

Anaemia prevention Badge workbook for Brownies, Girl Guides, and Rangers



Anaemia Prevention Badge Workbook

for Brownies, Girl Guides, and Rangers

This is publication of The World Association of Girl Guides and Girl Scouts
World Bureal
Olave Centre,
12C Lyndhurst Road
London NW3 5PQ
England
Email: waggs@waggsworld.org
www.waggsworld.org

ACKNOWLEDGEMENTS



I wish to recognize the contributions made by Brownies, Guides, Rangers and Guide leaders in making this workbook a reality. Several participated in the pre-test of this document and their suggestions for improving the Anaemia Prevention Badge materials were invaluable. Special thanks to Chief Commissioners; Esther Makhanya, Marie Chantal Dukuzermunemyi, Consolata Tumwesigye and the implementing teams of Swaziland, Rwanda and Uganda respectively.

I recognize the leadership role played by the Food and Nutrition Technical Assistance Project (FANTA) at FHI 360, and the Regional Centre for Quality of Health Care (RCQHC) at Makerere University. With the support of USAID, they not only offered the financial resources but also provided the technical expertise in nutrition. From RCQHC and FHI 360/FANTA, I wish to recognize the contributions from Dr. Sarah Naikoba, Child Health and Nutrition Advisor, RCQHC; Leslie Elder, Senior Maternal and Child Health and Nutrition Advisor, FANTA, and Ms. Christine Omondi, Activity Manager, RCQHC. A special mention goes to Ms. Kristen Cashin, Maternal and Child Health and Nutrition Specialist, FANTA and Dr. Robert Mwadime, Regional HIV&AIDS Specialist, FANTA who provided technical input and coordinated the development of this manual. I wish to recognize the work of our consultant, Maina Kiranga in assisting to put this manual together.

From World Association of Girl Guides and Girl Scouts (WAGGGS), Africa Region, I would like to thank to Alphonsine Kabagabo, Regional Director, Africa Region, Marie Paule Rafenoarisoa, Development Officer (French Speaking Countries) Lydia Mutare, Director of Strategies for Growth, World Bureau of WAGGGS, London

I wish to acknowledge the great contribution made by Alice Waweru, Development Executive, Africa Region (English Speaking Countries) for the leadership role she played being the Focal Point from WAGGGS team in this project. I applaud her sense of responsibility. I appreciate her frequent consultation with me on every step of this project.

Your individual and team contributions will assist in breaking the vicious cycle of malnutrition especially iron deficiency anaemia.



Mrs. Honorine R. Kiplagat

The Chairman,

World Association of Girl Guides and Girl Scouts, Africa Region Committee.

INTRODUCTION



We are so excited that you have decided to earn the Anaemia Prevention Badge! By completing the activities in this workbook and doing projects with your patrol, you will learn about ways that you can stop anaemia to keep yourself, your friends, your family and your community healthy.

The Anaemia Prevention Badge Workbook goes with the Anaemia Prevention Badge Award Handbook, and the Anaemia Prevention Badge Guiders' Manual. Just like the guiders' manual, the workbook is divided into eight sessions that begin with stories about Jane and Miriam. After each story, there are worksheets and information sheets to help you learn more about the anaemia topic covered in that session.

In the beginning of the workbook is a checklist to help you keep track of all of the activities you complete to earn your Anaemia prevention badge. All of the requirements to earn the badge are in the Anaemia Prevention Badge Award Handbook that your Guider has. Worksheets that are marked with a * are for activities that help you to earn the Anaemia Prevention Badge. In Section 2 of the workbook, there are more worksheets that will help you to complete some community outreach badge-earning activities. These activities are listed in the Badge Award Handbook, but are not part of any particular session. Some of the badge award activities mentioned in the handbook don't have worksheets to go with them, but you can still do them and write them on the checklist! You can work on all of these activities as you learn about anaemia. You have a lot of choices and can pick the activities that sound most fun

Many Brownies, Junior Guides, Rangers and Guiders helped to create this badge and the activities that go with it. We hope that you enjoy learning about anaemia prevention and have fun with the practical and community activities!

Good Luck!

A handwritten signature in black ink that reads "Alice Waweru". The signature is stylized and written in a cursive-like font.

Alice Waweru

Development Executive

Africa Region (English Speaking Countries)

This Workbook belongs to:

Name: _____ Age: _____

Address: _____

Company/Patrol/Sixers: _____

Date you started to earn the badge: _____

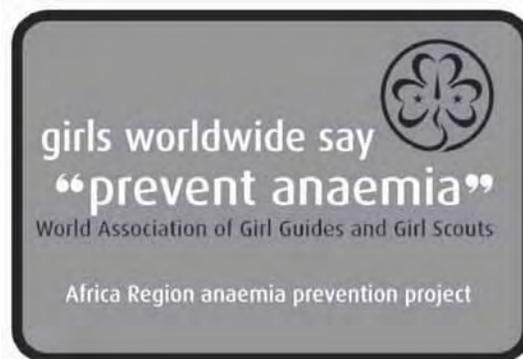


TABLE OF CONTENTS

ACKNOWLEDGEMENTS	2
INTRODUCTION	3
CHECKLIST FOR EARNING THE ANAEMIA PREVENTION BADGE	6
SESSION 1	7
Session 1: Good Nutrition and Good Health	8
Worksheet 1.1: Eat the FIVE Food-Groups Everyday:	9
Worksheet 1.2: All the Foods I Ate YESTERDAY (for Brownies) *	10
Worksheet 1.3: Jane is Coming for Dinner! (Brownies & Guides)	11
SESSION 2	13
What is Anaemia? What Causes Anaemia? Who Gets Anaemia?	14
Worksheet 2.1 Little Miriam has Anaemia: What are the signs? (all Girls)	15
Worksheet 2.2 Anaemia is Bad: What causes it? (Brownies)	16
Worksheet 2.3: Causes of Anaemia (Girl Guides and Rangers)	17
Information Sheet 2: What is Anaemia? What Causes Anaemia? Who gets Anaemia?	18
SESSION 3	21
Prevention and Control of Anaemia	22
Worksheet 3.1: Girl Guides Work to Prevent Getting Anaemia (all ages)	23
Worksheet 3.2A: Community Projects for Learning	24
Worksheet 3.2B: Helping Other Girls to Prevent Anaemia	25
Information Sheet 3: Common ways to prevent Anaemia	25
SESSION 4	27
Worksheet 4.1: Girl Guides Keep their Dietary Records * (all ages)	30
Worksheet 4.2: Girl Guides Eat Well if they Know Which Foods are Best to Eat (all ages)	31
Worksheet 4.3 Girl Guides Eat well by Planning Meals for their Picnic/Walk/Camps*	32
Worksheet 4.4: Girl Guides Eat Well by Developing Family Menu Plans (Guides only)*	33
Worksheet 4.5: Girl Guides Make Recipe Books of Foods Rich in Iron (Rangers)*	34
Worksheet 4.6 Girl Guides Visit Local Markets to Learn *	35
Information Sheet 4: I Will Eat Well to Prevent Anaemia	36
SESSION 5	37
Worksheet 5.1: Girl Guides Keep Mosquitoes Away from Their Families and Friends	40
Worksheet 5.2: Girl Guides Reach out to Others	41
Information Sheet 5: I Will Prevent and Control Malaria	42
SESSION 6	43
Worksheet 6.1: What would you or your family do to prevent hookworm?	46
Worksheet 6.2: Girl Guides Organize a De-worming Day	46
Information Sheet 6: I Will Support Hookworm Control	47
SESSION 7	49
Prevent Anaemia by Taking Iron Tablets	50
Worksheet 7.1: Girl Guides can Support Pregnant Women to Take Iron Tablets	51
Worksheet 7.2. Brownies Visit Local Health Clinic*	52
Worksheet 7.3. Guides and Rangers Visit Local Health Clinic*	53
Information Sheet 7: Girl Guides support pregnant women to take iron-folic acid supplements	54
Section 2: Badge Earning Community Outreach Activities *	55

