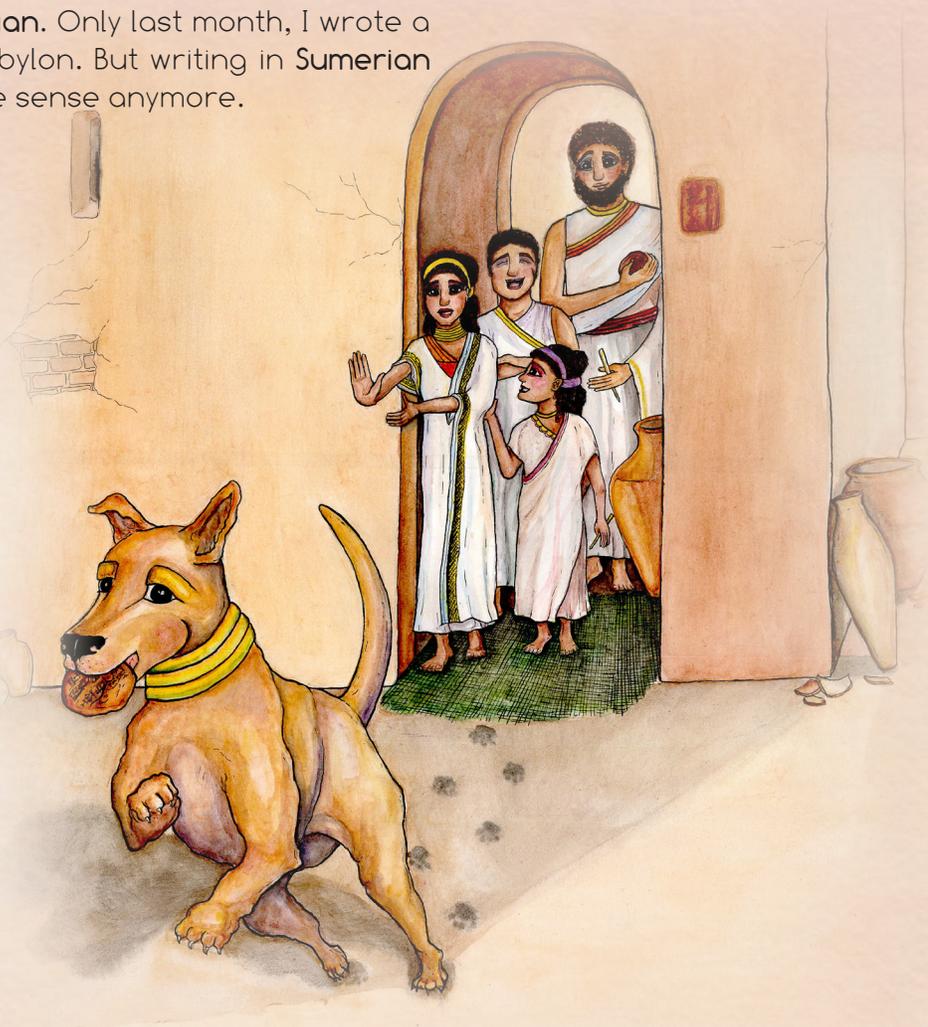
The day was finally here: After memorizing lists of trees, animals, buildings, people, jobs, and things, and lists with all the cuneiform signs, we finally learned how to write a sentence! Of course, I already knew how to write everything in **Akkadian**. Only last month, I wrote a long letter to my uncle and aunt in Babylon. But writing in **Sumerian** was totally different, and nothing made sense anymore.

My teacher gave me a **proverb**, or a short saying, with only two lines, but I couldn't understand anything and I got my signs mixed up! Feeling frustrated and trying to focus, I squeezed the tablet a little too hard. Oh no, now my teacher's writing was gone and the tablet was useless! Angrily, I threw it away.

But Tuni thought this was a new game of fetch, so he jumped and caught the tablet in midair. "Drop it, Tuni! Put it down!" Of course, he didn't listen. Suddenly, the sentences my teacher prepared made sense:

"A dog understands
'Take it!' But it does not understand
'Put it down!'"

