



# Numeracy Read Aloud Stories

Selected stories from the Reading and Numeracy Activity (RANA)  
in English and Hausa

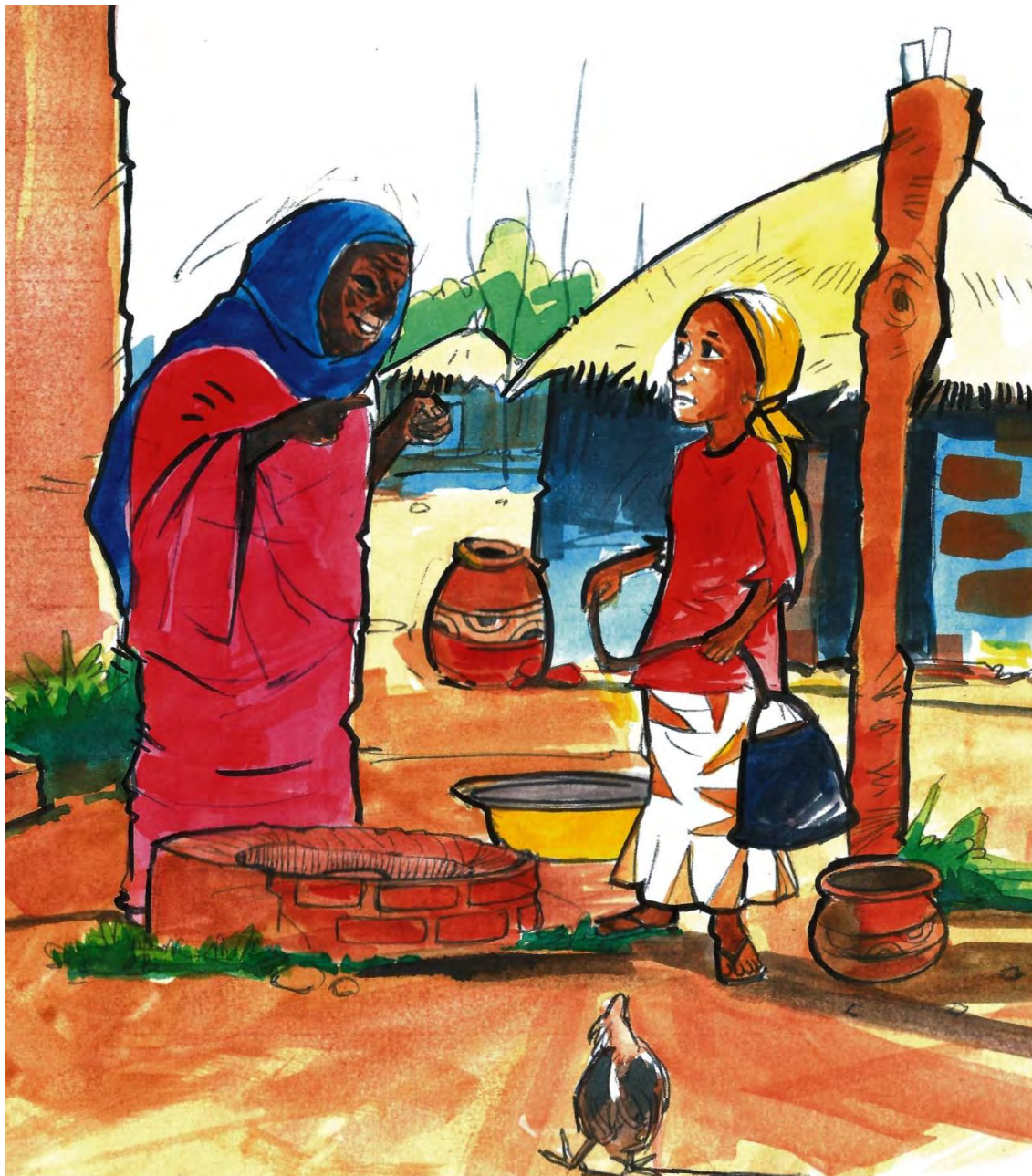
Production of this book was made possible by the Department for International Development (DFID) and the United Nation's Children's Fund (UNICEF) as a part of the Reading and Numeracy Activity (RANA), implemented by FHI 360.

# Table of Contents

<b>Jummai's Three Wishes (counting 1-3)</b> .....	<b>1</b>
Labarin Jummai Da 'Yar Tsohuwa	
<b>A Town with Ten Trees (counting 1-10)</b> .....	<b>6</b>
Gari Mai Bishiyar Kade Goma	
<b>The Football Fans of Zama (counting by 10s to 100)</b> .....	<b>11</b>
Gasar Kwallon Baga da Zama	
<b>The Sun and the Moon (concept of <math>\frac{1}{2}</math>)</b> .....	<b>16</b>
Jayayyar Wata da Rana	
<b>The Blessings of Living Well (addition)</b> .....	<b>21</b>
Na Gari Na Kowa	
<b>The Old Woman and the Foolish Servant (subtraction)</b> .....	<b>26</b>
Tsohuwa Mai Hikima da Shashashan Bara	
<b>The Thousand Bags of Grain (3-digit addition)</b> .....	<b>31</b>
Gwarzon Manomin Shekara	
<b>Spider and the Many Legs (multiplication)</b> .....	<b>36</b>
Gizo Mai Kafafu da Yawa	
<b>The Secret Kingdom (fractions)</b> .....	<b>41</b>
Taskar Hikima	



## Jummai's Three Wishes



**Math theme:** Counting 1-3

## Jummai's Three Wishes

In a village called DanZama there lived an nine-year-old girl named Jummai. Every day, Jummai would go to the only well in DanZama to fetch water for her parents. But eventually Jummai grew tired of the task. "Fetching water is so much work," Jummai thought. "How I wish I didn't have to carry it every day!"

One day, when Jummai went to fetch water, she met an old woman sitting by the well. "Good morning, my dear," said the old woman to Jummai. "Can you draw some water for me to drink? I am so thirsty."

"Yes, of course," Jummai said. Jummai drew the water and gave it to the old woman.

"Thank you for this," said the old woman. "In return, I will grant you three wishes any time you need me. Just call out, 'Old, old woman.'" And then the old woman disappeared.

The following morning Jummai did not want to go and fetch water as usual. Suddenly, she remembered the wishes promised her by the old woman.

She called out, "Old, old woman," and immediately the old woman appeared.

"What do you need my dear?" the old woman asked. "I don't want to go to the well anymore," Jummai replied. "Let me have water here in the house." "Done," said the old woman. "This is your wish number one." Then the old woman disappeared. Suddenly water rushed in through the door of Jummai's house, filling the floor with water. The water rose to Jummai's ankles, then to her knees.

Jummai was terrified and called out, "Old, old woman!" Immediately the old woman appeared. "Please make all the water disappear!" Jummai shouted.

"Done," said the old woman. "This is your wish number two." Then the old woman disappeared. All the water in the house disappeared too. Suddenly, Jummai felt very thirsty, so she went to the well. But when Jummai arrived, she found that the water in the well had disappeared too!

Jummai called out, "Old, old woman!" The old woman appeared. "Say your wish number three, and remember that this is your last." So Jummai said, "Let there be water in the well like there was before, and I will continue to fetch it."

"Done," said the old woman, and she disappeared. And from that day forward, Jummai never minded fetching water from the well.

## Reading Comprehension Questions

Why did Jummai wish for water in the house?

At the end of the story, why did Jummai decide she didn't mind fetching water anymore?

How many wishes did Jummai make?

## Math Exercises

1) Write the numbers 1 2 3 on the board. Ask pupils to write in the air with you. Then ask a pupil to write the numbers on the board.

2) Ask pupils to count 1 2 3 on their fingers. Then ask pupils to count groups of 3 objects in the room. As they count out loud, point to the numbers on the board.

3) Write a number (1, 2 or 3) at random on the board. Ask pupils to identify the number and hold up the correct number of fingers. Erase and repeat with a different number. Do not write them in order.

**EXTENSION:** Read the story again. When students hear a number, they should hold up the correct number of fingers.

## Labarin Jummai Da ‘Yar Tsohuwa

A wani kauye mai suna Dan-baura, an yi wata yarinya mai suna Jummai, wadda take zuwa dɓar ruwa a rijiyar garin kullum. Wata rana, ta je rijiya, sai ta haɗu da wata tsohuwa, wadda ta nemi Jummai ta jawo mata ruwa ta sha. Jummai ta jawo ruwa ta ba ta. Tsohuwa ta ce, “Saboda kyautatawar da kika yi mini zan biya miki bukatarki uku, a duk lokacin da kika ce ‘yar tsohuwa tsohuwa!”

