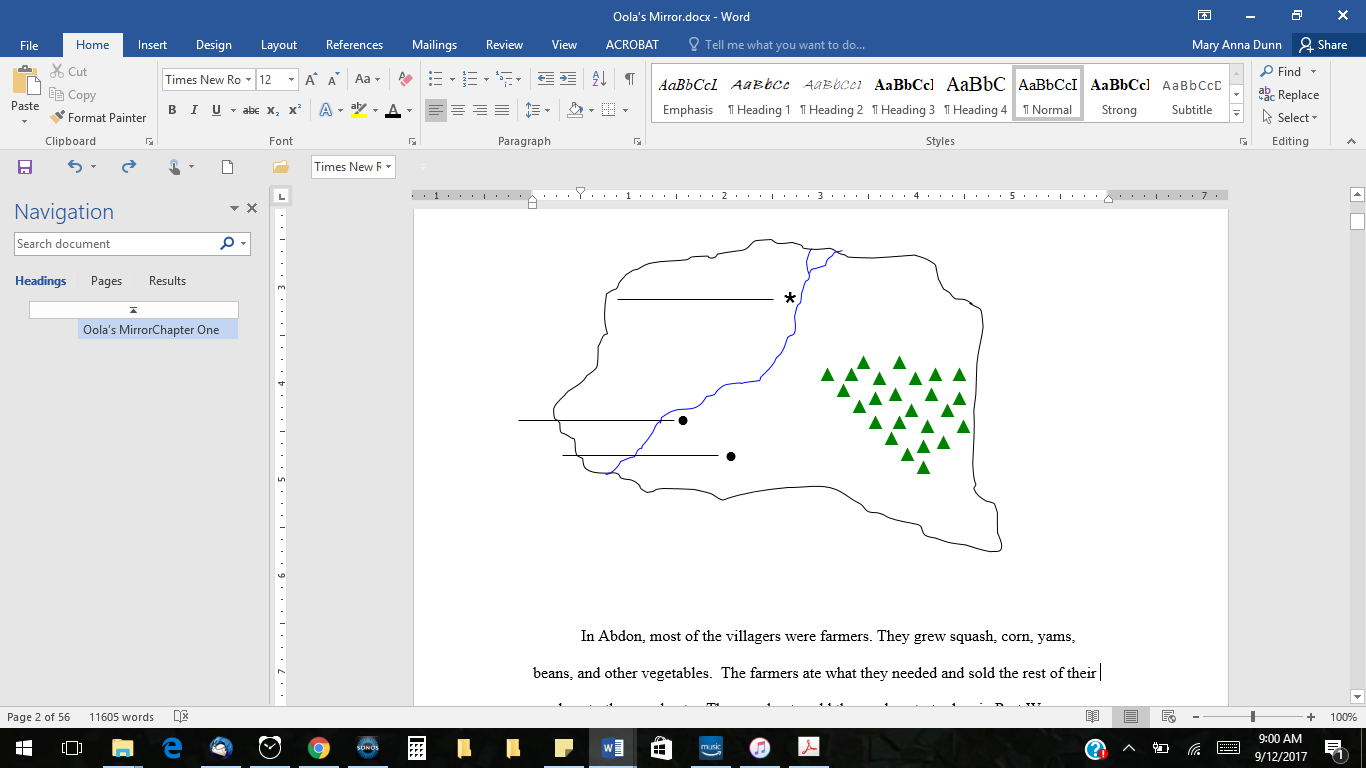


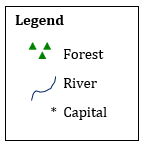
#### Oola’s Mirror

#### **Chapter One**

**Hunger Comes to Abdon**

On the far away island of Snoon was a tiny farming village called Abdon. Abdon was a one day’s walk from Port Wanamay on the Yokeen River, and it was a two days’ walk from the rainforest. The capital of Snoon was Takeneki, a city on the Yokeen River. Snoon was on the north of the island, a long way from Port Wanamay and Abdon

Here is a map of Snoon. Can you label Abdon, Port Wanamay, and Takeneki?



In Abdon, most of the villagers were farmers. They grew squash, corn, yams, beans, and other vegetables. The farmers ate what they needed and sold the rest of their produce to the merchants. The merchants sold the produce to traders in Port Wanamay and with some of the money they bought foods the traders had brought from faraway places—food like rice, beans, and smoked meats. Since these foods lasted a long time, and since the merchants always had money left over from their sales, they were a little better off than the farmers, but no one in the village was rich.

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It didn’t matter in Abdon that no one was rich nor that the farmers never had much more food or money than they needed, until the year of the terrible famine. First there had been a drought. It barely rained at all that summer and the land had produced fewer and smaller crops. Then there was a blight, and many of the crops that survived the drought began to die of disease.

. Everyone had to ration their food. When you ration food, you count out how much food you have, and how many days it has to last, then you figure out how much food you can eat each day.

There was very little for the farmers to eat, so their rations were small. They were always hungry. The merchants were a little better off than the farmers, because they always brought some food back from Port Wanamay. However, they knew that as long as the farmers had no produce left for the merchants to sell, they would soon run out of food and money, too. So even though they were never actually hungry, the merchants too had to ration their food carefully. They wanted to share with the farmers, but they did not want to run out of food. The merchants held a meeting.

“We need to help our friends the farmers,” said a merchant named Oola.

“Yes,” said her neighbor, Barboo. “I gave a farmer three cups of beans yesterday. I am glad I could help, but now I have less food for myself and my family.”

The merchants nodded solemnly.

“This is a serious problem,” Oola agreed. “We can’t let our friends and neighbors go hungry, but we need to take care of ourselves and our own families, too. Who knows when this famine will end?”

The merchants talked among themselves for over an hour but no one knew what to do about this terrible problem.

Finally, one merchant said, “We’re no closer to knowing what to do now than we were an hour ago. Someone should go ask the Jungle Sage.”

The Jungle Sage was a very wise old woman who lived in the rainforest. It was a two-day walk to her home and the rainforest was a dangerous place, full of stinging bugs, biting beasts, and noisy noises. The villagers rarely consulted her.

“I would go,” said one villager, “But I can’t leave my family for so long.”

“I would go,” said another, “But I have a blister on my little toe.”

“I would go,” said yet another, “But it is my mother-in-law’s third cousin’s half birthday, and I can’t miss it.”

It seemed everyone wanted to go, but everyone also had a reason to stay home. The merchants grew quiet. In a nearby farmer’s house they heard a child crying.

“Mama, I am hungry,” said the child. “Please, can’t I have one more potato cake?”

“I’m sorry,” the mother said, “We have to save our food or it will not last the month. You can have one more potato cake tomorrow.”

The mother walked out of the house, sat down on a tree stump, and buried her face in her hands. Oola stood up.

“I am going to see the Jungle Sage,” she announced. She went into her cottage and made 20 rice balls, which she put in a sack for her journey.

Oola will walk for two days to get to the forest, and two days more when she comes back. How many days will she walk in all? \_\_\_\_\_\_\_\_.

Remember, Oola had 20 rice balls. How many rice balls can she eat a day? To figure this out, you can draw 20 rice balls divided evenly among each day on this calendar:

|  |  |  |  |
| --- | --- | --- | --- |
| **Day One** | **Day Two** | **Day Three** | Day Four |
|  |  |  |  |

Do you have the same number of balls on each day? How many balls can she eat each day? \_\_\_\_\_\_\_\_\_\_\_\_\_

Well, that’s how many rice balls Oola *could have* eaten if she had kept all the rice balls. But she didn’t. As she left, she passed the home of the farmer and her child. She paused for only a moment, then took out one rice ball and left it in their window. Now she only had \_\_\_\_\_\_\_ rice balls left.