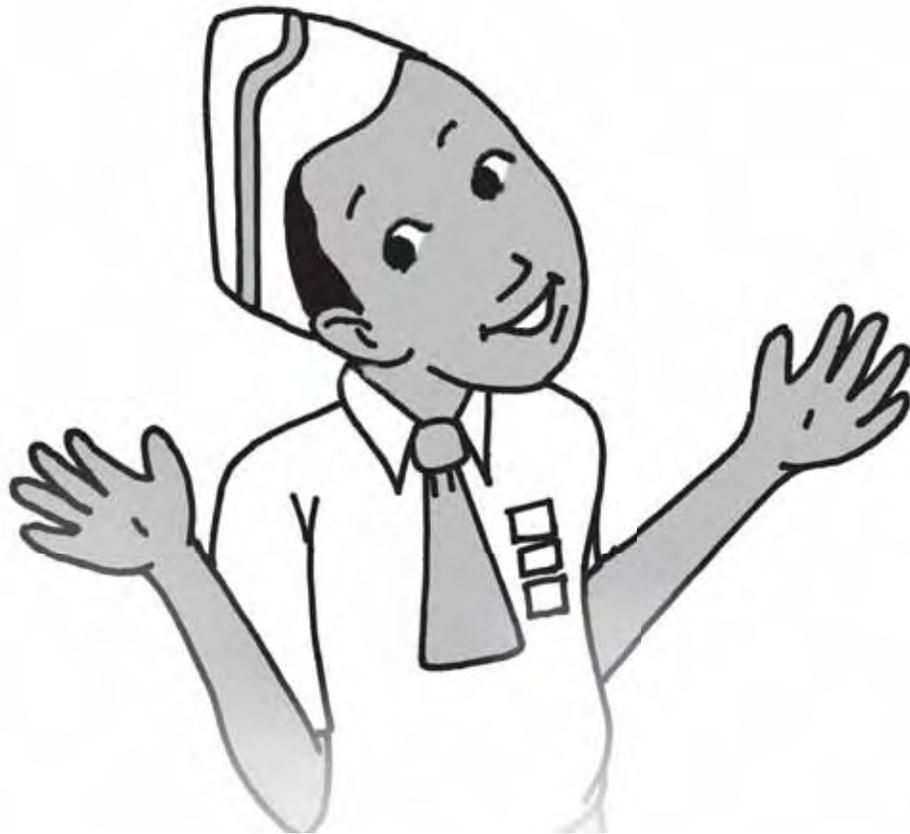
CHECKLIST FOR EARNING THE ANAEMIA PREVENTION BADGE

After you have completed a Badge Earning Activity, show your Guider the completed page in this workbook and have the Guider put her/his initials on the line beside the each activity that you have completed. When you show that you understand the four knowledge areas and have completed three practical activities and two community service activities, you will have earned the Anaemia Prevention Badge!

Name: _____

Are you a Brownie, Girl Guide, or Ranger? _____

To earn the Anaemia Prevention Badge I:	Date completed	Signature (Initials)
Demonstrated Knowledge in these 4 areas:		
a.		
b.		
c.		
d.		
Completed these 3 Practical activities:		
a.		
b.		
c.		
Did the following 2 Community Outreach activities:		
a.		
b.		

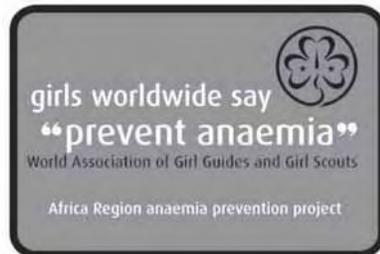


SESSION 1

Good Nutrition and Good Health

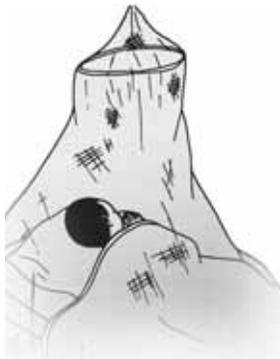
Session 1: Good Nutrition and Good Health

Meet Jane, a Girl Guide just like you!



Hi. My name is Jane and I'm twelve years old. I am a Girl Guide. I love being a Girl Guide because it is fun to help people, to camp, and to earn badges. I have earned the Friendship Badge, the Cookery Badge and a lot of others. Right now my patrol and I are earning the **Anaemia Prevention Badge**. Until I started earning this badge, I didn't pay much attention to what I eat and how I care for my health.

When I started earning the Anaemia Prevention Badge, I noticed that my friends and I could make healthier food choices. So, I changed my eating habits. Every day, I try to eat some of the healthy foods I have learned about. I'll eat meat, eggs, beans or groundnuts every day so that I can grow well. I eat vegetables and fruits to keep my body healthy and glowing. And I eat plenty of staple foods to keep me full of energy. I also drink plenty of clean water to keep healthy.



Besides eating right, I also try to make good health choices. I sleep under a treated mosquito net every night so I don't get malaria. I try to always wear shoes when I use the latrine, and I'm careful around dirty soil.

Now, I have even more energy than ever before. I can study and play netball and spend time with my friends. I hardly ever get sick and I am getting very good marks in school. I feel so happy and healthy. I want everyone else to feel as good as I do. So I teach my friends and family about good nutrition and health habits to prevent anaemia. Some of them don't want to try new things, but many do. The people who have tried to make healthy choices tell me that they feel great.



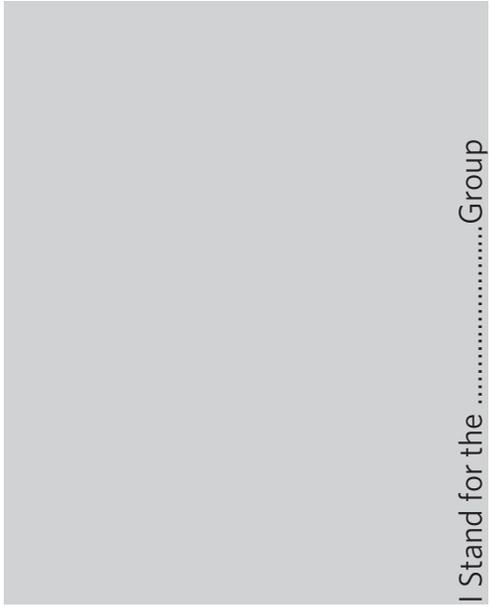
Worksheet 1.1: Eat the FIVE Food-Groups Everyday

Write in the second column the different foods in each of the five categories that are commonly found in your community.

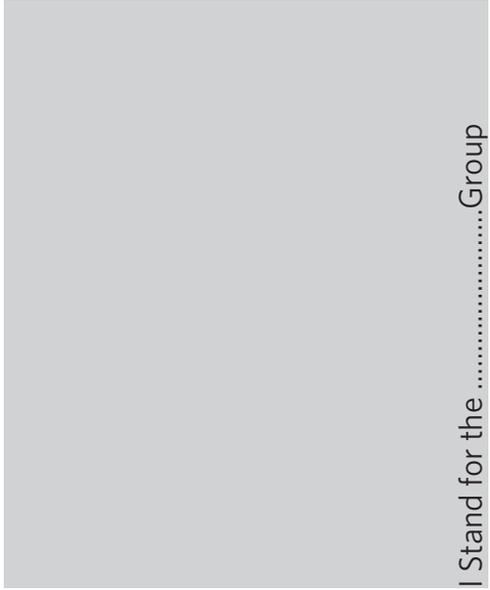
FOOD GROUP, HEALTH BENEFITS AND KEY NUTRIENTS	List LOCAL FOODS found at Home in this column
<p>Cereals, tubers and breads Provides energy and aids digestion</p> <p>Key Nutrients: Carbohydrates, Fibre</p>	
<p>Fats, oils, butter, ghee Provide energy, help our body use certain vitamins</p> <p>Key Nutrients: Fat</p>	
<p>Fruits & Vegetables Help you to be healthy, fight illnesses, heal cuts and bruises, and absorb iron</p> <p>Key Nutrients: Vitamins, minerals, fibre</p>	
<p>Meats, fish, dairy, beans and nuts Helps us to grow, builds strong muscles and bones</p> <p>Key Nutrients: Protein, minerals,</p>	
<p>“Others” (butter, chips, sugary cakes, sodas) Active children can consume small amounts of food in the “others” category as long as they eat foods in the other Four Food Groups.</p>	