Sai tsohuwa ta bace. Washegari, Jummai ta ji ba ta son zuwa rijiya, sai ta kira “‘Yar tsohuwa tsohuwa!” tsohuwar ta fito, ta ce “Me kike so?”

Jummai ta ce, “Ina sonruwa a gidan nan, ba sai na je rijiya ba.” Tsohuwa ta ce, “kin samu bukata ta farko ke nan.”

Sai ta bace. Sai ruwa ya fara bulbulowa a gidan, ruwan ya kai ga kafafun Jummai, ya kai gwiwowa.

A tsorace ta kira “‘yar tsohuwa tsohuwa, ina so ruwannan ya kafe!”

Tsohuwa ta ce, “Kin samu, bukata ta biyu ke nan,” sai ta bace. Nan da nan ruwan ya kafe. Sai Jummai ta fara jin kishirwa, don haka ta tafi rijiya. Sai ta iske har ruwan rijiyar ya kafe.

Jummai ta ce, “‘Yar tsohuwa tsohuwa, ina so ruwan rijiya ya dawo kamar yadda yake da. Ni kuma zan riƙa zuwa dɓan ruwa a rijiya. “Tsohuwa ta ce, “kin samu, wannan ce buƙatar ki ta ƙarshe da zan cika.” Jummai ta yi murnar dawowar ruwan rijiya, daga ranar ba ta sake jin wahalar zuwa rijiya ba.

## **Auna Fahimta**

1. Abu na wa Jummai ta nemi tsohuwa ta yi mata?
2. Me ya sa Jummai take da bukatar ruwa a gida?
3. Idan babu ruwa a gidanku, ya za ku yi?

## **Aikin Lissafi**

1. Ka/ki rubuta 1, 2, 3 a kan allo. Ka/ki rubuta lambobin tare da ɗalibai a cikin iska. Sa'aanan ka/ki umurci ɗalibai su rubuta lambobin a kan allo.
2. Ka/ki umurci ɗalibai su kirga 1, 2, 3 da yatsun su. Sannan ka/ki umurci ɗalibai su kirga abubuwan cikin ajin uku-uku. Ka/ki rika nuna lambobin da ke kan allo ya yin da suke kirgawa kana/kina saurare.
3. Ka/ki rubuta wata lamba (1, 2 ko 3) a kan allo. Ka/ki umurci ɗalibai su gane lambar sannan su nuna yawanta da yatsunsu. Ka/ki goge lambar sannan a maimaita matakin da wata lamba daban.

**KARIN AIKI:** Ka/ki sake karanta labarin. Idan ɗalibai suka ji an faɗi lamba su ɗaga yawan yatsun da suka dace da lambar.



## A Town with Ten Trees



**Math theme:** Counting 1-10

## A Town with Ten Trees

Once upon a time, there lived an old man who had only one daughter named Hadiza. One day, the old man called Hadiza to him. "I am very old and will not be around forever," he told her. "I want to make sure you are happy even when I am gone." Hadiza asked her father, "How can I be happy if you are not here?" Hadiza's father answered, "When you live in a town with 10 mango trees at the entrance, then you will be happy."

Hadiza searched far and wide for a town with 10 mango trees. She could not find one. She asked her friends and neighbors about a town with 10 mango trees. They could not tell her. Hadiza began to grow weary. What if she never found the town? But suddenly, a thought occurred to her. "Why can't *this* town be the town with 10 mango trees?" she thought.

Hadiza went and found 10 young mango trees. One by one, she planted each tree at the entrance of her town: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

The years passed, and the trees grew and grew. Soon they had big leafy branches, and the townspeople came and sat under the shade. Soon the trees produced fruit in abundance. The townspeople gathered together and ate their fill. As Hadiza sat among her neighbors and ate the fruit, she thought, "I have found the town with 10 mango trees. And I am truly happy."

## **Comprehension Questions**

How many trees did Hadiza's father recommend?

Why did Hadiza choose to plant the trees?

What does this story teach us about happiness?

## **Math Exercises**

1) Write the number 10 on the board. Ask pupils to write it in the air with you. Then ask a pupil to write it on the board.

2) Ask 10 pupils to come to the front of the room. Each pupil should put up their arms as if they are tree branches. Tell the class to pretend they are Hadiza's trees. Then ask the class to count the total trees. Then ask a pupil to count to 10 using a different set of objects in the room.

3) Write a number (0, 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10) on the board. Ask pupils to identify the number and hold up the correct number of fingers. Erase and repeat.

**EXTENSION:** Read the story again. When students hear a number, they should hold up the correct number of fingers.

## Gari Mai Bishiyar Kaƙe Goma

An yi wani dattijo wanda yake da ‘yarsa guda ɗaya tilo mai suna Dije. Wata rana, dattijon nan ya kira Dije, ya ce mata, “Kin ga na tsufa, kuma ba zan tabbata a duniya ba”. Ya ci gaba da cewa, “Ina so ki kasance cikin walwala ko bayan raina”. Sai Dije ta ka da baki ta ce, “Yaya zan kasance cikin walwala bayan ba ka da rai?” Maihaifin Dije ya ba ta amsa da cewa, “Idan kika zauna a gari mai bishiyar kaƙe guda goma a bakin gari, za ki yi walwala”.

Dije ta shiga neman gari mai bishiyar kaƙe goma a bakin gari, amma ta rasa. Ta tambayi abokanta da makwabta ko sun san wani gari mai bishiyar kaƙe goma a bakin gari? Amma ina! Babu wanda ya taɓa sanin irin wannan garin. Har Dije ta kusa hakura da gano wannan gari, sai wani tunani ya faɗo mata a zuci. Ta ce a ranta, “Me zai hana wannan garin namu ya zama da kaƙe goma a bakin gari?”

Dije ta je ta nemo dashen kaƙe guda goma, ta dasa su a bakin garinsu: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. Shekaru na zagayowa, bishiyoyi sai girma suke yi. A kwana a tashi sai ga bishiyoyi sun yi ganye lafa-lafa, har mutanen gari suna zuwa shan inuwa karkashin waɗannan bishiyoyi. Ba a jima ba kuma sai kaƙe ya fara ‘ya’ya. Mutanen gari suka fara kakkaɓo ‘ya’yan suna sha. Duk gari aka shiga yaba wa Dije.

Wata rana Dije tana zaune da mutanen gari a karkashin bishiyoyin suna shan kaƙe, sai tunani ya faɗo mata, “Lalle na sami gari mai kaƙe goma, kuma babu shakka ina cikin walwala”. Wannan tunanin ya sa ta kara jin wani daɗi cikin ranta.

## **Auna Fahimta**

1. Gari mai kade nawa baban Dije ya ce ta nema?
2. Me ya sa Dije ta dasa bishiyoyin?
3. Me wannan labarin ya koyar game da walwala?

## **Aikin Lissafi**

1) Rubuta lamba 10 a kan allo. A sa dalibai su rubuta a iska tare da kai/ke. Sannan a sa su rubuta a allo.

2) A ce dalibai su kidaya daga 1-10 da yatsunsu. Daga nan a ce su kidaya abubuwa daban-daban guda 10 a cikin aji. Yayin da suke kidayawa, sai a rika nuna lambar da suka ambata a kan allo.

3) A rika rubuta wadannan lambobin (0, 1, 2, 3, 4, 5, 6, 7, 8, 9 ko 10) a kan allo. A sa dalibai su gano kowace lamba da aka rubuta ta hanyar fadin sunanta da kuma nuna yawanta da yatsunsu. A rika gogewa ana maimaita wannan aikin.

**KARIN AIKI:** A sake karanta labarin. Yayin da ake karatu, idan dalibai sun ji an ambaci lamba, sai su nuna adadin da yatsunsu. Su dunkula hannu yayin da aka ambaci '0'.



# The Football Fans of Zama





**Math theme:** Counting by 10s to 100

## The Football Fans of Zama

Once there were two villages called Baga and Zama. Baga was the bigger village, with the best football players in the county. Zama was the smaller village, where most people were too busy working to have time for football.

One day Baga challenged Zama to a football match. “But what will we do?” asked one member of Zama. “Baga’s players are some of the best in the county. We could never win against them!”

“Neither can we refuse!” said another member of Zama. “The people of Baga will think we are afraid.”