“Well,” thought Oola, as she walked down the path that led out of the village, “At least I do not have so heavy a bag to carry now.” On the way out of the village, Oola passed three more farmers’ houses. At each house she stopped and left another rice ball. How many rice balls were left? Draw a picture of three cottages and count down from 19 to show how many rice balls Oola had after she stopped at each house.

Now Oola had \_\_\_\_\_\_\_ rice balls.

“I can only eat four rice balls a day, she thought. Already her stomach felt empty.

“I’ll eat one for a morning snack, one for lunch, one late in the afternoon, and one for dinner,” she thought. It was hard to walk, because she was getting hungrier and hungrier, but she kept going, reminding herself that no matter how hungry she was, there were people who were hungrier, many of them children. So Oola pushed on, resting to eat **one rice ball late in the morning, one at lunch time, and one late in the afternoon**. Count backwards to see how many she had left. \_\_\_\_\_\_\_\_\_\_\_\_\_

“Possibly,” she thought, “I will find someone to stay with tonight who will feed me.” It was the custom in Snoon for travelers to stop in strangers’ homes where they were given food and shelter for the night. As she walked, growing wearier and hungrier with each step, Oola’s imagination began to take over. She was picturing a small but cozy cottage with a large open room in front. There was a table in the room, a table so large that it filled most of the room and the whole table was spread with good things to eat--all the things Oola loved most: yams, green beans, fish stew, and foods from far away lands that she had only tasted once or twice in her life: sweet pastries, candy, and fruits from exotic islands far away.

By now Oola was so tired she was almost dreaming. The cottage filled with food seemed real to her. It was a shock, then, when late in the afternoon she came to a tiny mud cottage with one door and one window. An old woman sat outside the cottage, picking at an ear of corn.

“Good evening, good mother,” said Oola in the traditional greeting of her people. “I hope you are well and all your family is well.”

“Greetings,” replied the old woman. “It’s late, please sit with me a while. Are you very far from home?”

Oola sat down on a small stool next to the old woman. She saw that the woman was carefully picking a few good pieces of corn off a dry and shrunken cob. The well-spread cottage of her mind dried up and shrank like the corn in the old woman’s hand. “The famine reaches at least this far,” she thought sorrowfully, “I don’t see how anyone can help us.”

But her voice was cheerful as she replied, “Yes, I have walked all day from the village of Abdon. I am going to the rainforest to meet the Jungle Sage.  
 “That’s a long journey,” the old woman said. “You must be tired and hungry. Stay the night. I am sorry I do not have more to offer you too eat.”

Although the old woman smiled, her eyes were sad. Oola looked at the corn she held in her hand and knew how it hurt her to share it. Oola thought of the 13 rice balls in her sack.

“If I eat one and give her one I will have \_\_\_\_\_\_\_\_ left. That is not many, but at least I will be going home to more food than she has. What harm will it do if I am a little hungry on the way home?”

“Good mother,” she said, “My sack is so heavy. It’s been hard to carry it all this way. I was foolish to pack so many rice balls in here. Would you mind terribly taking one? You would be doing me such a favor.”

So the two women shared their food together, and Oola slept a little better that night than she had expected to. When she awoke in the morning she realized she would have to share her breakfast too. She now only had 11 rice balls. If she ate one and gave the old woman one she would have only \_\_\_\_\_\_\_\_ to last her all the rest of the journey. Still what could she do? Here was a frail old woman with not much more than a few dried ears of corn to her name.

Oola was a young, healthy merchant with a barrel of rice and a barrel of beans back at home, not to mention a jar of money under her bed. So Oola shared her rice balls again, thanked the old woman and began her walk. Because she had little food left, she skipped her morning snack but at lunch she was so hungry she ate one more rice ball. Now she only had \_\_\_\_ rice balls left to last the entire trip.

By now she was very tired and hungry, but she kept going. The air had become softer and cooler, and it had a sweet, rich smell to it. On the horizon she could see a green blur that she knew was the rainforest. She began to feel more hopeful. She planned to walk one more hour and eat her afternoon rice ball under one of the twisted, vine-like old trees that she was seeing more and more often along the road. When it was almost time to eat and she knew she was very close to the edge of the rainforest, she saw a huge tree. The branches were so long they bent almost to the ground and the tree was covered with thick leaves so that it looked almost like a lush green tent.

“I can go in there and eat my rice ball.” She thought about how peaceful that would be. When she was closer to the tree, however, she saw a man sitting in front of it. By the tree was a basket filled with old mirrors: cracked mirrors, chipped mirrors, mirrors so dark and smoky it was hard to see in them at all.

“Good afternoon, good brother,” Oola greeted him, “I hope you and all your family are well.”

“Very well,” said the man, but he did not look well. He had the thinnest arms she had ever seen. “May I show you my wares? I am selling mirrors for food.”

Oola pulled her sack closer to her, but she looked at the mirrors.

“Why,” she wondered, “Does he think anyone would want to trade their food for a broken mirror, especially in a time of famine?”

She looked again at his arms, as thin and twisted as the vines on the tree. Now she understood. He was too proud to beg, so he was “selling” these worthless old mirrors.

Oola examined the mirrors and pulled out a rather large square one. It seemed the least cracked and smoky of any and though there was nothing at all remarkable about this mirror she said, “Oh, this is such a lovely mirror, brother. Will you take a rice ball for it?”

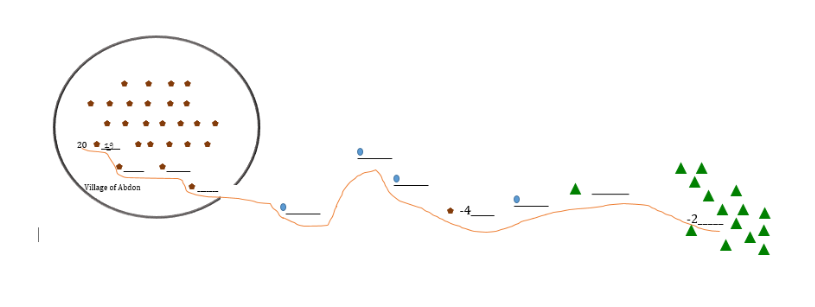
“Ah, you have made such a good choice,” he said, “Such a good choice, my miss.” He wrapped the mirror in straw. Oola put it in her sack and handed him a rice ball. Now she only had \_\_\_\_\_\_\_\_ rice balls left.

“I had better skip my afternoon snack,” she though miserably, as she bid the mirror man good-bye. “Oh well, here I am at the rainforest, perhaps the Jungle Sage will have something to eat. The famine cannot possibly extend this far.”

Even though it was late in the afternoon when she reached the rainforest, she knew it would already be as dark as night once she walked a few feet into the forest. There would be no point in looking for the Jungle Sage until morning. Just at the edge of the forest was a tree with roots so huge they formed a tiny cave. She crawled inside. This would be her home for the night. She ate one final rice ball, leaving \_\_\_\_\_\_, and curled up inside the roots of the old tree. Oola was hungry, her feet and legs ached, and she was frightened to sleep in such a wild and strange place. Still, the floor of the forest was even softer than her own bed at home, and her journey had worn her out. She drifted off to sleep at last.

Oola woke very early in the morning to the sounds of birds screeching and thousands of insects buzzing and humming. She ate one rice ball, leaving \_\_\_\_\_\_\_\_\_ in her bag. Oola stepped out into the dimly light forest.