Better late than never, I thought, and I carefully wrote down the proverb in Sumerian.



ISACM A30154

What Can We Learn from Proverbs?

After learning the basics of writing cuneiform and forming Sumerian words, students like Inanaka practiced writing whole sentences using proverbs, or short sayings. These proverbs can tell us things about the ancient world we wouldn't know otherwise: sometimes, they might be hard to understand, but many are funny or insightful!

Just like you might mess up when doing an assignment, students in ancient Babylonia sometimes struggled with their work, too! Here, a frustrated student squeezed this tablet too tightly after accidentally writing the beginning of one proverb and the end of another, creating nonsense!



Seeing the Signs:

Learning to Write with Proverbs

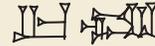
ANIMAL SIGNS

Using what you've learned in the past couple of pages, practice your knowledge of animal signs here! Write the English meaning of each of these animal signs.





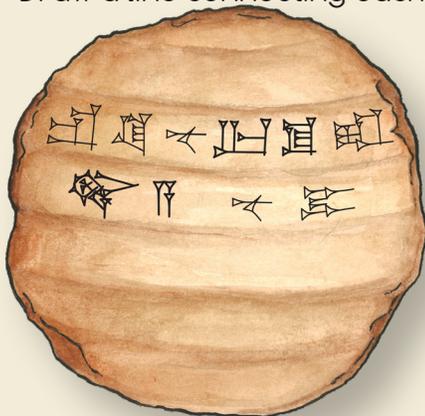




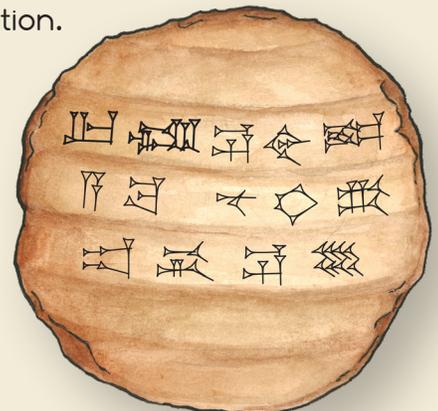


MATCH THE PROVERBS

Help Inanaka unscramble these proverbs and figure out what they mean! Find all the animals in the English translations. Then, use the list you created above to identify the cuneiform signs for those animals on the tablets. Hint: They appear in the same order! Draw a line connecting each Sumerian proverb to its English translation.



"A **fox** stepped on a **wild ox's** hoof. 'It didn't hurt,' he said."



"In the city with no **domestic dog**, the **fox** is in charge."

"A **fox** stood on an **elephant's** leg. 'It's enough—it's too much!' he said."



"If a **lion** made a big pot of soup, who would say that it wasn't good?"



Reflect

Why did the wild ox and elephant react differently to having the fox step on them?

In what situation could it be useful to tell a friend the proverb about the lion and the soup?

Do you think you'd prefer to live in a city with a dog in charge or a fox? Why? What do you think the writer of the proverb would prefer?

ACCOUNTING FOR THE GODS

During my last year at school, I helped my father prepare for the festival of the god Enki, when he visits us in Nippur. There was so much to do in the temple! Adda recorded all the food arriving for the party. As math is my favorite subject, I volunteered to help out and wrote:

	12	bulls
	48	sheep and goats
	144	jars of beer

When I showed the list to my father, he read everything carefully and remarked:

“Great. However, we need to triple the beer! The gods are very thirsty.”

So I used my fingernail and erased the number and corrected the line:

 432 jars of beer

All this counting took a long time and when we were finished, it was dark outside. We climbed up on the temple roof and looked up. First, I saw the star of Inana—the brightest one out there. “Adda, there are so many stars—I can’t even start to count them!” He laughed. “You don’t need to count them—let’s look for the symbols they make, the heavenly writing of the gods!” As we looked up, images started to appear, including a very familiar looking picture...We stayed up a long time marveling at the stars.