And so the people of Zama agreed to a football match in one month’s time. Every day before the match, the men of Zama trained. They practiced their kicks. They practiced their sprints. They ran around the field fifty times. Finally, when game day arrived, Zama felt ready. “We are now just as skilled as the football players of Baga!” they said.

But as soon as the game began, things began to go wrong. The Baga team scored a goal, and Baga’s fans cheered. The Baga team scored another goal, and Baga’s fans cheered even louder. “I don’t understand!” the Zama players said at halftime. “We trained just as hard as them. But we haven’t scored at all!”

Then Zama’s captain looked around. “We did train as hard. But you know what Baga has that we don’t have? Fans! They must have 50 fans here cheering. Baga players feel so encouraged that they are playing better.”

So the Zama football players picked up their phones. They called everyone they knew. Soon Zama fans appeared at the field. First 10 fans appeared, then 20, 30, 40, 50, 60, 70, 80, 90, 100! Then Zama started to play better. Zama scored once, and their fans cheered. They scored again, and their fans cheered louder. Then Zama scored a third time, and won the game! It was then that the Zama fans cheered loudest of all.

## **Comprehension Questions**

What did Zama players do to prepare for the football match?

Why do you think the fans helped Zama to win the game?

Have you ever been in a situation where you felt like you did a better job because someone was watching or supporting you?

## **Math exercises**

1) Write the number 100. Ask pupils to write in the air with you. Then ask a pupil to write on the board.

2) Use a 100s chart to count to 100 with the pupils. Then count to 100 by 10s. Then explain that you will determine whether there are as many pupils as there are Zama fans. Ask pupils to count with you as you count the pupils.

3) Say numbers between 1 and 100 and ask children to identify the number on the number chart. For example, if you say “22” a child should point to 22. If children struggle, try simpler numbers.

**EXTENSION:** Read the story again. When you reach the part of the story with numbers, ask a pupil to find it on the hundreds chart.

## Gasar Kwallon Baga da Zama

An yi wasu kauyuka biyu da ake kira Baga da Zama. Wata rana ‘yan kauyen Baga suka gayyaci ‘yan kauyen Zama wajen gasar kwallon kafa. “Amma me ya kamata mu yi?” Daya daga cikin ‘yan wasan Zama ya tambaya. “Kun san ‘yan wasar Baga suna daga cikin kwararrun ‘yan wasar kwallon kafa a kasar nan. Zai yi wuya, mu iya samun nasara a kansu! “Kuma ba za mu ki amincewa da gayyatar su ba!” in ji wani daga cikin ‘yan wasan. “Idan muka yi ha kan kuwa, ai sai su yi tunanin mun ji tsoro ne.”

Da haka mutanen Zama suka amince da amsa gayyatar yin gasar. Kowace rana kafin lokacin gasar, mutanen Zama suka yi ta karɓar horo. Sun koyi dabarun kwallon daban-daban. Daya karshe da ranar gasar kwallon kafar ta zo, Zama sun tabbatar da sun shirya sosai.

Amma da aka fara buga wasan, sai suka ga wasan na son ba su mamaki. ‘Yan wasan Baga sun ci kwallon ɗaya, sai magoya bayansu suka yi ihu da murnar nuna goyon bayansu. ‘Yan wasan Baga suka sake cin kwallon ta biyu, sai magoya bayansu suka kara farkewa da ihun murnar goyon bayansu fiye da yadda suka yi da farko. “Ba mu gane ba,” ‘yan wasan Zama suka ce bayan an je hutun rabin lokaci. Mun yi karɓar horon koyon wasa kamar yadda suka yi. Amma mun kasa cin kwallon ko ɗaya a wasan nan!”

Daya nan sai kaftin ɗinsu ya dubi zagayen filin ya ce, “Mun yi horon koyon wasa sosai sai dai an fi mu yawan magoya baya. Saboda haka dole mu sami karin magoya baya.

A lokacin ne, ‘yan wasan Zama suka ɗauki wayoyinsu. Suka kira duk wani da suka sani. Nan take magoya bayan Zama suka zama 10, suka koma 20, 30, 40, 50, 60, 70, 80 da kuma 90. Da aka fara buga wasan lokaci na biyu, magoya baya 100 sun riga sun iso filin wasan. Daya wannan lokacin sai ‘yan wasan Zama suka fara buga wasa da kyau. ‘Yan wasan Zama sun ci ɗaya, sai magoya bayansu suka tashi da ihun nuna goyon baya. Suka sake ci na biyu, magoya bayansu suka kara farkewa da ihun goyon bayansu fiye da yadda suka yi da farko. Nan take, sai ‘yan wasan Zama suka ci kwallon ta uku, suka kuma lashe gasar! Magoya bayan ‘yan wasan Zama a lokacin suka farke da ihun murna sosai fiye da kowace da suka yi a cikin filin wasan.

## **Auna Fahimta**

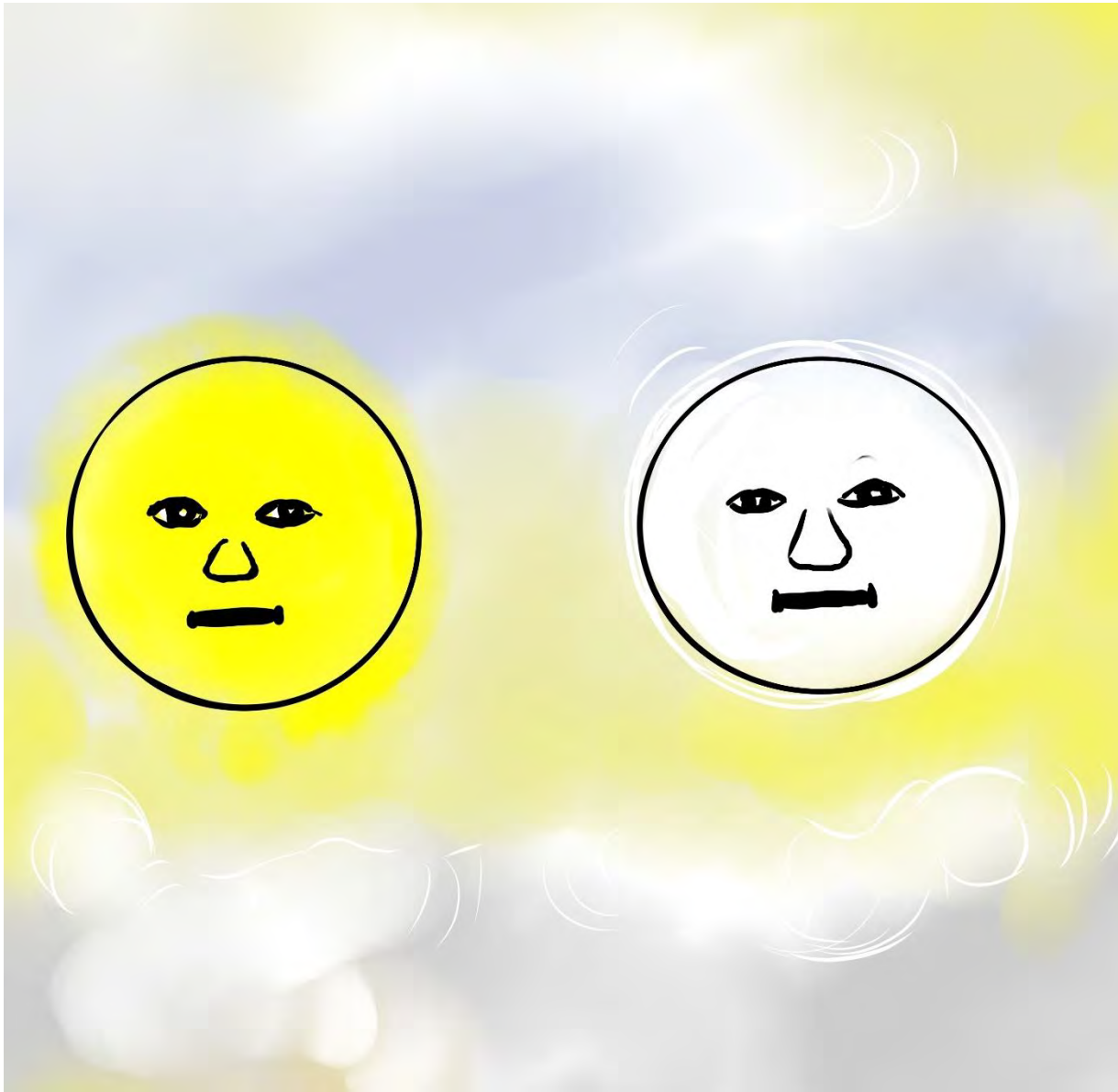
- 1) Me ‘yan wasan Zama suka yi domin su shirya wa gasar kwallon kafar?
- 2) Me ya sa kake/kike tunanin cewa magoya bayan ‘yan wasan Zama sun taimaka wajen samun nasarar gasar?
- 3) Ka/kin taɓa zama cikin wani yanayi da kake/kike tunanin cewa ka yi/kin yi wani kwazo saboda wani yana kallon ka/ki ko goyon bayanka/ki?