Worksheet 1.2: All the Foods I Ate YESTERDAY (for Brownies) *

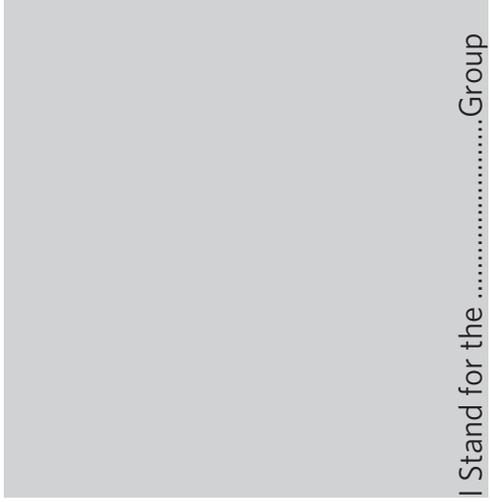
Draw and colour the foods/drinks that you ate yesterday and label which Food Group they were in.



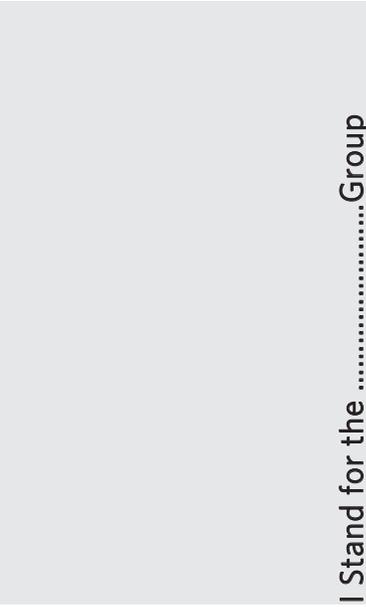
I Stand for theGroup



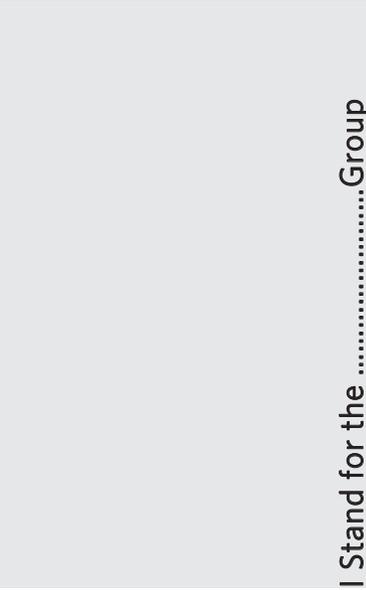
I Stand for theGroup



I Stand for theGroup



I Stand for theGroup



I Stand for theGroup

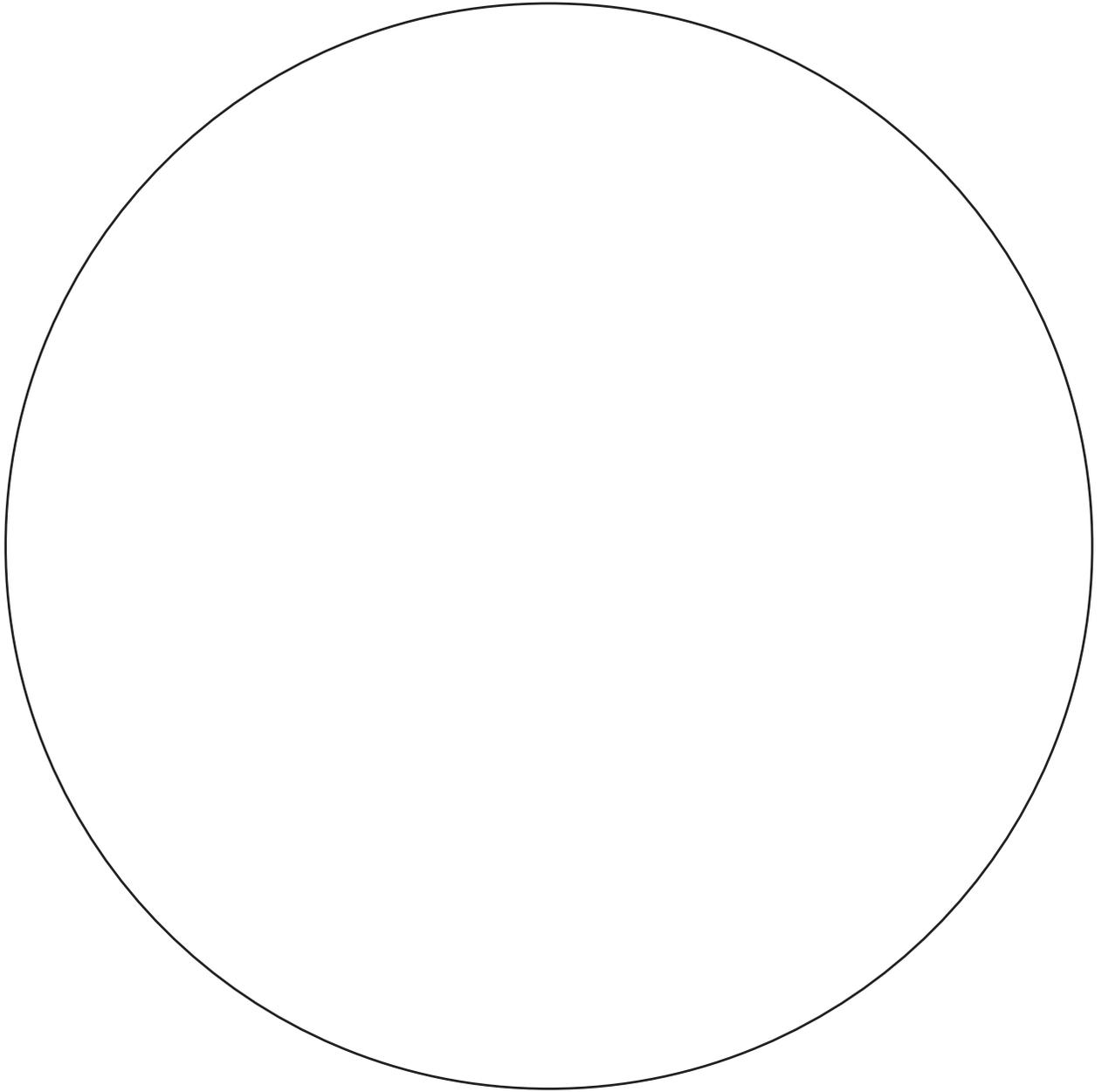


I Stand for theGroup

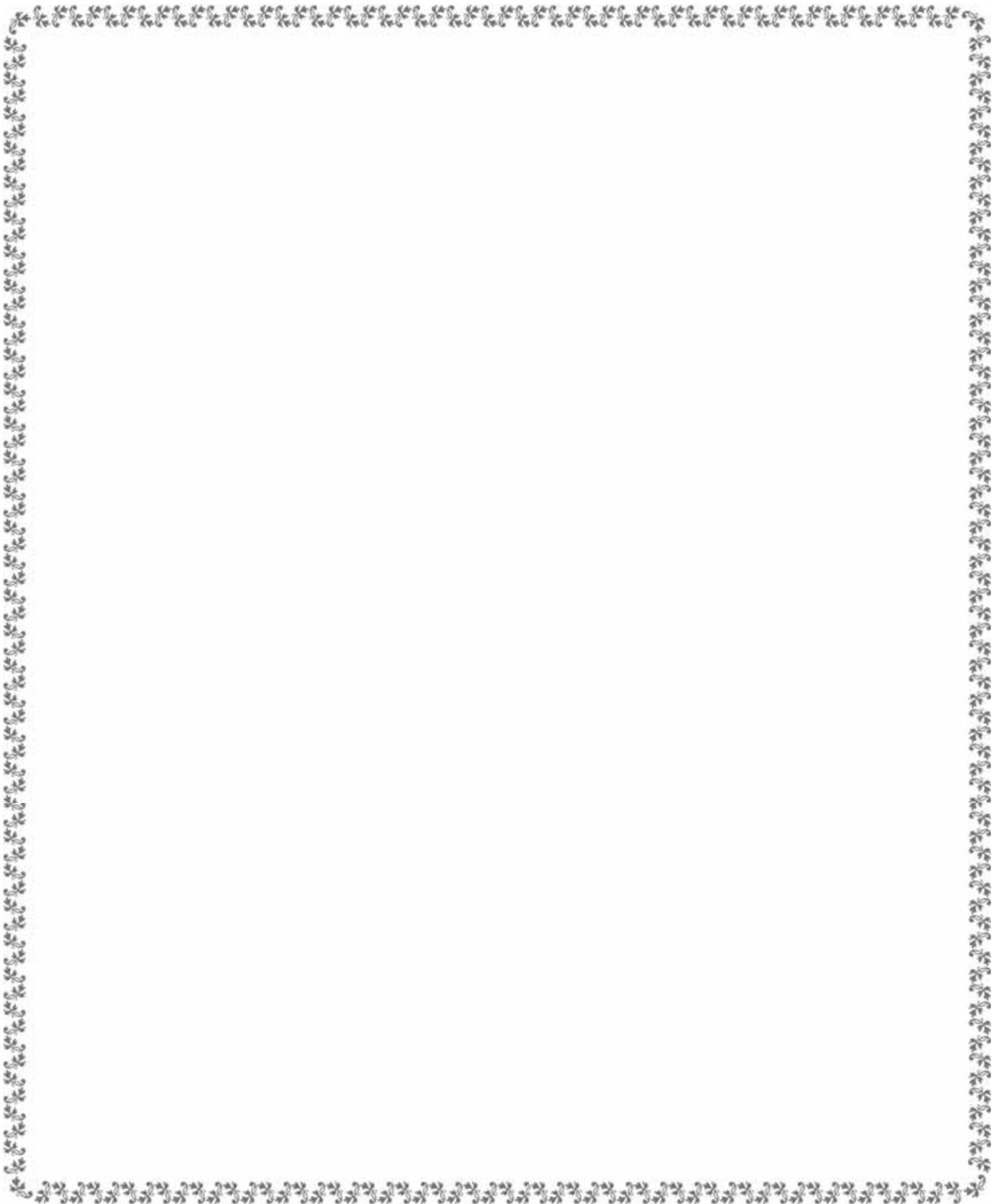
* Badge earning activity

Worksheet 1.3: Jane is Coming for Dinner! (Brownies & Guides)

In the plate below, draw the meal that you would serve to Jane. Keep in mind that Jane has started making healthy choices!



Notes:





SESSION 2

**What is Anaemia?
What Causes Anaemia?
Who Gets Anaemia?**

Session 2: What is Anaemia? What Causes Anaemia? Who Gets Anaemia?

Jane's Friend Miriam



Jane has a friend in her class named Miriam. For the past few weeks Jane has noticed that Miriam has been very tired, pale, and weak. Miriam used to be one of the best netball players but now she easily gets tired and sits on the side when they play. Jane has also noticed that Miriam hasn't finished all of her schoolwork this week. Jane is worried, so she meets Miriam and they have the following conversation.

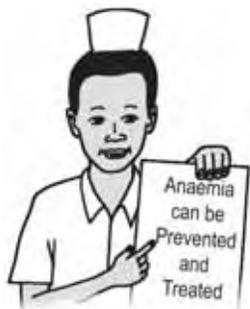


Jane and Miriam went directly to the school nurse. The nurse asked Miriam questions about how she feels, about whether she had been sick lately and how she eats and cares for herself. She found out that Miriam has had malaria three times this year and that she started having her monthly periods about five months ago. The nurse also noticed that the inside of Miriam's eyelids, her palms, and her tongue were pale. She noticed that Miriam had cracked lips and seemed very tired and weak.

When the nurse asked Miriam about her diet she found out that