Here is a map of the path Oola followed from her home to the forest. At most stops, Oola either eats or gives away one rice ball. Sometimes she eats one AND gives one away. Fill in the blanks in the picture to show how many rice balls are left each time one is eaten.



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1) At the beginning of the story we read:

First there had been a *drought*. It barely rained at all that summer and the land had produced fewer and smaller crops. Then there was *blight* and many of the crops that survived the drought began to die of disease.

Sometimes when you are reading, you come across a word you do not know. If you look at other words in your reading, you might be able to figure out what the word means. The words “it barely rained all that summer” suggest that a *drought* is a period of little rain. Underline the words that suggest that *blight* is a disease that attacks plants.

2) You used a chart to show how Oola rationed out 20 rice balls over four days. By the time she left the village, she only had 16 rice balls. Use this chart to show how she could divide them to have the same number every day.

|  |  |  |  |
| --- | --- | --- | --- |
| **Day One** | **Day Two** | **Day Three** | Day Four |
|  |  |  |  |

3) Suppose you had 15 pieces of candy and you knew you would not get any more for 5 days. How would you ration your candies out?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Day One** | **Day Two** | **Day Three** | **Day Four** | **Day Five** |
|  |  |  |  |  |

4) Why do you suppose the villagers rarely consulted the Jungle Sage?

5) Imagine you are a farmer’s child living in Abdoon during the famine. Write a letter to a friend telling what your life is like.

Chapter Two

Nuts to Oola

Oola had not thought much beyond getting to the rainforest when she left Abdon, but now she wondered how she would find the Jungle Sage. A narrow path from the tree where she had slept led deeper into the dark forest.

“Well,” she thought, “This is the only path, so I guess there’s only one way to go.”

The soft path felt good to her tired feet. The light in the forest was quite dim, yet she knew it was bright morning outside of the forest. The small amount of light that did make into down through the trees was a greenish gold. She could hear the screeches of strange birds above her, and sometimes something large rustled in the trees, making her shiver. When she had walked for almost an hour, she heard the branches creaking overhead. Suddenly, something landed on her back, and she felt a pair of hands on her arm. She looked around in horror, but it was only a little monkey. She was so relieved that she did not realize he was reaching into her sack. Before she could react he had snatched one rice ball. Now she only had \_\_\_\_\_\_\_\_ left.

The monkey leapt back into the trees. He seemed to be laughing at her. Then he pulled five very large nuts from the tree and threw them at her.

“This is too much,” said Oola, and tears began to fall. “Still,” she thought, “I suppose I can use the nuts. Nice of him to leave me *something*”, she thought, trying to laugh. She dried her eyes and gathered the nuts off the path, dropping them into her sack. The nuts were almost as large as coconuts, and they made her bag terribly heavy, but she was in no position to turn down food.

When she turned back toward the path, she saw something she did not remember seeing before. A few hundred feet away was what she thought was a tree, much smaller than the rest, with tangled vines spilling from it in every direction. As she got closer she was astonished to discover that it was not a tree at all. This was an old woman, with hair and arms as dark and twisted as the roots of the tree Oola had slept under the night before.

Though she was undoubtedly the oddest-looking woman Oola had ever seen, there was something soothing about her. Her face was thin and very wrinkled, her nose and chin were surprisingly long, and her mouth and eyes seemed large for her thin face. It was not a wild face though, but a face that was gentle, kind, and wise.

Oola knew she had found the Jungle Sage.

“Greetings, good mother,” she said, extending her hand. “I hope you and all your family are well. I’m Oola. I have walked for two days looking for you.”

“Well,” said the sage with a little smile, “You must have wanted to see me very badly.”

“Oh yes,” began Oola eagerly. “You see, there is a terrible famine in my village, Abdon. I’m a merchant, and like the other merchants, I have not been hit quite so badly as the farmers. We share a little of our own food with the farmers, but we know it’s not enough to help, and we are afraid to give them more…because if we run out of food too, how will we feed our own families? So I agreed to come here and ask for your wisdom.”

“You don’t need anything from me,” replied the old woman, “You have all that you need already.”

“No, no you don’t understand. *I* may have all that I need, but what about the farmers? They’re my friends, my neighbors.”

“You have all that you need,” repeated the old woman.

“It isn’t enough to have all that *I* need,” Oola argued, “I am here because of what *they* need.”

“You said that already,” said the sage with a grin, “And I said, ‘You already have everything you need’.” And with that, the old woman turned into a tree.

“No. No,” pleaded Oola, grabbing at the trees’ hard branches. “Come back, come back! Tell me what to do.”

But it was no use. Oola turned and walked back towards the forest’s edge, dragging her heavy sack behind her. In less than an hour, she was out of the forest.

“With any luck, I’ll be home in time to eat a real dinner tomorrow night,” she thought. “But of course, I don’t have any luck,” she added, feeling the weight of her sack, which now contained four rice balls, five big nuts, and a mirror.

How many objects was Oola carrying in all? \_\_\_\_\_\_\_\_

She came to the tree where she had met the mirror man the day before. He was not outside the tree. She parted the thick leaves that reached to the ground and peeped behind them. He wasn’t there either.

“Well, that’s lucky anyway,” she thought, grateful to be able to take out one rice ball and eat it all by herself in the tree’s cool shade. “At least, I still have \_\_\_ rice balls left and these nuts.” She tried to crack the nut against the tree, but the shell was much too hard. After trying a few more minutes more, she gave up and headed back down the path. She walked for two hours before she grew so hungry she knew she could not walk `any further unless she ate another rice ball. Now she was down to her last \_\_\_\_\_ rice balls and could only hope she would somehow find a way to open the nuts.

Oola wondered what she would tell the merchants when she came back with no wisdom, with nothing but a bag full of oversized nuts and a broken mirror. At dinnertime she was back at the house where she had stayed two nights earlier. She knocked on the door, and the old woman smiled warmly when she greeted her.

“Good mother, may I trouble you for another night’s rest?”

The old woman was happy to invite Oola in again. Oola gave her one rice ball, leaving \_\_\_\_, which she ate herself. Now there was nothing left but the nuts. Oola went to sleep thinking how disappointed the woman would be to find that she had nothing to offer her for breakfast.

In the morning when Oola awoke, the old woman was already up making a thin porridge out of a little bit of ground oats and a lot of water. Oola knew the old woman would have been able to make herself a thicker porridge if she had not had to share it. She hoped she could somehow open the nuts. They would have a pretty good breakfast if she could.

“Good mother,” said Oola. “My sack is terribly heavy with these nuts. A monkey tossed them at me yesterday. If we only knew how to open them, we would eat some now and I could leave some here, because I can barely carry this sack.”

“Let me see them,” said the woman.

Oola opened the sack and looked inside. Somehow, when she had set her bag down the night before, Oola’s sack had shifted in such a way that the nuts were all reflected in the mirror. With the 5 real nuts and the 5 reflected nuts, it looked as though there were \_\_\_\_\_ nuts in the bag.

“I wish that were true,” thought Oola, “I would leave half here because I am afraid this sweet old woman will starve to death.”

She reached into her bag and took out one… two… three… four… five nuts and then she gasped, because there were still 5 nuts in the bag. The reflected nuts had become real. Instead of 5, she really did have 10.

She set the 5 nuts on the table next to the first 5 and stared for a moment at the row of 10 nuts in astonishment. Then she looked back in the bag. The mirror was dark now, reflecting nothing at all.