## **Aikin Lissafi**

- 1) Ka/ki rubuta 100 a kan allo. Ka/ki jagoranci ɗalibai ku rubuta lambar a cikin iska tare. Sannan ka/ki umuci ɗalibai su rubuta lambar a kan allo.
- 2) Yi amfani da jadawali mai lamba ɗari ku kirga lambobi har zuwa ɗari tare da ɗalibai. Ka/ki ce yanzu ina son ina ko yawan mutanen da ke cikin ajin nan ya kai yawan masu goyon bayan kauyen Baga. Ka/ki umurci ɗalibai su kirga yawan mutanen ajin ya yin da kake/kike kirgawa.
- 3) Ka/Ki faɗi lambobi tsa kanin 1 zuwa 100 sannan ka/ki umurci ɗalibai su nuna lambar a kan jadawalin lambobi. Misali, idan ka/kin faɗi “22” sai ɗalibi ya nuna 22. Idan ɗalibai sun kasa, ka/ki gwada da lambobi mafi sauƙi.

**KARIN AIKI:** Ka/ki sake karanta labarin. Idan aka cimma inda lambobi suke cikin labarin sai a umurci ɗalibai su nuna lambobin a kan jadawali mai lamba ɗari.

# The Sun and the Moon



**Math theme:** Introduction to the concept of  $\frac{1}{2}$

## The Sun and the Moon

Once, long ago, the sun and moon did not get along. Neither liked to share the sky, and each felt that he was the most important. One day, the sun decided that he would not set.

“I should rule the sky,” said the sun. “For my bright light allows people to work and crops to grow.”

“No, I should rule the sky” said the moon. “For my soft glow allows the earth to cool and people to sleep.”

The sun responded, “But when you rule the sky, nothing happens. People don’t work and crops don’t grow.”

The moon responded, “But when you rule the sky, people don’t rest and crops suffer in the heat.”

That day, there was an eclipse as the sun and the moon remained in the sky, neither of them willing to compromise. People on the earth were confused and there was commotion everywhere. Some people were crying, while others were praying. “How can I rest?” cried some. “How can I work?” cried others. “Is it the end of the world?” many asked.

The sun and the moon were not happy to see the people so upset.

“We have to find a way to reconcile ourselves for the sake of the earth. The people on the earth are not happy,” the moon said.

“Indeed they are not,” the sun said.

And so the sun and moon agreed to divide time in the sky into two equal parts: day and night. The sun would occupy the sky half the time, and the moon would occupy the sky for the other half. This way, crops could grow and the earth could cool. People could work and people could rest. And indeed, the people have lived happily ever since.



## Comprehension Questions

What did the sun and moon argue about?

Why did the sun and moon divide their time in the sky?

Do you think that this story is true? Why do we sometimes tell stories that are not true?

## Math Exercises

1. Write  $\frac{1}{2}$  on the board. Explain that it is called “one half.” Ask pupils to write it in the air with you. Then ask a pupil to write it on the board.

2. Explain that  $\frac{1}{2}$  means dividing something into two equal parts, and then taking one part. Break a stick into two equal parts, and then show pupils that each part is one half. The parts should be the same length. Then provide a volunteer pupil with another stick and ask the pupil to break it in half.

3. Draw a square on the board. Ask a pupil if they can shade in one half of the square. The final result should look like this:



**EXTENSION:** Continue step 3 with different shapes.

## Jayayyar Wata da Rana

A can farkon zamani, rana da wata ba su shiri a tsakaninsu. Don haka ba su so su zauna wuri guda a sararin samaniya, don kowane a cikinsu yana jin ya fi muhimmanci. Idan sun haɗu da juna a sama ba wanda yake kula wani. Wata rana sai rana ta yanke hukuncin cewa ba za ta faɗi ba.

“Sai na mulki sararin sama” In ji rana. Ta ci gaba da cewa, “Tun da hasken ne yake taimaka wa mutane wajen aiki, sannan ya taimaka wa amfanin gona ya yi kyau.”

Shi kuma wata ya ce, “Ina! Ni zan mulki sararin sama”, ya ci gaba da cewa, “Saboda hasken da nake bayarwa mai sanyi shi ke sanyaya duniya ya kuma sa mutane su huta su ji daɗin barci.”

Sai Rana ta ka da baki ta ce, “Ai idan kai kake mulkin sararin sama babu abin da zai tafi daidai. Mutane ba za su yi aiki ba, kuma amfanin gona ba zai girma ba.”

Daga nan sai shi ma wata ya kada baki ya ce, “Ai idan ke ce da mulki, mutane ba za su huta ba, sannan amfanin gona kuma sai dai ya kone don zafi.”

A wannan ranar an sami husufi, saboda rana da wata duk suna nan a sararin sama a lokaci guda, kuma babu wanda ya bayar da kai ga ɗan’uwansa. Mutane kuma a doron kasa suka ɗimauce, ko’ina sai ruɗani. Waɗansu suna kuka, waɗansu suna addu’a. Waɗansu suna cewa, “Ina za mu sami hutu”, waɗansu kuma suna kukan, “Yaya za a yi aiki?” Sannan kuma waɗansu suna tambaya

“Ko duniyar ce za ta tashi?” Rana da wata sai suma suka fara damuwa ganin mutane a cikin wannan hali na ruɗani saboda husufi. Daga nan wata ya ce, “Ya kamata mu daidaita a tsakaninmu. Ga shi kuma mutane ba sa jin daɗin wannan halin da muka saka su a ciki.”

Rana ma ta ce, “Ni ma ina ganin haka.”

Saboda haka, sai rana da wata suka daidaita a tsakaninsu a kan su raba mulkin sararin sama gida biyu; dare da rana. Ita rana za ta ɗauki rabi, shi kuma wata ya ɗauki ɗaya rabin. Ta wannan hanyar amfanin gona zai girma, sannan duniya kuma za ta yi sanyi. Mutane za su yi aiki, sannan kuma su huta. Hakika wannan hanya ta taimaka gaya wajen jin daɗin mutane, yadda tun daga wannan lokacin mutane suke zaune lafiya a cikin duniya.

## Auna Fahimta

- 1) A kan me rana da wata suka yi musu?
- 2) Me ya sa rana da wata suka raba lokacinsu a sararin sama?
- 3) A ganinku wannan labarin yana iya faruwa? Me ya sa wani lokaci ake kirkira labari?

## Aikin Lissafi

- 1) Rubuta  $\frac{1}{2}$  a kan allo. Yi wa  $\frac{1}{2}$  bayanin cewa, wannan shi ne 'rabi'. A sa  $\frac{1}{2}$  su rubuta a iska. A sa wani  $\frac{1}{2}$  ya/ta rubuta a kan allo.
- 2) A yi bayanin  $\frac{1}{2}$  yana nufin a raba abu zuwa gida biyu daidai. A  $\frac{1}{2}$  siririyar sanda a raba ta gida biyu sai a nuna wa  $\frac{1}{2}$  a yi masu bayanin cewa kowane  $\frac{1}{2}$  rabi ke nan. A bai wa mai-sa-kai siririyar sanda  $\frac{1}{2}$  a ce ya karya ta gida biyu daidai.
- 3) Zana gidan dara mai-murabba'i a kan allo. A ce  $\frac{1}{2}$  su cika rabin gidan. Daga karshe gidan darar zai zama kamar haka:



**KARIN AIKI:** A ci gaba da mataki na uku da wasu fasaloli daban-daban kamar da'ira da sauransu.

# The Blessings of Living Well



**Math theme:** Addition

## The Blessings of Living Well

Once upon a time there was a young woman named Hauwa. She worked as a teacher, she was a generous neighbor, and she was happily married. There was just one problem. Hauwa and her husband had no child. They prayed and prayed, but to no avail. Finally, Hauwa went to her mother for advice.

Hauwa's mother said, "My daughter, please do not worry. Continue to be a good teacher, and continue to be a good wife and neighbor. If you live well, you will be blessed beyond what you ask for."