Learning Cuneiform Numbers

In some ways, ancient Babylonian math class was a lot like a math class today. For example, students like Inanaka had to memorize multiplication tables and do word problems. But of course, they had their own way of writing numbers in cuneiform.

For numbers 1 to 9, you can just count the vertical wedges:



Then 10 is like this: 

They wrote numbers up to 59 by writing out the number of tens and ones, using their respective signs.

13 is like this: 

20 is like this: 

While they used combinations of 10s and 1s to write 1–59, when they reached 60, they would write it with the same sign as 1 but move it one position to the left. This works the same way that we use 1 in the “tens” place to write 10. Unlike us, they did not write 0.

So, 59 looks like this: 

60 looks like this: 

61 looks like this: 

83 looks like this: 

60 + 20 + 3

Reflect

Today, we don’t write our numbers the way ancient Babylonians did, but we still use their base 60 system to measure some things, like the degrees in a circle or the seconds in a minute. When was the last time you saw the base 60 system in your everyday life?

Counting the Stars: Connecting the Dots

Using what you've learned about the ancient Babylonian number system, connect the dots to help Inanaka and her father find a familiar image in the night sky! Hint: Start with the red number!



THE DAY OF THE FESTIVAL

On the day of the festival, I woke up very early and went out with my mother to secure a good spot to see the gods arriving. We waited near the gates of the Ekur temple. First, we heard the musicians with their stringed instruments and drums, then smelled the incense. We saw the priests coming out, and I could spot my father neatly shaved and wearing his best outfit.

Finally, the statues of the gods came out: **Enlil**, the Great Mountain, looked impressive with his crown of many horns. At his side was **Inana**: I recognized her lion and weapons. She is a powerful war goddess and protects our family. My parents not only have a house shrine for her but also named me after her: Inana-ka, “the one belonging to Inana”!



The drums were picking up and the crowd was cheering. There he was, **Enki**, the god of wisdom. He had traveled all the way from Eridu, his watery home, to Nippur to feast with our gods. His boat was tied up at the harbor, and a priest carried him towards Enlil. He looked splendid with all the golden fish and turtles on his robes.

Tuni started barking cheerfully and another dog answered. I looked around and spotted a dog sitting next to the statue of my favorite goddess, **Nintinuga**, our goddess of healing. She helps everybody when they are sick—and in only a few months, I would become her scribe!

The Ever-Present Gods

The gods were present everywhere in Inanaka's world. They lived in cities in their houses—the temples—where statues of them were kept that were brought out during festivals. But people also had smaller images of them in their homes and on the seals they carried with them. They told stories about the gods—myths of their adventures—and celebrated them in hymns, or songs of praise. At the festival, you met a few of Inanaka's many gods.

Enlil, who commands all the other gods from the Ekur, or “Mountain House,”

Inana, the goddess of love and war, who can easily get angry,

Enki, god of water, crafts, and wisdom, who creates clever things, and

Nintinuga, who heals people when they are sick and whose symbol is a dog.

Matching Myths

When archaeologists excavated a school in Nippur like Inanaka's, they found lots of tablets with writings about gods. But because the tablets were made out of clay, they were often found broken into smaller pieces, so sometimes it's even hard to tell what story they come from! Luckily, researchers can use clues in the texts themselves to piece things back together.

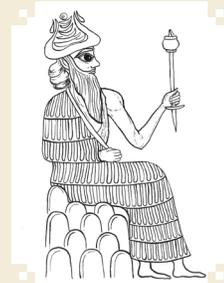
CAN YOU RECOGNIZE THE GODS?

Using Inanaka's story of the festival and the descriptions above, identify which god is pictured in each of the images below. Then, reconnect the god to the story fragment about them.



“My lady, the lands bow down at your cry. People stand before you, silent in the face of the fierce light and storm, as you hold the power of all powers in your hand.”

“Without the Great Mountain..., a city is not built, a community is not formed. A cattle barn is not built, a sheep pen is not set up, a king is not raised up high, a lord is not born.”