“Ah, er, yes,” Oola began, “Well, I certainly will wear myself out carrying all *these* home. Do you perhaps have a mallet or something we can strike them with? The old woman had an ax in the back of her house. Oola took a nut, set it on a tree stump, and split it in half like a log.

*Draw a line to show how she might have divided it in half.*

The old woman and Oola used a spoon to scoop out the nutmeat, which was creamy in color and surprisingly soft. They mixed it into the porridge. The porridge thickened. It was delicious to eat — sweet and smooth.

After eating and helping clean up, Oola made ready to go. She wanted to leave the woman with a large supply of nuts. Yet, she also needed enough nuts to eat on the way home and still have something left from her journey to share with the farmers.

“I wonder,” thought Oola. They had eaten only one of the ten nuts so there were still \_\_\_\_ on the table. She took 4 and put them back in the bag, on top of the mirror.

Oola looked in the bag. She saw the 4 nuts and their reflections, so she seemed to see \_\_\_\_ nuts. She reached into the bag and pulled out one… two… three… four …five… six …seven …eight nuts. The four nuts had doubled to make eight. With 8 nuts from the bag combined with the 5 nuts she had left on the table, she now had a total of \_\_\_ nuts. When she looked back in the bag, the mirror was black once again.

“Ah, good mother, I cannot possibly carry all these nuts. I’ll take one and leave the rest with you.”

Oola left the house with a bag that felt lighter than before, but her heart too was lighter. With this one nut she could feed her whole village.

Oola’s breakfast had left her surprisingly full, and she was not at all hungry until early afternoon, when she still had three hours walking ahead of her. She had come to a very rocky place. She sat down and opened her bag. She placed the nut in front of the mirror and when she reached in again, sure enough she took out not one but \_\_\_\_ nuts. She found a large rock, which she used to crack one nut. It broke into many pieces and she was able to easily separate the nutmeat from the shells. This nutmeat was nothing like the other; it was dark brown, spicy and very filling.

Oola finished that nut, put the extra nut back in the bag, and headed home. She arrived late at night after everyone had gone to bed, except one guard who stood by the village entry.

“Ah, Oola, I’m relieved to see you are safely home,” the guard said, “What wisdom did you bring with you?”

“I will share everything with you tomorrow,” she replied, “Have all the villagers meet me before lunch in the village center. Until then, no one is to disturb me.”

With that, Oola bid the guard goodnight and went back to her own home. How glad she was to see her bed, but first, there was one thing she had to know.

“Where is the magic,” Oola was wondering. “In the mirror or in the nut?”

Oola took another mirror off her dresser and put it in the bag with the nut. Nothing happened.

“So, it’s the mirror,” she concluded, but just to be sure, she took a bean from a barrel in the back of her house and put that in the bag with the mirror she had bought from the mirror man. Nothing happened.

Oola put the nut back in the bag with the mirror man’s mirror, then reached in and took out 2 nuts.

“So, it’s the mirror *and* the nut.”

Then, just to be sure about everything, she took the mirror and the 2 nuts out of her bag and arranged them on the table. All she saw was two nuts and two reflections. She reached out towards the reflected nuts and touched glass. So Oola put the two nuts and the mirror back into the bag. When she reached in, the nuts had doubled. She took out \_\_\_\_\_ nuts.

“No, it’s the mirror *and* the nuts *and* my bag.”

Oola ate one nut, which this time tasted just like chocolate cake, and put one nut back in the bag, leaving \_\_\_\_\_ nuts on the table, which she put in a cupboard. Then she gratefully crawled under the covers of her own bed. She was tired and she had a lot to do in the morning.

1) **Oola had 1 mirror and 4 rice balls in her bag when the monkey stole one rice ball and left her with 5 nuts. How many things were in her bag?**

This problem has three parts. First find out how many things were in her bag before she saw the monkey.

Next, figure out how many things she had after the monkey took her rice ball.

Finally, figure out how many things she had after she picked up the nuts.

**2) Make-up your own word problem about Oola’s bag.**

|  |
| --- |
|  |
|  |
|  |
|  |
|  |

**3) Fill in this number line.**

20 \_\_\_\_ \_\_\_\_ \_\_\_\_ 16 \_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ 11 \_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_

\_\_\_\_\_\_ \_\_\_\_\_\_\_ 5 \_\_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_\_\_ 0

**4) Arrange four nuts in front of your mirror.** How many nuts do you see when you include their reflections?

Here is the number story about the nuts you saw: 4+4= \_\_\_\_\_\_\_

Experiment with doubles by setting a number of nuts in front of your mirror. Make sure the mirror shows as many as you actually set out. For each group of nuts you double with the mirror, write a number story.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5) Draw a detailed picture of one place Oola stopped on her journey. Show your picture to someone else, and tell them about it.**Chapter 3

Oola Figures Things Out

Oola woke up the next morning before anyone else was up, picked up her sack, and snuck into a little shed behind her house. Soon she heard voices and knew the villagers were stopping to point and talk as they passed her house. Word was out about her late night return. She knew they were eager to learn what she had brought back from the rainforest, so she went to work quickly.

Oola got out a piece of paper.

“Let’s see, the farmers all have a little bit of food, just not enough to survive on. If I give each person two nuts per day until the famine is over, they should have enough to make their own rations go much further.”

She made a table that looked like this.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Name of Household*** | ***Number of People in Family*** | ***Number of Nuts Needed*** |  |  |
| ***Moona*** | *5* | *10* |  |  |
| ***Simo*** | *3* |  |  |  |
| ***Twoali*** | *1* |  |  |  |
| ***Onko*** | *4* |  |  |  |
| ***Zeela*** | *6* |  |  |  |
| ***Fanmah*** | *3* |  |  |  |
| ***Sellfell*** | *2* |  |  |  |
| ***Eldmont*** | *7* |  |  |  |
| ***Feem*** | *6* |  |  |  |

There are five people in the Moona family, so they will need 10 nuts.

Fill in the chart for the rest of the families.

Oona added a new page and continued to work on her chart until she had a entry for everyone in the village. Now her really hard work was ahead of her.

She arranged her nut and her mirror in the bag so that the mirror reflected the nut. She took out two nuts. She put both nuts back in the bag and took out \_\_\_\_ nuts. She put those nuts back in the bag and took out \_\_\_\_\_ nuts. She doubled the nuts again and now she had a total of \_\_\_ nuts.

Look at the chart. How many nuts does she need for the Moona family? \_\_\_\_ She took the Moona’s nuts and put them in a pile by the door. She put a check in the first blank column next to the Moona family. Put a check there.

Oola had 16 nuts before she took out the Moona’s share. How many did she have after she took theirs out? \_\_\_\_

That would have been just enough for the Simo family but she needed to have one nut left for doubling. What do you think she did? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

She gave the Simo’s six nuts and kept one for doubling. She put a check by their name.

Mr. Twoali lived alone. She doubled her nut and then put both nuts back in the bag. Now she had \_\_\_\_. She gave him 2 and she had 2 left.

Now it was time for the Onko family. How many nuts did they need? Remember, Oola always has to have at least one nut left to begin doubling for the next family on the list.

Oola went through her entire list this way, doubling the nuts for each family, and checking their names after she had added their nuts to the huge pile by the door. When she finally had enough nuts for every farm family, she made a list for each merchant household. Because the merchants already had enough food, she only counted out one nut per day for them. By the time she had finished it was very late in the morning. Her shed was so full of nuts that she could not get to the door and had to climb out a window.

Oola went to the village center, where everyone was already waiting for her. The villagers rushed towards her, grabbing her hands and telling her how glad they were to see her safely back from her journey.