Soon enough, Hauwa became pregnant and gave birth, not just to one child but to twins! Her husband was so happy that he decided to invite all the townspeople to a ceremony to name the babies.

Everything needed for the ceremony was available except for water. That is because there was no reliable source of water in the village. Hauwa was worried. She needed at least 10 buckets.

"How will we have enough water for the party?" she worried aloud to her husband. Her husband remembered what a hardworking wife Hauwa was, and resolved to gather his relatives to fetch the water. On the way to find water, they met Hauwa's neighbor Zainab, who asked where they were going.

"Hauwa wants 10 buckets of water," Hauwa's husband said. Zainab remembered what a good neighbor Hauwa was, and she resolved to gather the neighbors and bring the buckets themselves. On their way to find water, the neighbors met a group of Hauwa's pupils.

"Where are you going?" they asked Zainab.

"We are going to fetch 10 buckets of water for your teacher Hauwa," she said. They remembered what a good teacher Hauwa was and decided they wanted to get the buckets themselves.

Soon the relatives returned with 10 buckets, the neighbors with 10 buckets, and the pupils with 10 buckets. Hauwa looked at them all in amazement.

"30 buckets!" she said. "My mother was right. If you live well, you will be blessed beyond what you ask for."

## Comprehension Questions

What was Hauwa's problem at the beginning of the story?

Why were people so eager to help carry the buckets?

Can you describe a time when you helped a friend or neighbor?

## Math Exercises

1) Ask three pupils to stand up and hold up ten fingers. Ask the class to help you count the fingers of the three pupils to see if they add up to 30.

2) Ask a pupil to come to the board and check Hauwa's math with an equation. Help the pupil as needed.

10

10

+10

3) Ask a pupil how many buckets Hauwa would have if each group of people had brought 12 instead of 10.

12

12

+12

**EXTENSION:** Repeat step 3 with the number 15. If time still remains, you can ask the pupils to provide three different numbers to add.



## Na Gari Na Kowa

A wani lokaci tun farkon shigowar ilimin zamani, an yi wata mata mai suna Hauwa. Hauwa dai tana aiki a matsayin malamar makaranta, ga ta da taimakon makwabta, sannan kuma ga shi tana da aure. Sai dai babbar matsalar Hauwa da mai gidanta ita ce, Allah bai ba su haihuwa ba. Sun sha yin addu'o'i amma dai haihuwar ba ta samu ba.

Daga karshe dai, sai Hauwa ta yanke shawarar zuwa wajen mahaifiyarta domin ta taimaka mata da wasu shawarwari. “Yata Hauwa, don Allah kada ki daga hankalinki” Mahaifiyarta ta fada mata haka. “Ke dai ki yi kokari ki ci gaba da kasancewa mutumniyar kirki mai kyautata wa mai gidanki da makwabta da sauran jama'a, sannan kuma ki dage wajen addu'o'i”. Hauwa ta amsa da cewa “Ai mun dade muna yin addu'o'i Mama”. Maman ta amsa da cewa wannan ya yi daidai, idan dai har kina raye, lallai za ki ga biyan bukata.”

Hauwa ta koma gida suka ci gaba da addu'a ita da mai gidanta. Ba a dade ba sai Hauwa ta sami juna biyu ta haifi 'ya'yanta tagwaye. Jama'a da dama sun yi farin cikin samun haihuwar Hauwa, har mai gidanta ya yanke shawarar shirya gagarumar walima a ranar suna.

An samar da duk wani abin bukata a ranar walimar, sai dai kuma kash! ba a tanadi isasshen ruwa ba. Dalilin hakan kuwa shi ne, babu wani wuri muhimmi da za a iya samun ruwa a kauyen. hankalin Hauwa dai ya tashi matuka; saboda tana bukaratar akalla tulu goma na ruwa. “Ta yaya za mu iya samun isasshen ruwa?

Hauwa ta koka wa mai gidanta. Saboda tuna yadda Hauwa take wajen jajircewa da dagewa a kan aiki, sai mijin ya je ya gayyato 'yan uwansa domin su samo ma Hauwa isasshen ruwa. A kan hanyarsu ta zuwa diban ruwan sai suka haɗu da Zainab makwabciyar Hauwa. Zainab ta tambaye su inda suka nufa sai suka fada mata cewa za su je su samo ma Hauwa tulu goma na ruwa. Da Zainab ta tuna da irin kirki da taimakon Hauwa, sai ta yanke shawarar gayyato makwabta domin su ma su debo ruwan.

Sun kusa isa wurin diban ruwan kenan sai suka sami wata tawaga ta daliban Hauwa su kuma suka tambayi Zainab “Ina za ku je ne?” “Za mu je ne mu debo ruwa tulu goma mu kai gidan bukin malamarku Hauwa” ta fada musu. Sai su ma suka tuna da irin kirkin Hauwa, sai suka yanke shawarar a debo ruwan tare da su. Ba a jima ba sai ga 'yan uwan Hauwa sun dawo da tulu goma na ruwa, makwabta ma da tulu goma na ruwa, sannan daliban Hauwa ma da tulu 10 na ruwa. Hauwa ta dube su cikin mamaki, ta ce “har tulu 30 na ruwa?” Lallai Mama ta yi gaskiya da ta ce “Idan dai kana raye, za ka iya samun sama da abin da ka roka.”

## **Auna Fahimta**

1. Mene ne matsalar Hauwa a farkon labarin?
2. Me ya sa mutane ke sha'wara taimakon Hauwa?
3. Shin za ka/ki iya tuna wani taimako da ka yi wa makwabcinka?

## **Aikin Lissafi**

1) Umarci dalibai uku su tashi su tsaya su nuna 'yan yatsunsu guda goma. Umarci sauran daliban su kidaya 'yan yatsun daliban uku. A lura ko sun kidaya 30.

2) Umarci wani dalibi ya fito gaban allo ya yi kidayar da ta shafi labarin Hauwa kamar haka:

$$\begin{array}{r} 10 \\ 10 \\ + 10 \end{array}$$

3) Tambayi dalibai su fadi yawan tulunan da za a iya samu idan da tulu 12 kowace tawaga ta kawo wa Hauwa a maimakon 10.

$$\begin{array}{r} 12 \\ 12 \\ + 12 \end{array}$$

**KARIN AIKI:** Maimaita mataki na 3 da lambobin 15. Idan har akwai sauran lokaci, umarci daliban su kawo wasu lambobi daban-daban guda uku da za a tara.

# The Wise Woman and the Foolish Servant



**Math theme:** Subtraction

## The Wise Woman and the Foolish Servant

Once upon a time, there lived a wise old woman in a village called Banga. She had 32 silver coins, which she hid in a box under her bed. Every morning the old woman counted her silver coins to make sure she had all 32.

One morning, the old woman counted her silver coins. There were only 22. “Who stole my silver coins?” wondered the old woman. She thought about her many servants. There was one who was foolish and dishonest. It was likely that he had taken the coins. However, the old woman had to have proof.

After thinking for a while, the old woman had an idea. She called all of her servants together.

She said to them, “I am an old and forgetful woman. I had a certain number of silver coins. I can’t remember the number, but now I have only 22 coins. I will give a reward to anyone who tells me how many silver coins I had and how many I misplaced.”

“No one can know this,” one of the servants protested.

But the foolish servant shouted, “I know!” Everyone turned to him in amazement.

The foolish servant said confidently, “You had 32 silver coins, and you misplaced 10. That is why you have 22 left.”

The old woman looked at the servant and smiled. “You are right. But unfortunately for you, only the thief himself could know that. So now you will have your reward!” The old woman’s guards came and escorted the foolish servant out of the house. The old woman became known in the village for her wisdom.

## Comprehension Questions

How many coins did the old woman have originally?

How did the old woman know who the thief was?

Why do you think the old woman tricked the servant instead of asking him directly?

## Math Exercises

1. Explain that we use subtraction when we want to show an amount that is taken away. Write the following equation on the board, explaining that these numbers represent the silver coins. Then ask pupils to help solve it.

32

-10

2. Ask pupils how many coins would remain if 20 were stolen. Then ask a pupil to write the equation on the board and solve it.

32

-20

3. Ask pupils to imagine that they had 45 coins, and they find that 15 are missing. Then ask a pupil to write the equation on the board and solve it.

**EXTENSION:** Use 32 coins (or you may substitute another small object, such as stones, nuts, pieces of paper, leaves, etc). Tell pupils you have 32, and then ask a volunteer to take a certain amount away. After the volunteer tells the class how many were taken, the class should guess how many remain. Then check the answer in two ways: use an equation, and count the remaining objects.