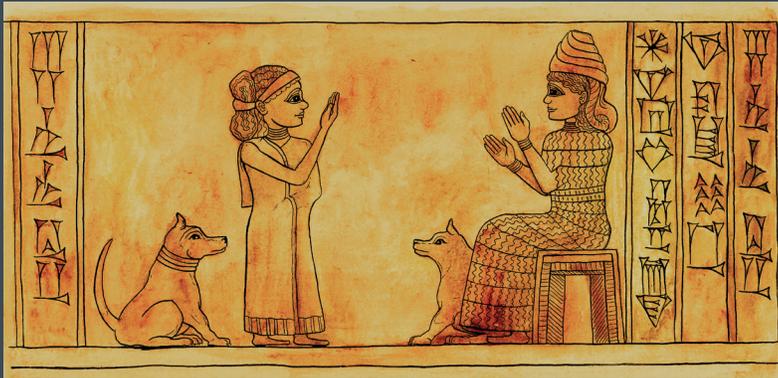


“She who looks at the bones, sorting the muscles of life from the muscles of death, who makes bandages beautiful...”

“He set up a temple in the sea, a shining temple, whose heart is skillfully constructed. The temple, whose heart is a tangled thread, beyond anyone's knowledge...”



What Happened after School?



Some former students of the edubba'a worked in the palace of the king, writing letters or using their math skills to keep track of things. Others worked in the temples, like Inanaka and her father, recording all the activities of the temple and making sure that the people of the city had a positive relationship with the gods.

What people did was often reflected in their seals. For example, here's the impression Inanaka's seal would leave on a tablet. What does it tell you about her, and how?

First Impressions: Design Your Own Seal

Using everything that you've learned about Inanaka's world, including its writing system and gods, design your own seal!

𐎶 In the first column, write your name in cuneiform. Hint: See page 7.

𐎶𐎶 In the second column, write "scribe" or "female scribe" in cuneiform. Hint: See page 9.

𐎶𐎶𐎶 Pick the god for whom you'd like to be a scribe. Write their name in cuneiform in the third column. Hint: See page 15.

𐎶𐎶 Draw yourself greeting the god whose name you've written. Include any symbols of the god (like their associated animal).

𐎶𐎶𐎶 Finally, decorate the seal with whatever symbols you'd like!



FROM SCHOOL TO THE TEMPLE

At the end of school, I proved that I knew the totality of scribal knowledge by inscribing a series of beautiful tablets with several myths—including Enki's Journey to Nippur! Soon after, I started working as a scribe for Nintinuga's temple household. I keep the records of Nintinuga's daily business, writing down all the offerings and making sure that she and her dogs always have enough to eat. In my spare time, I am also working on a new hymn to her.

Being part of the temple is great: I get to write interesting things, and each day, I get a small portion of the offerings myself. Best of all, I have my own seal now: it shows me standing before Nintinuga, and the dog at her side looks just like Tuni! Tuni still hasn't decided whether he wants to join the temple or not—he loves roaming the city too much.



A Note from the Authors

While Inanaka's story is fictional, we based it on what we know about the real lives of students who learned to write in an edubba'a in Nippur in the 18th century BCE. What she learns and the tablets she writes are inspired by the real-life tablets archaeologists found in that school, and Inanaka and Tuni are named after characters from texts found there as well. And while it is likely that most of the scribal students were boys, we know that some girls learned to write, too, and grew up to work as scribes. To highlight that the ancient past is more varied and complicated than you might expect, we decided to make our protagonist a girl. Bringing her to life involved a lot of both research and creativity—we hope you enjoyed reading her story as much as we enjoyed making it.





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About this Book

Journey back in time 3,800 years to Nippur, a city in ancient Babylonia, as a girl sets out on a quest to become a scribe. Follow along as Inanaka learns how to make a tablet and write her name, solves the many puzzles of the cuneiform writing system, and prepares with her family for a festival, all with the help (some of the time, at least) of her dog, Tuni.