Miriam doesn't like many foods. Miriam eats only kalu (a stiff dish made of maize) and beans most days. Once a week she has meat and she rarely eats fruits and vegetables. She loves chocolate and buys some for herself almost every day.

The nurse tested Miriam's blood and found out that she has anaemia. The anaemia is making Miriam feel tired, dizzy and weak. It may also be causing her headaches and making her nails break. The nurse told Miriam that anyone can get anaemia. It can happen when someone doesn't eat enough foods that have iron. Malaria, hookworm, and losing extra blood during monthly periods can also cause anaemia.

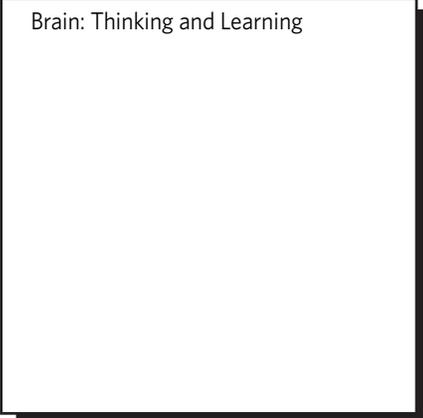


Anaemia is easy to prevent and treat. Just remember to eat a healthy diet and prevent malaria and hookworm infections.

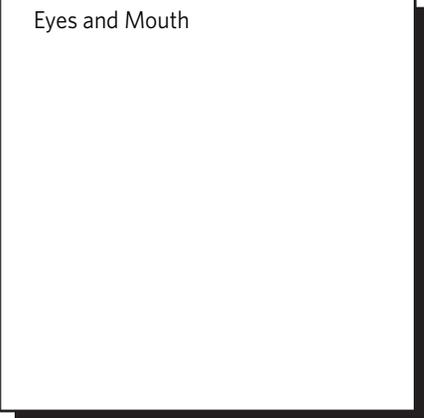
Worksheet 2.1: Little Miriam has Anaemia: what are the signs? (All Girls)

In the boxes, write how anaemia is affecting different parts of Miriam's body.

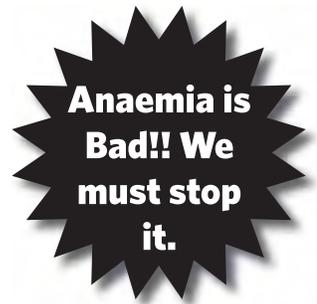
Brain: Thinking and Learning



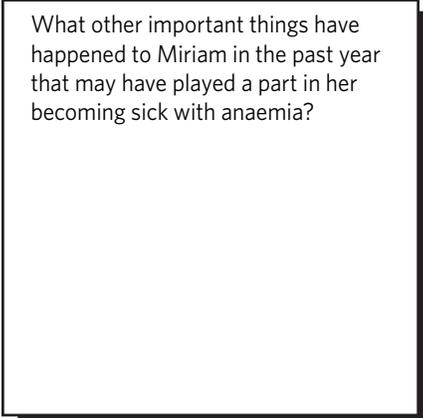
Eyes and Mouth



How did she feel?:



What other important things have happened to Miriam in the past year that may have played a part in her becoming sick with anaemia?



Fingernails and palms:



Workseet 2.2: Anaemia is Bad: What causes it? (Brownies)

Draw a picture of each of the FIVE main causes of anaemia in children and women in our community.

You may suffer anaemia

You may suffer anaemia

You may suffer anaemia

If you do not:

If you lose a lot of:.....

If you suffer from:

You may suffer anaemia

You may suffer anaemia

You may suffer anaemia

If you suffer from:.....

If you get infected by:.....



Worksheet 2.3: Causes of Anaemia (for Girl Guides and Rangers)

Tell someone what anaemia is and what causes of anaemia.

In the boxes below write what you will tell them anaemia is and also write three causes of anaemia!!

I shall tell them that anaemia is.....