## Tsohuwa Mai Hikima da Shashashan Bara

A wani lokaci can da, an yi wata tsohuwa mai hikima a wani gari da ake kira Banga. Wannan tsohuwar na da sulallan **tagulla** guda talatin da biyu da ta boye a cikin wani akwati ta kuma saka shi a karkashin gadonta. Duk bayan ‘yan kwanaki, tsohuwar nan ta kan dauko sulallan nan ta kidaya ta tabbatar guda 32 ne.

Wata rana da safe, da tohuwar nan ta kidaya sulallanta, sai ta tarar da guda 22 kawai. “Wa ya sace mani sulallana?” ta fara zulumi. Sai ta fara tunanin ko wani ne daga cikin barorinta. Daga cikin su akwai wani shashasha kuma marar gaskiya. Ta yi tunanin ko shi ya sace mata wadannan sulalla nata? To, amma ya kamata wannan tsohuwa ta sami wata hujja kan haka. Bayan ta yi nazari na wani dan lokaci, sai tsohuwar nan ta sami wata dabara. Ta kira dukkan barorinta, ta ce musu “Ni tsohuwa ce mai yawan mantuwa, ina da wasu sulallan tagulla, da ba zan iya tuna adadinsu ba, amma yanzu ina da guda 22 kawai kuma ina ganin wasu sun bace.

Zan ba da tukuici mai yawa ga duk wanda ya fada mani yawan sulallan da nake da su a da” Sai daya daga cikin barorin ya ce “Ai babu wanda ya san adadinsu” daga nan sai shashashan baran nan ya ce shi ya san adadin. Sai kowa ya dube shi cikin mamaki.

Shashashan bawan nan dai ya fada cikin alfahari “Kina da sulalla guda 32, sannan kuma guda 10 ne suka 6 ace. Shi ya sa ma guda 22 suka yi saura”. Tsohuwar dai ta dubi bawan nan ta yi murmushi ta ce “Lallai ka yi gaskiya, sai dai ka tona kanka, domin wanda ya sace sulallan ne kawai zai iya sanin hakan. Don haka yanzu zan ba ka tukuicinka” Daga nan, sai masu gadin tsohuwar nan suka zo suka kama wannan baran sai da ya fitar da sulallan da ya sata sannan suka fita da shi daga gidan. Wannan hikima ta tsohuwa dai duk ta bazu a kauyen har ma da makwabta.



## **Auna Fahimta**

- 1) Sulalla nawa ne tsohuwar nan take da su tun farko?
- 2) Ta yaya tsohuwar nan ta gano wanda ya sace mata sulallanta?
- 3) A ganinku me ya sa tsohuwar nan ta yi wannan dabara a maimakon ta tambayi bayin kai tsaye?

## **Aikin Lissafi**

- 1) Yi bayanin cewa ana amfani da debewa ne yayin da ake buƙatar rage adadin wani abu. Rubuta wannan aikin lissafi a kan allo, sannan ka/ki taimaka wa dalibai wajen warware lissafin.

32

- 10

- 2) Tambayi dalibai sulalla nawa ne za su rage idan an sace guda 20. Umarci daliban su rubuta aikin lissafin sannan su warware matsalar kamar haka:

32

- 20

- 3) Umarci daliban su dauka cewa suna da sulalla guda 40, daga ciki kuma sai 15 suka 6 ace. Umarci dalibai su rubuta wannan a kan allo, sannan su warware matsalar.

**KARIN AIKI:** Yi amfani da sulalla guda 32 (ana iya amfani da wani karamin abu, kamar duwatsu, gyafa, 'yan guntayen takardu, ganyaye da sauransu). Fadaɗawa dalibai kana/kina da 32, sannan a umarci mai-sa-kai ya/ta rage wasu daga ciki. Bayan ya/ta fadaɗawa sauran dalibai adadin da ya/tadauka, sai su yi hasashen abin da ya rage. Duba amsar ta bin waɗannan hanyoyi guda biyu: warwarewa a kan allo da kuma kidaya sauran abubuwan.

# The Thousand Bags of Grain



**Math theme:** Addition of 3 digit numbers

## The Thousand Bags of Grain

Once there was a village called Dombo. The people of Dombo were honest and faithful, but they were also very poor and hungry.

One day, the village head, the elders, and the community decided to solve their problem of hunger. "We must inspire our farmers to produce more food," said the village head. "Let's have a competition. Whoever can produce 1,000 bags of grain will be named farmer of the year."

Many farmers agreed to do the competition. Malam Kowa said to himself, "I will work twice as hard as before, farming by hand. I will surely win." Malam Nalado said to himself, "I will hire two strong men to help me. I will surely win." But Malam Dankeke said to himself, "Let me see what the other villages have done." So Malam Dankeke visited the neighboring villages. He saw the farmers there were using tractors, and producing hundreds of bags of grain. "Let me rent a tractor," he said. "Perhaps I will win."

Harvest season came. Malam Kowa had worked twice as hard as usual. He produced 200 bags of corn and 200 bags of millet. Malam Nalado had hired two strong men. Together, they produced 300 bags of corn and 300 bags of millet. Malam Dankeke had used his tractors. He produced 500 bags of corn and 500 bags of millet.

"It is decided!" cried the village head. "Malam Dankeke is the winner!"

## Comprehension Questions

How many bags of corn and millet did Malam Dankeke produce?

Why do you think that Malam Dankeke's strategy worked better than the others?

Do you think the village solved their problem of hunger?

## Math exercises

1) Write Malam Kowa's name on the board. Then ask pupils how many bags of corn and how many bags of millet he grew. Then show pupils how to find the answer by adding the numbers on the board:

200

+200

2) Repeat step 1 with Malam Nalado (using 300 and 300) and Malam Dankeke (using 500 and 500). Ask for volunteers to add the numbers.

3) Ask pupils if Malam Kowa and Malam Nalado combined could match Malam Dankeke. Then show them how to add to find the answer with addition:

400

+600

**EXTENSION:** Read the story again. When you arrive at the part when the bags are announced, ask volunteer pupils to add the totals again on the board.

## Gwarzon Manomin Shekara

A wani gari mai suna Dombo. Mutanen garin masu gaskiya da rikon amana ne, amma kuma suna fama da talauci da yunwa. Wata rana, hakimin kauyen da mukarabansa da sauran al'ummarsu suka yi shawarar warware matsalar da suke fama da ita ta yunwa. "Dole ne mu samar da abinci mai yawa," in ji hakimin. "Bari mu shirya wata gasa. Duk wanda ya noma buhu 1,000 na hatsi, za a kira shi gwarzon manomin wannan shekara."

Manoma da yawa suka yarda da shiga cikin gasar. Malam Kowa ya fada a ransa. "Zan nunka aiki a kan yadda na saba yi a da; zan yi noma da hannu. Lalle ni zan yi nasara."

Malam Nalado shima ya fada a ransa, "Zan dauki mutane masu karfi biyu aiki da za su taimaka mini. Lalle ni zan yi nasara."

Amma Malam Dankeke ya fada a ransa cewa, "Bari in tafi in ga yadda wasu garuruwa suke noma." Daga nan Malam Dankeke ya ziyarci wasu garuruwa makwabtansu, indaya ga manomansu suna amfani da motocin noma, kuma suna samun daruruwan buhuman hatsi. "Zan dauki hayar motar noma," ya ce. "Watakila in yi nasarar zama gwarzon."

Da lokacin kaka ya yi. Malam Kowa ya yi aiki fiye da yadda ya saba yi. Ya samu buhu 200 na masara da buhu 200 na gero. Malam Nalado wanda ya dauko mutane biyu masu karfi suka taya shi aiki. Tare, suka samar da buhuhuwa 300 na masara da buhuhuwa 300 na gero. Malam Dankeke kuwa wanda ya yi amfani da motar noman sa, ya samu buhu 500 na masara da buhu 500 na gero. "Ta tabbata!" Hakimi da mukarabansa suka fada da karfi. "Malam Dankeke shi ne Gwarzon Manomi."

## **Auna Fahimta**

- 1) Me ya sa mutanen kauyen Dombo suka yi shawarar yin gasa?
- 2) Wane dalili kuke ganin ya sa dabarar da Malam Dankeke ya yi, ta fi amfani a kan ta sauran?
- 3) Ko kuna ganin al'ummar kauyen sun warware matsalarsu ta yunwa kuwa?