“Greetings, my good friends,” she said warmly, “I hope you are all well. My trip was certainly an unusual one, but I’ll tell you no more. Instead, each of you bring a large sack or basket and come to my shed.”

The villagers scattered but soon all were back at the shed with sacks and baskets. She opened the door and the crowd gasped.

“These were sent to you from the rainforest,” she said. “They’re not mine. They’re yours. There are just enough for each of you take your own share today. As long as the famine lasts there will be more. There are double portions for the farmers, because they have less food to begin with.”

The villagers wondered how she could have possibly brought over a hundred giant nuts all the way from the rainforest. The guard was especially perplexed, because he had seen her walk through the village gate carrying only a nearly empty sack. But Oola knew that no matter how good and honest most of the villagers were, this was the sort of thing that must be kept quiet. So she merely smiled at their questions and said, “Aren’t you going to take your nuts? Someone from the Moona family, please come and take 10 nuts.” Oola put a second check in the last column by their name. Go back and add a check to their column.

When all the farmers had received their nuts, Oola began to distribute the nuts to the merchants, but one of the merchants, a tall man named NooNoo, complained.

“Why should they have more than us? That isn’t fair.”

“The farmers are what this was all about,” argued one merchant.

“We sent Oola to the rainforest to get help for *them* not *us*,” said another and a third added, “Where would we be without the farmers anyway? If it were not for the food they grow and we trade, none of us would have anything at all.”

But NooNoo was not satisfied, and Oola saw that he was glaring at her long after the other villagers had gone home to their lunches.

That same night, the villagers held a feast to celebrate Oola’s safe return and the wonderful gifts she had brought back from the rainforest. Each family took one nut and cut it into four equal parts.

How can you divide this nut into four parts, all the same size?

People put their nuts in baskets and bowls, and they all enjoyed trying out each other’s nuts. Some were salty and crisp, some were fruity, some were soft and mushy, some were sweet, some were sour. There seemed to be almost an endless variety of flavors. They ate some nuts just as they were and mixed others with rice and vegetables. There was a lot of music, a lot of dancing, and most of all a lot of joy in Abdon that night.

Only one person in all the village seemed unhappy; NooNoo sampled more nuts than everyone else, but no one saw him smile all evening.

In the morning, after having half a nut mixed with eggs for breakfast, Oola went back to her shed. She looked at her chart from the day before and thought, “There ought to be a better way to do this.” After a looking at the chart a moment or two more, she made new chart.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Name of Household*** | ***Number of People in Family*** | ***Number of Nuts Needed*** |  |  |
| ***Moona*** | *5* | *10* |  |  |
| ***Simo*** | *3* | *6* |  |  |
| ***Twoali*** | *1* | *2* |  |  |
| ***Onko*** | *4* | *8* |  |  |
| ***Zeela*** | *6* | *12* |  |  |
| ***Fanmah*** | *3* | *6* |  |  |
| ***Sellfell*** | *2* | *4* |  |  |
| ***Eldmont*** | *7* | *14* |  |  |
| ***Feem*** | *6* | *12* |  |  |
| ***Bleeni*** | *1* | *2* |  |  |
| ***Malba*** | *5* | *10* |  |  |
| ***Glaff*** | *3* | *6* |  |  |
| ***BeeNew*** | *6* | *12* |  |  |
| ***Spoop*** | *1* | *2* |  |  |
| ***Fom*** | *4* | *8* |  |  |
| ***Spow*** | *2* | *4* |  |  |
| ***Barle*** | *3* | *6* |  |  |
| **Yorm** | *1* | *2* |  |  |
| ***Total Nuts for Farmers*** |  |  |  |  |
| ***Pow*** | *5* | *5* |  |  |
| ***Lona*** | *4* | *4* |  |  |
| ***Ilky*** | *3* | *3* |  |  |
| ***Barray*** | *1* | *1* |  |  |
| ***Beldy*** | *7* | *7* |  |  |
| Total Nuts for Merchants |  |  |  |  |
| Grand Total |  |  |  |  |

Oola decided that instead of doubling enough nuts for each household, one house at a time, it would be faster just to find the total number of nuts she needed. Total means how many of something you have all together, so of course, a total is what you get after you add.

Look at the chart. Find the phrase “Total Nuts for Farmers”. Now run your finger across that row until it is also under the column labeled “Number of nuts needed”. Circle the box you are pointing to. When we know how many nuts Oola needs to give out in all, we will put the number there.

Now look at the numbers in the column. When Oola combines all the nuts for all the farmers, do you think she will have somewhere around 50, 100, 150, or 200 nuts? \_\_\_\_\_\_ Get a calculator and carefully add up all the nuts. Write down you answer, in the box you circled. Is your answer close to your estimate? Add your numbers up one more time, just to be extra sure about your answer.

Now do the same thing for the merchants. You now have two totals, one for the farmers and one for the merchants. Totals that still need to be added again are called “subtotals”. In the space below, add up your two subtotals. That is how many nuts Oola needs.

Oola decided she first needed to figure out exactly how many nuts her sack would hold. She put in 1 nut and took out \_\_\_\_\_. She put them back in and took out \_\_\_\_. She put those back in and took out \_\_\_\_\_. She put those back in and now she had \_\_\_\_\_.

Her bag was very full, but she also knew she could get a few more in.

Oola estimated that her bag would probably hold 20 nuts. To get a total of 20 nuts, how many nuts would Oola have to double? \_\_\_\_\_\_

She returned 10 nuts to the bag, and when they were doubled the bag was full. She left 10 nuts in the bag.

Oola put six nuts in one pile by the door and ten nuts in a second pile. She now had 6+10 nuts ready to go. How many nuts is that? \_\_\_\_\_\_\_

Solve this problem to see how many more nuts are needed

146

-16

Oola’s piles looked like this:

Draw more piles of 10 until you have 146 nuts, including the ones already drawn for you.

How many piles of 10 did it take? \_\_\_\_\_\_\_\_ How many nuts were left? \_\_\_\_\_\_

Oola’s work was done much more quickly that morning. When she had all the nuts ready, she went to the window. Something seemed to flicker past, but Oola thought it must have been a shadow. She climbed out the window and turned the corner behind her shed. As she did, the first person she saw was NooNoo.

“Ah, good morning, good friend,” Oola greeted him. “I hope you and all your family are well.”

“Well, enough,” said NooNoo gruffly. By then, the villagers were gathering at her house and the nuts were soon distributed. That day, even NooNoo left smiling, because he had seen some interesting things through Oola’s window.

1. If your family were farmers, how many nuts would Oola have given you?\_\_\_\_\_\_\_
2. Look back at the chart Oola made.
   1. Which was the biggest household? \_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Which was the smallest household?\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Which two households are the same size?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. How many more nuts do the Zeela’s get than the Onko’s?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Write your own question about the chart.

|  |
| --- |
|  |
|  |
|  |
|  |

1. Using your mirror when you need to, write the doubles for each number in the table below. The first is done for you.

|  |  |
| --- | --- |
| 1 | 2 |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |

1. Do you think it was fair that Oola gave the farmers more nuts than she gave the merchants? Why do you think that?

Chapter 4

NooNoo Figures Things Out, Too…Sort Of

All the while Oola was doubling her nuts, NooNoo had been watching from the window. Oola was so absorbed in her work that she never even saw him. NooNoo watched Oola put 10 nuts in the bag and take out 20.

“Uh-*huh*!” thought NooNoo. “Just as I suspected. There’s some kind of magic going on in here.”

He kept watching. NooNoo noticed that every time Oola put the nuts in the bag she seemed to be moving something else that he could not see.