**I found out that the local name for
anaemia is....**

**I shall tell them that anaemia is caused
by.....**

Information Sheet 2: What is Anaemia? What Causes Anaemia? Who gets Anaemia?

What is anaemia?

Anaemia means that a person's blood cannot carry enough oxygen from the lungs to other parts of the body. Your body does not work well if you don't get enough oxygen.

The part of the blood that carries oxygen is the red blood cell. Anaemia happens when the body doesn't have enough red blood cells.

What is iron?

Iron helps the red blood cells carry oxygen around the body. The body needs iron to work well. We get iron from eating a balanced diet with foods rich in iron or from supplements.

What causes anaemia?

- Not enough iron in the body - Anaemia mainly is caused by lack of enough iron in blood. This happens when a person doesn't eat a balanced diet with enough foods rich in iron or the body can't use the iron from the food that a person eats.
- Malaria - Malaria destroys some of a person's blood. It also prevents the body from making new blood.
- Parasites/Worms - People infected with worms like hookworm or bilharzia lose blood.
- Losing Blood - Heavy menstruation or losing a lot of blood during childbirth may make a girl or woman anaemic.
- Illness or Infection - People with illnesses like diarrhoea, measles and HIV are more likely to be anaemic.

Who is at risk for anaemia, and why?

Anyone can get anaemia. However, young children, adolescent girls and pregnant or breastfeeding women are more likely to suffer from anaemia.

Children and adolescents are likely to suffer anaemia because:

- They are growing very quickly and need iron to help their bodies grow.
- Many of the children are infected with hookworm, which makes them lose blood.
- They frequently suffer from malaria, which destroys some of their blood.
- Adolescent girls may suffer from anaemia because they lose blood during menstruation and are growing so fast that they also need more iron.

Pregnant women also often get anaemia because:

- Their bodies need more iron for the babies growing in their wombs.
- The babies need the iron to grow well.
- They are at risk of getting malaria and other diseases.

What are the signs and symptoms of anaemia?

Signs: something you can see

- Brittle finger nails
- Paleness or whiteness of skin, lips, gums, lining of the eyelids, nail beds, palms

Symptoms: something that you feel

- Weakness and tiredness
- Dizziness and headaches
- Trouble paying attention

What are the dangers of anaemia?

For **adolescents:**

- Trouble paying attention in and out of school
- Poor performance in school
- Poor growth

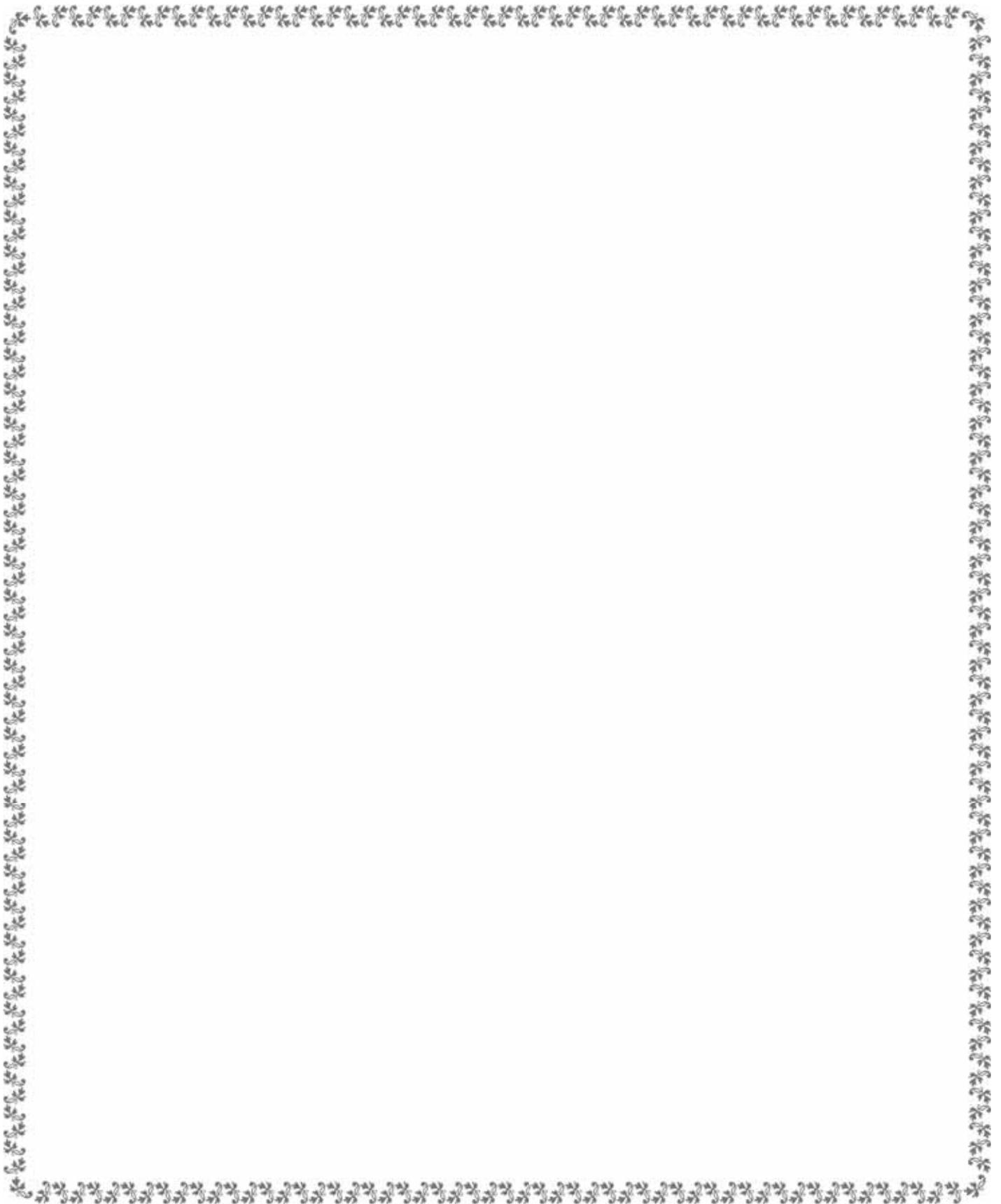
Babies in the womb of anaemic mums are more likely to:

- Die in the womb or in the first few months after birth
- Be born before time
- Get sick soon after birth
- Grow poorly
- Develop poorly (brains may not develop as they should)

A **pregnant mother** who is anaemic may:

- Be tired and unable to do as much work as usual. This includes caring for children
- Have trouble concentrating
- Get sick more often
- Need a blood transfusion after delivery
- Be more likely to bleed too much and die during delivery

Notes:





SESSION 3

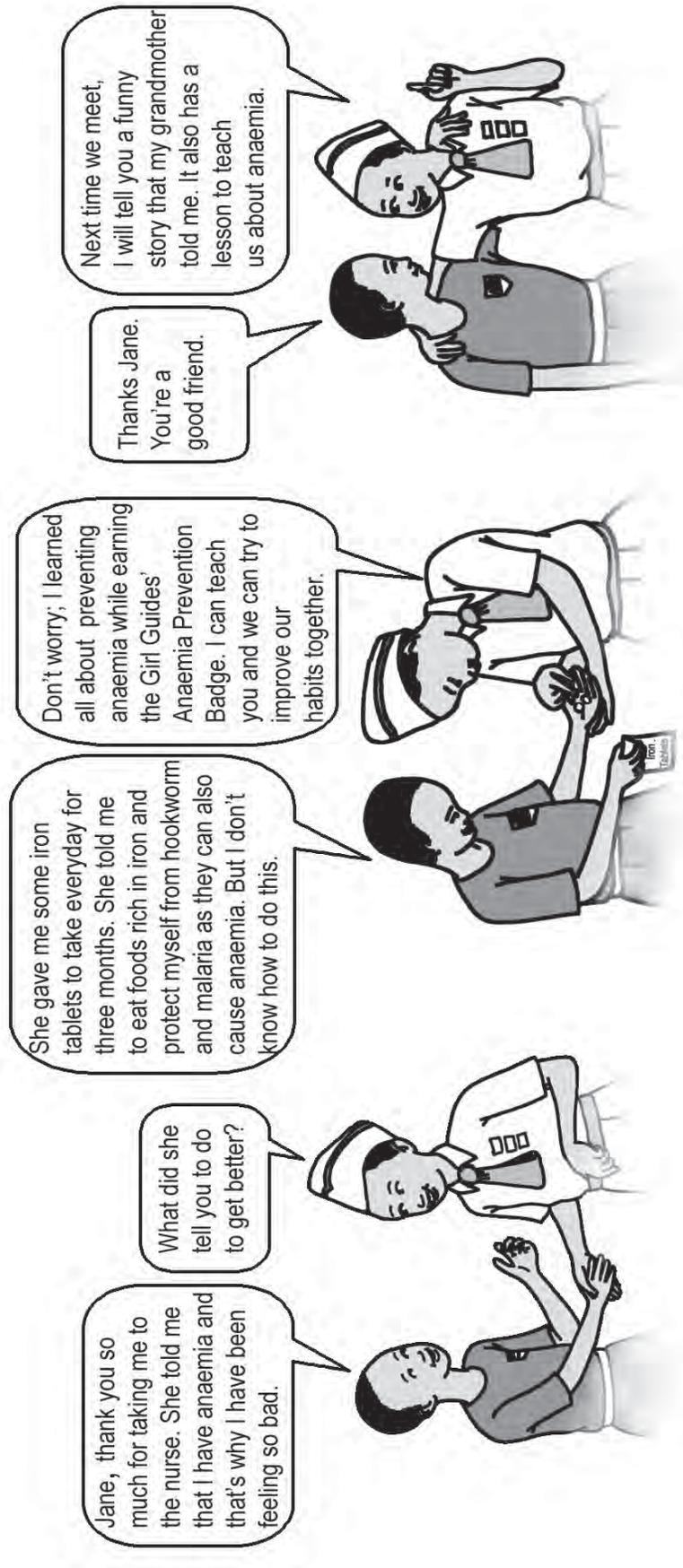
How to Prevent and Control Anaemia

Session 3: Prevention and Control of Anaemia

Helping Miriam to feel better.

What happened with Miriam in the last story?

After finding out Miriam had anaemia, the nurse also tells Miriam that anaemia is easy to prevent and treat.



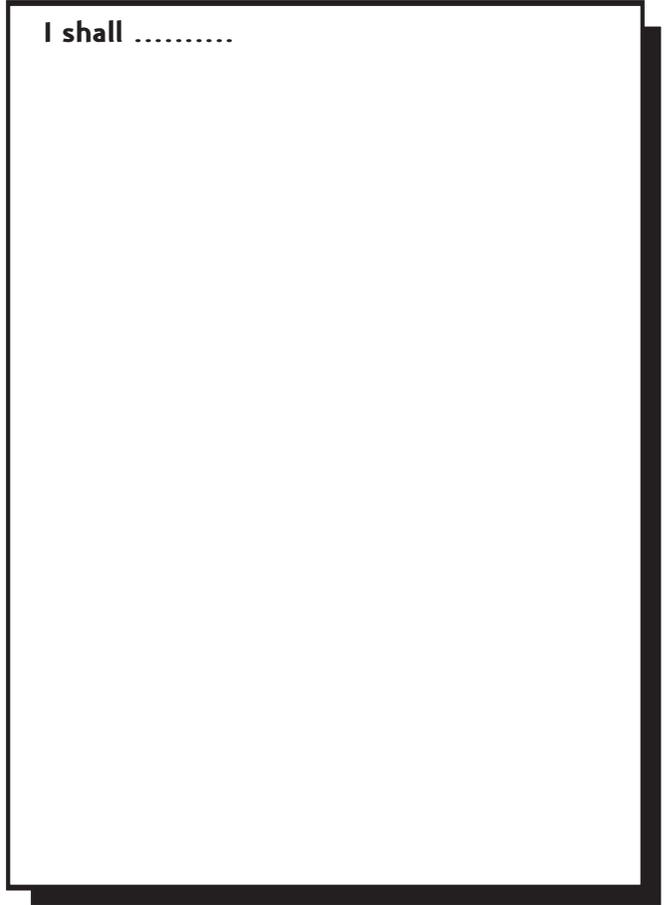
Worksheet 3.1: Girl Guides Work to Prevent Getting Anaemia (all ages)

In the boxes below draw (and colour), and explain two things that You will do prevent anaemia!!

I shall



I shall



Worksheet 3.2A: Community Projects for Learning

The activities below will be assigned by your Guider. Half of the patrol will do Activity A, the other half will do Activity B.

A. Interview with Adults in the Community

Challenge yourself to meet with 4 adults in your community/school. They can be parents, family members, friends, relatives, or other adults you trust. Talk to them about anaemia. You may do this accompanied by another Guide, your Guider, or a family member.

1. What symptoms of anaemia did you tell them about:
2. If they are familiar with these symptoms, ask them to tell you the local name (of anaemia):
3. What did they think/say causes anaemia:
4. What did they say they can do to prevent anaemia:

Share what you learned with your patrol.

Worksheet 3.2B: Helping Other Girls to Prevent Anaemia

Make a poster or pamphlet with 2 or 3 simple and clear messages about ways to prevent anaemia. Make the poster or pamphlet colourful. Share the pamphlet or poster with your patrol.

Below list the messages that you included in your poster or pamphlet

Information Sheet 3: Common ways to prevent Anaemia

Information on how to prevent anaemia

1. Increase iron intake

- Eat meat that has a lot of iron, like beef, liver, goat, or chicken
- Eat vegetables that have a lot of iron like cowpeas, spinach and other greens
- Eat “iron helpers” such as guava, oranges, lemon or a little meat, to help your body use the iron)
- Try not to eat “iron blockers” for one hour before and one hour after eating an iron-rich meal (Examples of “iron blockers” are: tea, coffee, and milk)

2. Prevent malaria

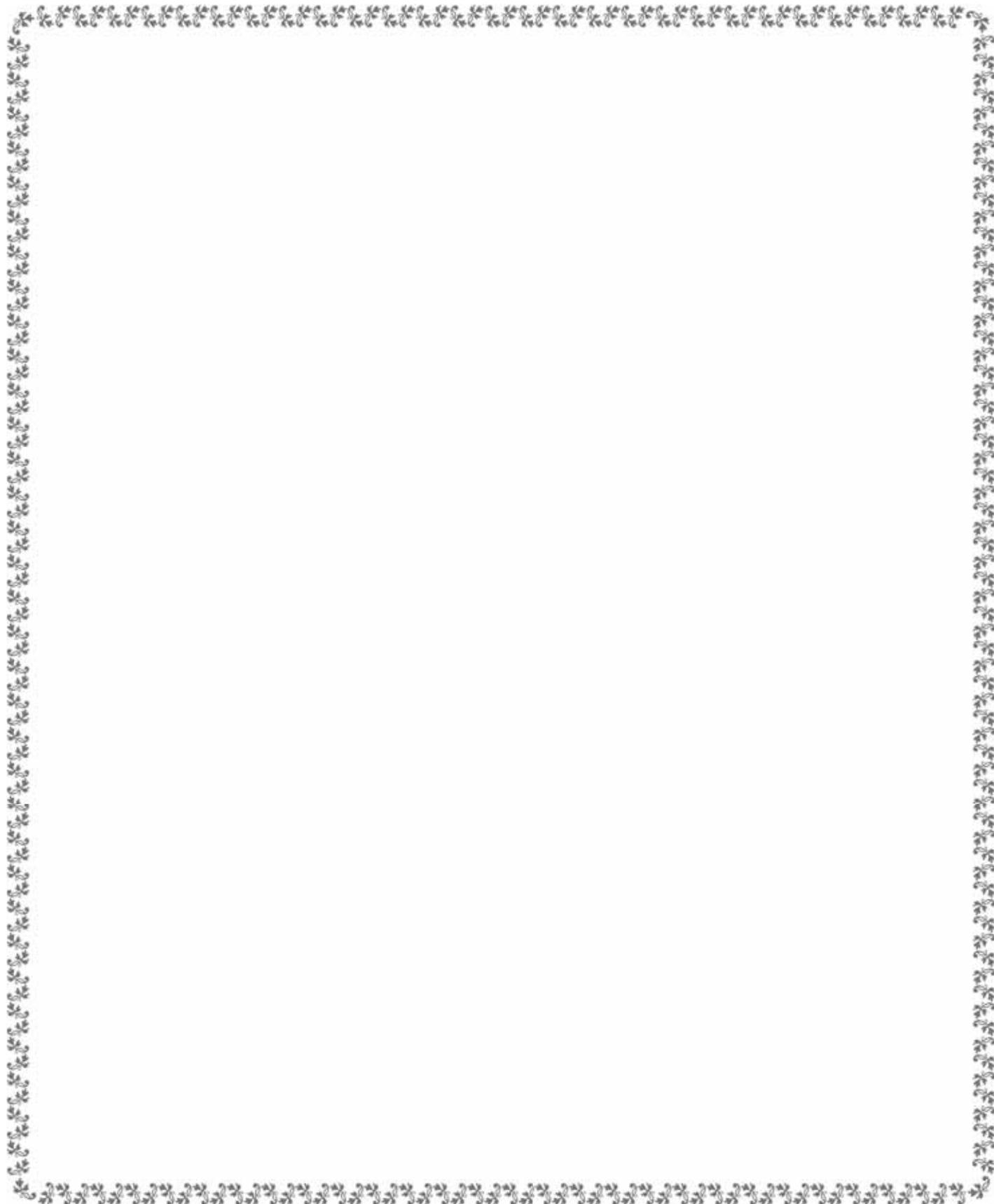
- Sleep under treated mosquito nets to prevent malaria
- Get treated for malaria immediately