## **Aikin Lissafi**

1) Ka/ki rubuta sunan Malam Kowa a kan allo. Sannan ka/ki umurci dalibai ko buhu na wa na dawa ya samu, sannan buhu na wa na gero. Bayan haka sai ka/ ki nuna wa dalibai yanda ake tara lambobin a kan allo kamar haka:

$$\begin{array}{r} 200 \\ + 200 \\ \hline \end{array}$$

2) Ka/ki maimaita aiki na dāya tare da amfani da sunan Malam Nalado (watau da lambobin 300 da 300) da kuma Malam Dankeke (da lambobin 500 da 500). Ka/ki nemi 'yan sa kai su tara lambobin.

3) Ka/ki tambayi dalibai su gwada gano ko idan an haɗa buhuman Malam Kowa da Malam Nalado za su kai yawan na Malam Dankeke. Sai ka/ki nuna masu yanda zasu haɗa lambobin su sami amsa:

$$\begin{array}{r} 400 \\ + 600 \\ \hline \end{array}$$

**KARIN AIKI:** Ka/ki sake karanta labarin. Idan ka cimma sashen labarin da ake faɗin lambobin, ka umurci dān/'yar sa kai ya/ta sake tara su a kan allo.



## Spider and the Many Legs





**Math theme:** Multiplication

## Spider and the Many Legs

Lion was king of all the animals. He was also the custodian of the animals' food chamber. He gave the most food to the large animals and the least food to the small. But one day, Spider, the smallest animal in the kingdom, decided she was tired of always receiving the least. She presented herself before the king.

"Oh great king," she said. "I know that you are very wise, and yet you do not take what is due to you. You give more food to Elephant than you do to yourself, even though you are the king."

Lion replied, "That is because Elephant is larger than me, and by law more food is due to him."

"Then why not change the law?" Spider asked. "Give food according to the number of legs. This way, at least you will receive the same as Elephant."

Lion was impressed with Spider's solution and changed the law. Soon, however, he realized the Spider had 8 legs while he had only had 4. Therefore, Spider was receiving twice as much food. Lion summoned Spider again.

"Spider," said Lion. "Do you really think it is fair that a spider should receive twice as much food as a lion?"

"That is true," said Spider. "That is not fair. Perhaps you can change the law again. Provide food according to the number of legs in one family."

Lion was impressed with Spider's solution. Lion had one wife and three children, and therefore 20 legs in all. Meanwhile, Spider had no husband and no children, and therefore only 8 legs in all.

"Very well," said Lion. "I will change the law. But I solemnly swear that is the last time, as laws should not be changed too often." Thus Lion changed the law so that the most food would be given to the families with the most legs. As soon as the law was passed, Spider promptly went to get married. Unknowingly to Lion, she went out and married Centipede, who had 100 legs. And from that day forward Spider and her husband received the most food in the kingdom, for together they had 108 legs.

## Comprehension Questions

How many legs does Spider have?

Why did Spider ask the Lion to change the law?

Who do you think was more clever, Spider or Lion? Why?

## Math Exercises

1) Write down the names of everyone in Lion's family. Then ask pupils how many legs each family member has and write it next to the name. Finally, ask a pupil to help you add them together. The result should look like this.

Lion	4
Lion's wife	4
Lion Child	4
Lion Child	4
Lion Child	<u>+ 4</u>

2) Explain that when we add the same number over and over again, multiplication can help us solve the problem more quickly. Ask pupils how many number 4s are written on the board. Pupils should say 5. Then write:  $4 \times 5 = 20$ .

3) Ask pupils how many legs 5 humans would have. Then help pupils solve the problem with both repeated addition and multiplication.

2

2

2

2

+2

$2 \times 5 =$

**EXTENSION:** Ask pupils how many legs 5 spiders would have. Use repeated addition ( $8+8+8+8+8$ ) and multiplication ( $8 \times 5$ ).

## Gizo Mai Kafafu da Yawa

Zaki shi ne sarkin namun daji. A matsayinsa na sarki, shi ne mai kula da al'amurran namun daji, musamman abin da ya shafi abinci. Yakan raba abinci daidai buƙatar dabbobin, wato yakan ba da mai yawa ga manya, kaɗan kuma ga kanana. Wata rana, Gizo kasancewarsa karami daga cikin namun dajin, sai ya yanke shawarar cewa ba za ya kara amincewa da mafi kankantar abinci ba.

Sai ya je gaban Sarki ya faɗi ya yi gaisuwa ya ce: "Ranka ya daɗe sarki, lallai na san kai mai hikima ne, amma duk da haka ba ka ɗaukar abincin da ya dace da kai. Ko yausha kana ba da ma fi yawan abinci ga Giwa, duk da cewa kai ne sarki".

"Haka ne, ai ina yin haka ne saboda Giwa ta fi ni girman jiki" Zaki ya faɗa wa Gizo. Daga nan sai Gizo ya ba da shawarar cewa daga yanzu a rika ba da abinci ta la'akari da yawan kafafun kowa, ta haka sai Zaki ya sami abinci daidai da na Giwa.

Zaki ya ji daɗin wannan shawara ta Gizo. Nan da nan kuwa ya fara aiki da ita. Ba a daɗe ba, sai zaki ya fahimci ai Gizona da kafafu da dama shi kuwa yana da kafafu huɗu ne kawai. Saboda haka sai Gizo ya rika samun ninkin abincin da zaki yake samu.

Zaki dai ya sake kiran Gizo, ya ce masa "Kai Gizo, shin kana ganin ya yi daidai ka rika samun abinci ninkin na zaki?"

"Gaskiya ne' "A'a bai dace ba" in ji Gizo. "Ka canja wannan doka, daga yanzu ka rika bada abinci ta la'akari da kafafu na iyalan kowane gida."

Zaki dai ya ji daɗin wannan shawara ta Gizo domin yana da mata ɗaya da 'ya'ya uku. Ya lissafa ya ga zai sami abincin kafafu 20 gaba ɗaya ke nan. Gizo kuwa, da yake da kafafu guda 8, ba ya da mata balle 'ya'ya.

"Wannan ya yi daidai in ji zaki, daga yau zan canja wannan doka, na kuma rantse, wannan shi ne karo na karshe da zan yi haka". Daga wannan rana dai, zaki ya canja wannan doka, ya kasance duk gidan da iyalansa ke da kafafu da yawa, su za su fi samun abinci mai yawa. Da ganin wannan sabuwar dokar ta tabbata sai Gizo ya kuɗiri aniyar ɗaura aure. Ba tare da sanin zaki ba, sai ya ɗaura aure da shanshani, shi kuwa yana da kafafu ɗari ne. tun daga wannan ranar sai Gizo da matarsa suka rika samun abinci mai yawa a wannan masarautar, tun da jimillar kafafun su ya kama guda 108 ne.

## Auna Fahimta

1. Me ya sa Gizo ya ba zaki shawarar canja dokarfarko?
2. Me ya sa koki ta dāura aure da shanshani?
3. Wanne daga ciki kake ganin ya fi dabara tsakanin zaki ko Gizo?

## Aikin Lissafi

1) Rubuta sunayen kowanne daga cikin iyalan zaki. Daga nan, sai ka ki tambayi daliban kowanne daga cikin iyalan zakin kafafu nawa yake da. Rubuta yawan kafafun a gefen sunan kowane dāya daga cikinsu. Umarci daliban su kidaya yawan jimillar kafafun. Sakamakon na iya kasancewa kamar haka:

Zaki            4  
Matar Zaki    4  
Dan Zaki      4  
Dan Zaki      4  
Dan Zaki    + 4

2) Yi musu bayanin cewa, idan aka tara lambobi iri dāya aka kuma maimaita, aka sake ninkawa, to an sami lissafin ruɓ anyawa ke nan. Ta hanyar lissafin ruɓ anyawa, kidaya na kasancewa cikin sauƙi. Tambayi daliban su faɗi sau nawa aka rubuta lambar 4 a kan allo. Daliban na iya cewa sau 5. Daga nan, sai ka rubuta:

$$4 \times 5 = 20$$

3) Tambayi daliban su faɗi yawan kafafun da mutane guda 5 suke da su.

2  
2  
2  
2  
+ 2

$$2 \times 5 =$$

**KARIN AIKI:** Tambayi daliban su faɗi adadin kafafun da gizo guda 5 suke dasu. Yi amfani da dabarar kidaya ta tarawa (8+8+8+8+8) da kuma dabarar ruɓ anyawa (8 × 5).

**Math theme: Fractions**

## **The Secret Kingdom**



**Math theme:** Fractions

## The Secret Kingdom

Once upon a time there lived a lion called Mai Daj who ruled over seventeen kingdoms. Mai Daj had three children, and as he grew older, he began to think about how he would divide his kingdoms among them. "I will write my will and give my kingdoms according to each child's seniority," he decided.