NooNoo watched all morning. First Oola had 6 nuts by the door. She added 10 nuts and had 16. She added 10 more and had 26. She added 10 and had \_\_\_\_. She added 10 to those and had \_\_\_\_. The she added 10 and got \_\_\_\_. With 10 more she had \_\_\_. 10 more made \_\_\_\_. Then \_\_\_\_\_, \_\_\_\_\_\_, \_\_\_\_\_\_, \_\_\_\_\_\_, \_\_\_\_\_\_, \_\_\_\_\_\_\_, \_\_\_\_\_. In just a couple of hours she had made and stacked enough nuts to feed the village for one day.

NooNoo was furious. “If that’s all it takes to make these nuts, she could just as easily make enough for the merchants to have two nuts as well.”

NooNoo wanted to see what was inside the sack. Now, Abdon was a very small village. The tiny houses were close together, and it was impossible for anything to happen in one house without someone else noticing. Most of the farmers were outside the village, working on the few crops they had left, but the merchants were still in the village, and the farmers had a way of coming in and going out all day. NooNoo needed to get all the people out of the village. It took a while for him to come up with a plan, but eventually he had an idea.

That night, after everyone else was in bed, NooNoo put several jars of dyes, some brushes, and a lamp into a bag. Next he needed to get out of the village without being noticed by the guard. He wrapped himself in a black blanket, stood behind a tree about 50 feet away from the guard, and whispered loudly, “Over here, by the wall, you can climb in right here.”

While the guard searched along the wall for intruders, NooNoo slipped through the gates and made his way to each of the farmers’ fields. At every field, he took out his dyes and sat down to work painting angry faces on the crops. NooNoo painted 15 scowling squash, 50 grimacing beans, and 40 threatening looking potatoes. He painted glowering faces on each of the 7 ears of corn that had survived and on each one bent back the shucks so that all the corn seemed to stand hands on hips.

Look over the paragraph above. Do you think NooNoo painted about 100, 200, or 300 vegetables?\_\_\_\_\_\_\_

Use a calculator to see how many he painted.\_\_\_\_\_\_\_\_

The poor crops, already dried out and blighted, were a fearsome sight when NooNoo left. He threw a rock over the village wall far enough away from the gate that he could easily slip back in when the guard went to investigate the sound. All he had to do now was climb in bed and catch a few hours sleep, but he made sure he was up early enough to watch Oola’s house before the farmers left for their fields.

As he expected, Oola was up as early as the farmers, and she had already been doubling for a while when the first of the farmers came rushing into the village shouting.

“As if we didn’t have enough trouble,” one cried, “Now our vegetables are angry at us.”

As NooNoo had hoped, all the merchants ran out to see what the trouble was, even Oola. He hurried into her shed and opened the bag. Inside it, he found the cracked, dark mirror. NooNoo examined the mirror for as long as he felt it was safe, grabbed two nuts, and returned home.

The merchants and some of the farmers returned from the fields. They had tasted a few of the vegetables and decided that angry, dried out, blighted vegetables tasted no better or worse than just dried out, blighted vegetables.

Oola returned to her cabin and went back to work.

“Where did I stop?” she wondered. Oola looked over the piles of nuts she had already doubled.

Here is what she saw. Skip count the tens .

Oola saw that she had 3 piles of tens, and she knew she had begun with 6 nuts in her first pile.

“So,” she thought, “I have 36.” But the first pile looked small. Look at the picture of her nut piles again. How many nuts were in her first pile.\_\_\_\_\_

“Now, I *know* there were 6 in the first pile. There always have to be six in the first pile.”

How many nuts does Oola need to add to the 4 in the pile to get it back to 6?

4+ □ = 6

“Now I *really* have 36, but what happened to those other two nuts?” she wondered. “Well, let’s see, how many to go?”

Oola needs 146 nuts. She had 36 nuts. How many more nuts did she have to make?

146

- 36

Oola went back to work doubling her nuts. While Oola was hard at work, so was NooNoo. He was inside his house, chipping at a rectangular mirror with a small chisel and holding it over a smoky fire.

As usual, NooNoo was one of the first villagers to arrive at Oola’s shed the next morning. He had just picked up his nut when suddenly he clasped his hand over his eye and began to yell loudly.

“Oww oww my eye. Ow my eye. My eye. Ow!! Ow!! Ow!!”

“What is it NooNoo?” everyone asked, crowding around him.

One of the farmers put a hand on his shoulder. “Let me look at your eye,” he said.

“No. Don’t touch it. Don’t touch it. Ow there’s something in it.”

“Well, let someone look,” insisted another.

“Noooo. Ow. Ow. Ow.”

“Oh someone give him a mirror then and let him look at it himself,” said a third villager who was rather tired of NooNoo’s constant complaining.

“A mirror. Yes. Ow. Ow. I need a mirror so I can get this out.”

Oola rushed to her sack and pulled out her mirror. “Well,” she though, “It’s a good thing it only works on the nuts in my bag. I sure would not want to double *him.”*

Oola handed NooNoo the mirror. He held it up to his face, rolled his eye around for a while, and then taking a large handkerchief out of a sack, he dabbed at his eye.

“Ah, I got it. Thank-you, Oola. Thank-you very much.” With that he left.

“That’s the politest he’s ever been,” one of the villagers remarked, and everyone laughed.

After all of the nuts had been distributed, Oola went back to her house for lunch.

Oola always left one nut in her shed to double for the villagers, and kept one in the house, which she doubled for herself whenever she needed it. It was time to double a new one.

So Oola put her nut in the bag and took out … 1 nut.

“One nut!” exclaimed Oola. “I must have turned the mirror the wrong way.” She looked in the bag. Everything looked right but she adjusted the mirror and tried again.

“Only one nut,” Oola had a sinking feeling, but she said, “Maybe something is wrong with the nut. She raced out to the shed and got her other nut. Nervously, she put it in the sack. She opened the bag and took out only one nut.

Oola sank to her knees and buried her face in her hands.

At the same time, in his house, NooNoo was also experimenting with nuts and mirrors, and he was no happier with his results. When NooNoo had come home from the shed he put his nut on a table with the two he had taken the morning before. Then he reached into his sack and pulled out Oola’s doubling mirror. When Oola handed him the mirror, he had quickly switched it with his own mirror, which was hidden in the folds of the large handkerchief. Oola was at her house, desperately trying to double nuts with NooNoo’s mirror.

NooNoo put the mirror back in the sack, along with two of his nuts. He looked in the sack and still saw only two nuts. One of these appeared to be a reflection.

“What?” groaned NooNoo. He reached in his hand and pulled out only one nut. He yanked the mirror out of his sack. Now the mirror was blank, reflecting nothing at all.

“This cannot be.” NooNoo added his last nut to the one he had pulled from the sack and put the two of them in with the mirror. He reached in again and pulled out one nut.

By now, most of the villagers had gone back to their fields outside the village wall. NooNoo felt too desperate to be very careful. He snuck from one house to another looking for the nuts. Since most had not yet eaten any nuts yet, he soon had all the nuts his sack would hold: 20 nuts. He lugged the heavy bag to his house and put the mirror back inside.

NooNoo opened up the bag and found that half of the nuts were gone. Heonly had \_\_\_\_ nuts left. Now he was more careful. He put 6 nuts on his table and placed the remaining \_\_\_\_ in his bag. When he opened it, he found that once again half of the nuts were gone leaving \_\_\_\_. He put them back in the bag and took out \_\_\_. Now NooNoo had 1 nut from his bag and 6 on the table, leaving him with \_\_\_ nuts. A wiser man would have been satisfied with that, but no matter what NooNoo had, he always wanted more.