3. Prevent hookworm

- Take medicine to get rid of hookworm
- Wear shoes to avoid hookworm
- Dispose of faeces properly to avoid hookworm
- Do not play with dirty soil

4. Take iron tablets as directed by a health worker

Notes:





SESSION 4

Eat Well to Prevent Anaemia

Session 4: Eat Well to Prevent Anaemia

Boukie the Hyena



Bouki the Hyena is miserable. He can no longer hunt for his meals. He feels weak and tired all the time and his claws break easily. The other animals laugh at him, none louder than Sonko the Hare.

Sonko is fat and healthy from eating carrots, greens and cereals. He teases Bouki and calls him old, tired, crippled legs and other even worse names. Hyena tries to chase Sonko, but he staggers and steps in elephant dung. He smells bad and is covered with flies. Finally, Bouki says to himself, "I must do something to get better!"

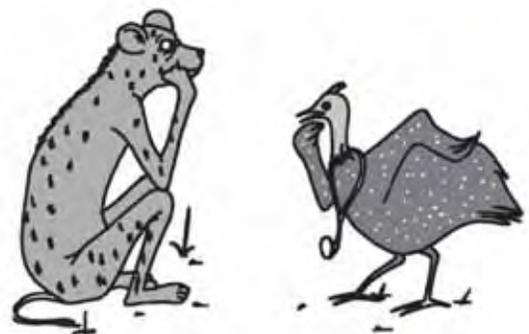
So Bouki goes off to see his old friend Dr. Guinea Fowl who tells him, "The reason you cannot run fast, you get tired, and your claws are brittle is because you do not have enough iron in your blood.

"What can I do to get iron in my blood, Dr. Guinea Fowl?" asks Bouki.

You must eat foods that are rich in iron like greens, beans, cowpeas and fruits."

"But I'm a hyena, not a hare!" exclaimed Bouki.

"If you are too weak to hunt for yourself, eat the leftovers that Lion and Leopard leave behind," advised the doctor.





So Bouki ate vegetables and fruits that were rich in iron. He waited until Lion and Leopard had had their fill and then ate the meat they left behind. Gradually his strength returned.

But he did not tell Sonko the Hare that he was feeling better. Every night Bouki pretended to be more tired and weak. He acted as if he couldn't even walk without the help of a walking stick. And every night Hare teased him, dancing around him.

Finally, one night Sonko got too close and Bouki caught him by the ears. "No vegetables and rotten meat for me tonight!" shouted Bouki. "Tonight I'll have fresh hare's liver for dinner!"

Bouki held Sonko up in the air by his ears. Sonko struggled and struggled. His ears grew longer and longer. Finally "plop" and Sonko was free. Sonko ran away, but from that day to this all little Hares are born with very long ears.



That is a great story, Jane. Old Dr. Guinea Fowl knew about the right foods to eat to prevent anaemia.

Yes, he knew that there are many foods that we eat that have iron.



How do I know if a food is rich in iron?

Let's do the following activities together and learn about it.....



Jane continues to say:

It is important to mind what you eat, including paying attention to what foods you eat together. For example it is good to eat fruit when you are eating foods with iron, but it is not as good to drink tea when eating foods rich in iron. I learned in Girl Guides that the iron from plants is hard for the body to use, but there are "iron helpers," that you should eat with vegetables to help your body to use the iron. For example, eating plant foods with animal foods makes it easier for the body to use the iron in the plants. Eating foods that have vitamin C, like oranges, apples, and peppers with your meals also helps your body use the iron from most foods. Animal meats and vitamin C are "iron helpers."

Worksheet 4.1: Girl Guides Keep their Dietary Records * (all ages)

Records all foods consumed at different times in the last three days. Indicate if they are rich in Iron and rich in Vitamin C

Time/Meal	Day 1 Food Eaten	Day 2 Food Eaten	Day 3 Food Eaten	Does it have a lot of iron?	Does it have Vitamin C?
Breakfast					
Morning snack					
Lunch					
Afternoon snack					
Dinner					
Other					

Guides/Rangers: What other foods could you start eating to have more iron in your diet?

I would improve my iron intake by eating.....

Worksheet 4.3 Girl Guides Eat well by Planning Meals for their Picnic/Walk/Camps *

Brownie plan for a picnic or walk or a Guide/Ranger plan for a two day camping trip.

Record the Foods to include in meals/snacks during the outing. Guides make sure their foods are rich in iron, have vitamin C, are appetizing and are fun to prepare.

List of Foods to include in your Menu	
Day 1 (Brownies, Guides, Rangers)	Day 2 (Guides, Rangers)

For your next picnic, walk, or camping trip, prepare and bring some of these foods.

Worksheet 4.4: Girl Guides Eat Well by Developing Family Menu Plans (Guides only) *

In the Table below fill in a menu plan for a family in your neighbourhood. Mark foods which are iron rich and which foods are vitamin C rich.

Breakfast	
Morning Snack	
Lunch	
Evening Snack	
Dinner	
Other Snacks	

Worksheet 4.5: Girl Guides Make Recipe Books of Foods Rich in Iron (Rangers)*

Write two recipes that are rich in iron that can be eaten in a home in your locality. As a patrol vote on the five most popular recipes and put these recipes together to make a book of iron rich foods for pregnant women.

(A recipe shows the ingredients and steps to prepare a food). Make one or two of the recipes and share.

Example of a recipe

<p>Name of food.....</p> <p><i>Ingredients</i></p> <p><i>Procedure</i></p>	<p>Name of food.....</p> <p><i>Ingredients</i></p> <p><i>Procedure</i></p>
--	--

WorkSheet 4.6 Girl Guides Visit Local Markets to Learn *

(Brownies, use another piece of paper to do your drawings)

Find five foods that have iron added to them (iron-fortified or iron-enriched).

Foods with iron added	How much iron is in them?
1.	
2.	
3.	
4.	
5.	

Rangers and Guides: Record recipes of two dishes/meals that you can cook with the foods from the list above that have iron added to them.

<p>Name of food.....</p> <p><i>Ingredients</i></p> <p><i>Procedure</i></p>
--

Information Sheet 4: I will eat well to prevent anaemia

I. I will eat foods rich in iron

Eat iron-rich food every day. Foods from animals like red meat, beef liver, eggs, and chicken are a better source of iron. The body uses that iron better and it is absorbed more easily.