Soon after, Mai Daj died. When his three children opened his will, they found the king had kept his promise. He had divided his seventeen kingdom according to his children's seniority. The first child would receive  $\frac{1}{2}$  of the kingdoms; the second child would receive  $\frac{1}{3}$  of the kingdoms, and the third child would receive  $\frac{1}{9}$  of the kingdoms.

The children sat in puzzlement. "But 17 cannot be divided in half!" said the eldest child. "Nor can 17 be divided in thirds!" said the middle child. "Nor can it be divided in ninths!" said the youngest child. "What shall we do?" they all wondered. The children thought and thought, and finally they decided to call Fox, for he was the wisest animal in the kingdom.

When the three children told Fox their problem, Fox smiled and said, "Your father also possessed a secret kingdom. I will solve your problem, but if I do so, you must give me the secret kingdom as my reward."

The children thought and thought, and finally they agreed. Fox said, "Very well. Let us count the secret kingdom as the 18<sup>th</sup> kingdom." Then he turned to the eldest child and said, " $\frac{1}{2}$  of your father's 18 kingdoms gives you 9 kingdoms." Then he turned to the middle child and said, " $\frac{1}{3}$  of your father's kingdoms gives you 6 kingdoms." Lastly, the Fox turned to the youngest child and said, " $\frac{1}{9}$  of your father's kingdoms gives you 2 kingdoms."

The children were very happy indeed. They counted their kingdoms and found that they had seventeen in all. "We are very pleased!" they told the Fox. "And I am pleased as well," said the Fox. "For now the secret kingdom belongs to me."

## Comprehension Questions

How did Mai Daj divide his kingdoms between his children?

Why did the children have so much trouble following the Fox's will?

Did the Fox prove that he was wise?

## Math Exercises

1. Write  $\frac{1}{2}$ ,  $\frac{1}{3}$  and  $\frac{1}{9}$  on the board. Point to each, say the fraction, and ask pupils to repeat.

2. Ask 17 pupils to come to the front of the room. Explain that to find half of the pupils, you must make two equal parts (the "two" refers to the bottom part of  $\frac{1}{2}$ ). Ask the 17 pupils to try to divide themselves into two equal groups to make  $\frac{1}{2}$ . They will not be able to. Then ask them to try to make 3 equal groups for  $\frac{1}{3}$ , then 9 equal groups for  $\frac{1}{9}$ . Each time, they will not be able to do it.

3. Remind pupils that Fox added an additional kingdom to make the fractions work. Ask one more pupil to join the volunteers so that there are 18 pupils. Then ask the 18 pupils to divide themselves in two groups. Pupils will find they can do it. Indicate that one of these groups is  $\frac{1}{2}$ , or one out of the two possible parts. Repeat with dividing the group into three groups, then nine.

**EXTENSION:** Read the story again. Ask a pupil to stand near the board as you read. When you mention a fraction, the pupil should point to the correct fraction on the board.



## Taskar Hikima

Wani zamani da ya shude an yi wani zaki mai suna Mai-Dawa. Wannan zaki yana mulkin gandayen daji da yawa amma akwai 17 da ya fi sha'awa. Saboda haka ya yi tunanin yadda zai raba su tsa kanin 'ya'yansa guda uku domin su iya kula da su da kyau. Daga karshe, ya yanke shawara a cikin ransa cewa, "Babu komai zan rubuta wasiyya, yadda a ciki zan yi musu rabo gwargwadon shekarunsu."

Bai jima da yanke wannan shawarar ba kuwa sai ya mutu. Ya yin da 'ya'yansa suka zo suka duba sai suka tarar ya bar musu wasiyya. A wasiyyar ya ce, babban ɗansa ya ɗauki  $\frac{1}{2}$  na wuraren 17, mai bi masa ya ɗauki  $\frac{1}{3}$ , sannan ɗan karaminsu ya ɗauki  $\frac{1}{9}$ .

Yara suka zauna suna al'ajabin wannan rabo na babansu, "17 ba za ta rabu gida biyu daidai ba" in ji babban ɗan. Sai mai bi masa ya ce, "Haka kuma ba za ta rabu gida uku ba". ɗan karaminsu ma ya ce, "Sannan kuma ba za ta rabu da tara ba." Abu dai ya ɗaure musu kai. Daga karshe, suka nemi shawarar Dila, da yake ya fi sauran dabbobi hikima. Ya yin da suka fada wa dila matsalar da ke tafe da su, sai ya yi mumushi, ya ce ai baban naku yana da wani boyayyen wuri da yake mulki. Zan warware muku matsalarku, sai dai ina son ku ba ni boyayyen wurin nan a matsayin lada idan mun gama. Yaran suka amince.

Dila ya ce to yanzu mu ɗauka cewa babanku yana mulkin wurare 18 ne, sai ya dubi babban ya ce rabin 18 zai zamo 9, don haka kai za ka ɗauki wuri 9 ke nan. Ya ce wa mai bi masa kuma, "Idan an raba 18 gida 3, za a sami 6 kenan ko? Don haka sai ka ɗauki wurare 6." Daga karshe Dila ya ce wa, ɗan karamin cikinsu." Kai kuma rabonka da ma  $\frac{1}{9}$  ne, idan an raba 18 gida tara za a sami 2, ke nan. Don haka sai ka ɗauki wurare biyu."

Yara suka tashi suna murna, da suka kidaya jimlar wuraren da Dila ya raba musu sai suka ga 17 ne cif-cif. Suka dubi Dila suka ce "Mun gode". Dila ma ya ce, "Ni ne da godiya, tun da yanzu boyayyen wurin da babanku yake mulki ya zama na wa". Duka suka fashe da dariya suka tafi kowa yana murna.

## Auna Fahimta

1. Ta yaya Mai-dawa ya raba wa 'ya'yansa wuraren da yake mulka?
2. Me ya sa yaran suka sami matsala da wasiyyar da babansu ya bari?
3. Shin ko Dilla ya yi hikima wajen rabon? Yi bayani?

## Aikin Lissafi

1) Ka/ki rubuta  $\frac{1}{2}$ ,  $\frac{1}{3}$  da  $\frac{1}{9}$  a kan allo. Ka ki nuna kowace daga cikin su ka kira kowace da sunanta sannan ka/ki umurci  $\frac{1}{2}$  da  $\frac{1}{3}$  a kan allo.

2) Nemi  $\frac{1}{2}$  da  $\frac{1}{3}$  su fito gaban aji. A yi bayanin cewa rabinsu shi ne a raba su gida biyu daidai yadda za a sami  $\frac{1}{2}$ . A nemi  $\frac{1}{2}$  da  $\frac{1}{3}$  su raba kansu gida biyu daidai, za a tarar ba zai yiwu ba, haka kuma a ce su raba kansu gida uku daidai yadda za a sami  $\frac{1}{3}$ , daga nan a ce su raba kansu gida tara daidai yadda za a sami  $\frac{1}{9}$ . Za a tarar a kowane yanayi ba zai yiwu ba.

3) A tunatar da  $\frac{1}{2}$  da  $\frac{1}{3}$  cewa, Dila ya kara yawan wuraren da zaki ke mulka ne saboda rabon ya yiwu. A umurci  $\frac{1}{2}$  da  $\frac{1}{3}$  ya fito, yadda yawan  $\frac{1}{2}$  da  $\frac{1}{3}$  zai zama 18. Idan ya zo a ce  $\frac{1}{2}$  da  $\frac{1}{3}$  su rabu gida biyu daidai,  $\frac{1}{2}$  da  $\frac{1}{3}$  za su fahimci cewa ha kan zai yiwu, sai a nuna cewa gida  $\frac{1}{2}$  da  $\frac{1}{3}$  daga cikinsu shi ne  $\frac{1}{2}$ , wato  $\frac{1}{2}$  a cikin biyu. A maimaita wannan dabarar ta wajen raba  $\frac{1}{2}$  da  $\frac{1}{3}$  zuwa gida uku da kuma tara.

**KARIN AIKI:** Ka/ki sake karanta labarin. Ka/ki umurci wani  $\frac{1}{2}$  da  $\frac{1}{3}$  ya/ta tsaya kusa da allo ya yin da kake/kike karantawa. Idan ka/kin fadi kowane sashen lamba, sai  $\frac{1}{2}$  da  $\frac{1}{3}$  ya nuna sashen lambar a kan allo.