NooNoo put six nuts in the bag. He took out \_\_\_\_\_. He added his one remaining nut to those and put the \_\_\_\_ nuts in the bag. He took out 2. Still refusing to give up, NooNoo put his last two nuts in the bag, and when he opened it he had \_\_\_\_.

Maybe another person would have stopped there, with the one nut he was entitled to, but NooNoo just couldn’t quite trying. “If it worked for her, it has to work for me too. Maybe it didn’t work because I started with too many. I bet you’re supposed to start with 1.” So he put his one nut in the bag and when he opened the bag he found half a nut.

Finally NooNoo admitted he didn’t know what he was doing. He decided to go back to Oola’s house and see if he could trick her into sharing her secret. But when NooNoo got to Oola’s house she was gone. He asked around the village, but no one had seen her. NooNoo should have asked the guard.

1. **Here are some problems similar to the ones you solved with Oola today:**

Oola needs 146 nuts. She had made 26 when she was interrupted by a friend. How many more does she need? Use the space below to solve the problem.

1. **Here is a number story you completed:**

4+ = 6

2

You can use that story to finish a lot of related stories. Here they are:

+4= 6 2+4 = 4+2=

6-2= 6-4= 6- =4 6- = 2

1. **In the space below, skip count by 10s to 100.**
2. Oola’s bag doubles nuts. Every time she puts nuts in, she gets twice as many nuts back. NooNoo’s bag undoubles nuts. Every time he puts nuts in, he only gets half the nuts back. His bag is the opposite of Oola’s.

**On page 32, you made a double chart. You can use that chart or you can use 20 nuts, to finish this *undouble* chart:**

|  |  |
| --- | --- |
| 20 | 10  5+5=\_\_\_\_\_  10-5= \_\_\_\_\_  5+ \_\_\_\_=10 |
| 18 |  |
| 16 |  |
| 14 |  |
| 12 |  |
| 10 |  |
| 8 |  |
| 6 |  |
| 4 |  |
| 2 |  |

6-\_\_\_ = 3

3+3 = \_\_\_\_

3+ \_\_\_ = 6

8-4= \_\_\_\_\_

4+ \_\_\_\_ = 8

4+4= \_\_\_\_\_

1. Each box next to the chart has a number family in it. Number families are addition and subtraction stories that have the same numbers in them. The chart you filled out will help you tell these family stories. Just think of all the stories you can tell when you have learned your doubles!
2. Why do you suppose Oola’s bag doubles and NooNoo’s undoubles?
3. Can you think of a better word than “undoubles?”

Chapter 5

The Jungle Sage Surprises Oola

By late afternoon, the villagers were beginning to come in from their fields. Many of them discovered nuts were missing from their homes. One villager came out exclaiming, “I left 6 nuts on my shelf, and 1 is gone. How will I feed my family with only \_\_\_\_\_\_ nuts?”

Another moaned, “I had also had 6, but from my house 2 are gone. I only have \_\_\_\_ nuts to feed my family.”

“You think that is bad,” said a third, “I had 5 nuts and 2 are gone, so I only have \_\_\_\_ nuts left.”

So the villagers began to argue among themselves about who was the worse off. But there was no arguing about who could be responsible. They all had a pretty good idea who had taken the nuts, especially when they realized only farmers’ nuts were missing. A crowd of angry villagers arrived at NooNoo’s house, expecting to find him fat, happy, and surrounded by nutshells, but instead they found a gloomy NooNoo sitting with his chin cupped in the palm of his hands.

“Where are our nuts, NooNoo?” they demanded.

“Nuts. What nuts? I can’t even keep up with my own nuts. Look.” NooNoo stretched out his hand and showed them his half nut.

“Yes,” said a farmer, “Half a nut. So?”

“It used to be a whole nut.”

“Yeah, and I used to have a whole lot of nuts,” said the farmer. “Why should I care that you ate half your nut?”

“But, I didn’t eat it,” NooNoo said, sadly. “It just disappeared.”

“Disappeared?” the villagers asked, “How?”

“Don’t I wish I knew,” lied NooNoo. “I just came back to my house and half of my nut was gone.”

“That’s just what happened to *us*,” one of the villagers said.

“You don’t believe him, do you?” replied another, “He’s lying. He knows exactly what happened to our nuts, because he took them while we were all in the fields.”

“Yeah,” others agreed, while some argued that NooNoo couldn’t have taken the nuts because there weren’t any in his cottage.

“He couldn’t possibly have eaten 20 nuts by now,” one said, “And even if he had, where are the shells?”

“Search his house,” someone said. Some farmers began searching through NooNoo’s house for signs of the nuts, while others sided with NooNoo and shouted at the rest to get out of the house. More villagers began arriving at the cottage and soon they were all taking sides and shouting at each other. No one but NooNoo realized that Oola was not among them.

By now, it was late in the afternoon, and Oola was walking towards the rainforest, hoping to find the Jungle Sage. She carried her sack, along with the mirror and the 2 nuts. In her desperation, she had forgotten to pack any food other than the nuts, which she kept to show the sage. Oola was very hungry when the sun began to set. She was grateful to see the old woman’s house, but also troubled. This time she had nothing to offer the woman, and she did not want to take the little bit the old woman was likely to have left since her last visit. Still, she needed a place to sleep for the night, so she knocked on the door.

The door swung open at once and there on the other side stood the Jungle Sage, grinning widely.

“Ah, come in Oola. I’m glad to see you again.”

“But, but” stammered Oola, “Where is the old woman?”

“That was me,” said the Jungle Sage.

“You?”

“Yes, yes, I changed myself into her form so I could find out what sort of person you are. I will explain it all to you soon but come in, come in my dear. Sit down. I know you are tired and very hungry. Did you bring your nuts?”

“Yes, but they don’t double anymore.” Oola showed the Jungle Sage the two nuts, put them back in the bag, and took them out again. “See,” she said, “Still just two.”

“Let me see the mirror,” said the Jungle Sage, reaching with her twisted old hand, fingers stretched out like long roots.

Oola handed her the mirror.

“Bah,” said the Jungle Sage, “*That’s* not the mirror I traded with you.”

“*You*,” said Oola. “I bought the mirror from a *young man*.”

“That was me again,” said the Jungle Sage with a smile.

“And I suppose you stole my rice balls too, and threw the nuts at me.”

“Oh no, that was my friend here,” the Jungle Sage scratched the head of a little monkey, whom Oola had not noticed before. They monkey made a laughing sound, just as he had in the woods.

“You see,” continued the Jungle Sage, “I needed to know if my magic would help you or harm you before I could share it with you, so I made sure I met you twice in disguise before I met you again as myself. I quickly found that you were just the sort of person my magic would help. Now, give me those nuts.”

With that, she picked up a mirror from a table and put it in Oola’s bag with the 2 nuts. She handed the bag back to Oola and when Oola opened it, they were doubled. Oola had \_\_\_ nuts. Oola sighed with relief.

“Now,” said the Jungle Sage, “Since you were always so incredibly generous as to feed me when you had precious little to spare, I hope you will allow me to feed you this time.”

With that, the Jungle Sage led Oola to a table.

“I was not expecting company tonight,” said the Jungle Sage. “But that is never a problem for me,” she added with smile.

On the table was one place setting.

“Let me see your bag, Oola.”

The Jungle Sage put the entire place setting into Oola’s bag and when she had brought it out everything had doubled. There were two plates, two cups, two knives, and so on. She handed a place setting to Oola. Now she took 9 large berries from a bowl, and doubled them, so that there were now \_\_\_\_\_\_ berries. She then doubled 6 small chunks of cheese to make \_\_\_\_\_. She doubled an entire bowl of stew and a roll. She picked up a pot of tea, which she did not double, but poured into Oola’s cup.

Oola enjoyed her meal, but no sooner had she finished than tears began to run down her checks.

“Why, my dear, what is wrong?”

“When I eat this wonderful meal I can’t help thinking about my people. Now I can give them nothing. My mirror is gone.”

“Tonight, stay here and get a good night sleep. In the morning, I will tell you how to find the mirror.”

**1) Look at the chart on page 29 to answer these questions:**

NooNoo took 2 nuts from the Simo family. How many were left? \_\_\_\_\_\_

NooNoo took 3 nuts from the Fanmah family. How many were left? \_\_\_\_\_\_\_

He took 2 nuts from the Sellfell family. How many were left? \_\_\_\_\_\_\_

NooNoo took 4 nuts from the Glaff family. How many were left? \_\_\_\_\_\_\_\_\_\_

**2) One phrase is repeated in each of these word problems. That phrase tells you to subtract. What is that phrase?** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3) Draw lines through the nut piles and write subtraction stories that go with them.**

Example: 10-4=6 \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_

Chapter 6

How Oola Got the Mirror Back and NooNoo Was Sent on a Mission

In the morning after breakfast was over, the Jungle Sage told Oola, “Now it’s time for me to explain everything to you. Since there was famine in the land and your people have always found their way to me in times of trouble, I knew someone would be coming soon. In a famine, I can give you the nuts and the mirror, but what you do with that depends on you. I cannot give you everything.

“Here’s how it works: the mirror and the nuts are magic. Of course you have seen that now, but as you have probably discovered, you have magic too. Your magic is with your bag. The magic of the nuts and the mirror cannot work without the magic of the bag. And the bag takes its magic from the person who owns it.

“A person who is generous of heart doubles the joy that is around her. So for her, the magic is a doubling magic. But the magic of a person with a selfish heart is divisive; a selfish person will divide everything around her. In the bag of a selfish woman or man, the nuts would be reduced to nothing in no time, or at least they would be reduced to something so small you would think there was nothing at all left.

“So I had to test you. I had to know if I could trust my nuts and my mirror with you. I appeared to you as a hungry woman, and you fed me. I appeared to you as a hungry man, and you fed me again, even though it meant less for yourself. I found that you are just the person I could trust the most, and that was important, because the mirror you see before you now and the one you bought from me are the only ones of their kind.”

“And now mine is gone. Oh, how horrible. What will I do?”

“That’s easy. Find people who are divided, and there you will find your mirror.”

“Thank-you,” Oola clasped the Jungle Sage’s hand. “I’ll go at once.”

“One more thing, Oola,” the sage called after her. “When you don’t need the mirror anymore, bring it back to me. There will always be someone who needs it.”

Oola agreed and sat off for home, arriving close to nightfall. The guard met her at the gate, “Oh Oola, where have you been? There’s so much trouble here. You can’t imagine. The nuts are disappearing, and everyone’s fighting.”

Oola sighed and entered the village. She heard the sound of arguing and followed it to NooNoo’s cottage where people stood face to face. One man poked another in the chest with his finger, two women stood shouting at each other, arms flying in the air. In the center of this mob stood NooNoo.

Oola walked calmly through the crowd, which grew still as she approached NooNoo. She held out her hand, “NooNoo, give me back my mirror.”

“What are you talking about?”

“NooNoo, will you give me my mirror, or shall I send someone into your house to look in your bag.”

NooNoo frowned but went into his house and came back a moment later with his bag. He took out the mirror and handed it to Oola.

“What else is in your bag, NooNoo?”

Looking terribly embarrassed, NooNoo reached into his bag and brought out half a nut. Oola emptied her bag and put in the mirror and the half nut. A moment later she pulled out a whole nut and handed it to NooNoo, to the amazement and amusement of the crowd.

“Alright, if you are missing nuts, come with me to my house.”

The Moona, Simo, Fanmah, Sellfell, Glaff, Blini, Glonko, and Fom families followed Oola to her cottage. She took out her old chart and a fresh piece of paper and made this chart. Use the chart on page 28 to complete the first column.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Should Have** | **Have** | **Missing** |
| **Moona** | 10 | 6 | 4 |
| **Simo** |  |  |  |
| **Onko** |  |  |  |
| **Fanmah** |  |  |  |
| **Sellfell** |  |  |  |
| **Glaff** |  |  |  |
| **Bleeni** |  |  |  |
| **Fom** |  |  |  |

After filling in the first column, Oola asked everyone how many nuts they actually had. Fill in the second column to show that Moona house had 6, the Simo house had 4, the Onko house had 5, the Fanmah house had 3, the Sellfell house had 2, the Glaff house had 2, the Bleeni house had 1, and the Fom family had 7.

Oola used this chart to figure out how many nuts each household needed. The first row shows the Moona family. Oola knew that the Moona family ought to have 10 nuts but they only had 6, so she subtracted 6 from 10 and got 4. As a math story, it looks like this: 10-6=4. Finish the number story for each row to help Oola figure out how many nuts she needs to double.

Oola doubled nuts for each family, and they all went home. Now that everyone had seen Oola at work, there was no longer any point in working in the privacy of her home. Every morning, Oola simply walked from cottage to cottage to see how many nuts each family had left and doubled these until they had enough for the day.

Over the months, the rains returned and the farmers produced increasingly more vegetables, until finally they didn’t need Oola’s nuts anymore.

One evening, Oola asked everyone in to bring one nut to the center of the village.

“We don’t need my doubling mirror anymore,” Oola said.

“True,” everyone agreed, except NooNoo, who only stared at the ground.

“Tomorrow the mirror must go back to the Jungle Sage. It’s a promise I made her. NooNoo, you will take the mirror back for me.”

“Me?” he repeated with great surprise.

“I’ve already traveled the road twice. One trip I would not have taken if not for you. Now you owe me a trip. I think you know enough about the mirror now not to dare try any of your tricks, and what’s more, I don’t believe for one moment you can trick the Jungle Sage. But for tonight, let’s double all our nuts one more time and enjoy a final celebration.”

So Oola doubled everyone’s nuts and they had a scrumptious feast of sweet things, salty things, crispy things, spicy things, icy things and all sorts of combinations tastes and textures. It was a feast they would always remember.

The next day, NooNoo sat off towards the rainforest with the magic mirror, but that is a story I will tell some other time.

**Oola Words**

1. **Here is a list of some words from the story. The page number for each word is next to the word. Look for the words in your book. Underline each word, and circle the sentences in which you found the words.**

Ration (3)

Share (5)

Divide (5)

Half (19)

Doubled (20

Total (20)

Combined (20)

Portions (27)

Distribute (28)

Equal (28)

Estimated (30)

1. **Choose 3 words from this list and use them in your own sentences.**

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |

1. **Pick one of these characters: Oola, NooNoo, The Jungle Sage. Inside the frame below, draw a picture of your character, then write adjectives describing the character in the surrounding ovals.**
2. **NooNoo played a lot of tricks on people, always to try to get something he wanted. Choose *one* of the following activities:**

* Pick one trick NooNoo played. Explain what his reasons for playing the trick.
* Retell a story about another Trickster you have read about or seen on TV (suggestions: Anansi The Spider, Brer Rabbit, Road Runner).
* Make up a new story about NooNoo playing a trick.