Plant foods such as dark green vegetables especially traditional vegetables, also have iron.

II. I will eat foods that have iron added to them

Regularly eat foods that have iron added to them. These foods might be called iron-fortified or iron-enriched. Examples of these foods are cereals that have been milled and breakfast cereals. Check whether a food has been fortified, and the amount of iron that has been added.

III. I will eat foods that help my body to use iron - "Iron helpers"

Help your body to use more iron!! How? If plant foods are your main source of iron, eat "iron helpers" along with them. Foods that help your body to use iron include: a) small portions of animal foods such as beef or chicken liver, and b) foods with vitamin C, like lemons, tomatoes, and oranges.

IV. I will avoid eating foods that block iron in my body- "Iron blockers"

Avoid eating foods and drinks that make it harder for your body to use iron, "iron blockers." These foods include tea, coffee, high calcium foods like milk, and chocolate. You could eat these foods one hour before or after eating iron-rich foods.

V. I will prepare foods to preserve iron or increase its absorption

Fermentation or germination of cereal foods may improve the absorption of iron in the food. Cooking food in iron pots also increases the amount of iron in the food..

Iron Rich Foods		Iron Helpers	Iron Blockers
<u>Animal sources</u> Beef Egg Turkey Liver, Kidney Goat Tuna	<u>Plant sources</u> Lentils Chickpeas Other dry beans Almonds Asparagus Spinach Broccoli Prunes Raisins Apricots	Meat/fish/poultry Orange Orange juice Lemon Cantaloupe Tomato Potato Peppers Tamarind seeds	Tea Coffee Sweet potato Milk and dairy products Soy



SESSION 5

Prevent Anaemia through Prevention of Malaria

Session 5: Prevent Anaemia through Prevention of Malaria

Katanu the Girl and Soonum the Mosquito²

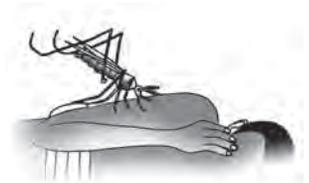
Jane taught Miriam about preventing malaria through a story she had read from the UNESCO website¹. Ask two Girl Guides read the roles of Jane and Miriam.



Soonum is a female mosquito (called an Anopheles). She is fully-grown now, but when she was young she and her many sisters grew up from eggs in a little pool of dirty water just near the school. Like all mosquitoes, Soonum loves to bite people, especially at night when they are asleep.



One night Soonum saw a girl named Katanu sleeping. Her arms looked very juicy and there were no nets protecting her. Soonum took a bite of her skin, pumped the bad germs into her, and sucked her blood.



Twelve days later, Katanu developed a fever (her body temperature rose) and started to shiver and sweat. But sometimes she would also complain of cold. She had muscle pain and was weak. She also had diarrhoea and a very bad headache.



Her family took her to the health centre immediately. They found out that she had malaria, which she got from Soonum's bite. She was given medicine to help her get better.

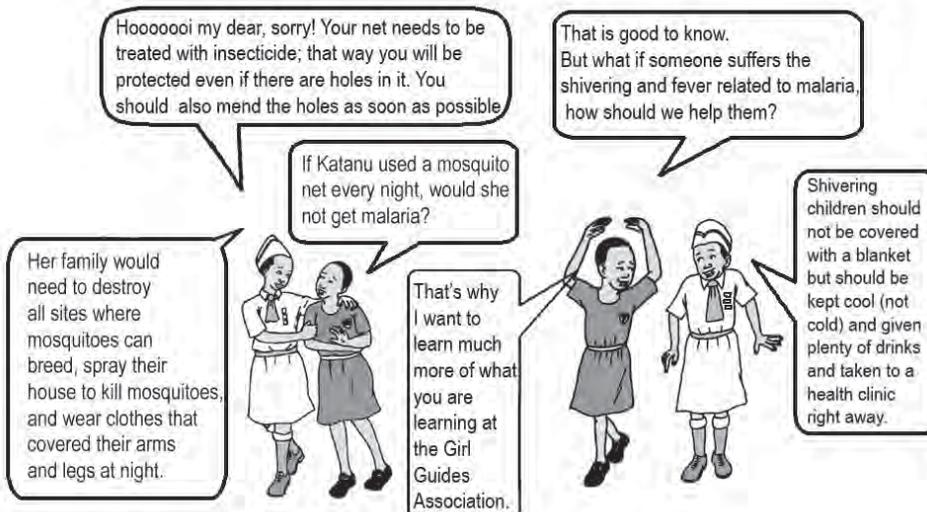
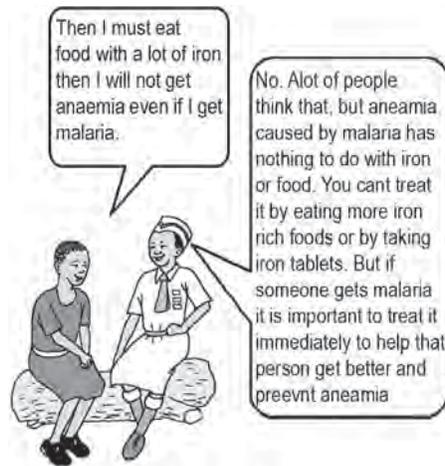
The medicine did not taste very nice, but the health worker told her that she **MUST** take it all at the right time even when she began to feel better. The health worker said Katanu was very lucky. If her family had waited even a day to bring her to the clinic she could have died.



¹ Adapted from UNESCO, "Telling Stories to Introduce Lessons About Malaria" (2004) http://portal.unesco.org/education/en/file_download.php/2245af72dc82dabca1aa965242d82d1dFINAL+cc3-malar102story.doc

³ Adapted from UNESCO, *FRESH Tools for Effective School Health*.

Prevent Anaemia through Prevention of Malaria



Worksheet 5.1: Girl Guides Keep Mosquitoes Away from Their Families and Friends

Patrol name: _____

Where activity was done: _____ Date it was done: _____

In the space below draw (or write) activities that your patrol did to prevent malaria in the community/school.



Worksheet 5.2: Girl Guides Reach out to Others

In your patrol:

- 1) Create three messages for girls and boys your age about the dangers of malaria and how to prevent it. Write the messages on manila paper and present it to the other girls.

What messages did your patrol prepare for girls and boys your own age?

1	_____

2	_____

3	_____

- 2) Create three messages for pregnant women about the dangers of malaria and how to prevent it during pregnancy.

What messages did you and your patrol prepare for pregnant women?

1	_____

2	_____

3	_____

Information Sheet 5: I will prevent and control malaria

I. Educate girls and women of the importance of controlling malaria

- Tell adolescent girls and women that they are at high risk of catching malaria.
- Tell them if they get malaria, they are likely to also get anaemia from the malaria.
- Tell pregnant women that if they get malaria, a) they may give birth to a baby with lower weight at birth than a woman who does not suffer malaria, b) malaria can cause death of the baby in the womb.
- Tell them that there are ways to prevent malaria that help women to give birth to safe, healthy babies.

II. Encourage girls and women to control malaria

- Encourage pregnant women to attend antenatal care services at the nearest health facilities that have antenatal care services.
- Advise young children, adolescent girls and pregnant women to sleep under insecticide treated mosquito nets every day.
- Advise adolescent girls and pregnant women to seek medical care immediately if they think they have malaria.
- Tell them that pregnant women, who are at least 4 months pregnant, in areas with a lot of malaria should go to a health facility for malaria treatment, even if they don't have the symptoms. They should ask their health care worker about this.
- Check whether women who are more than three months pregnant have been told about control of malaria.
- Check to make sure the woman knows when to expect malaria treatment during pregnancy [this is done in the antenatal clinic for those women who are more than three months pregnant].
- Encourage pregnant women who are more than three months pregnant and have not been treated for malaria to seek care from their antenatal services as soon as possible.
- Women should not treat themselves for malaria.



SESSION 6

Prevent Anaemia through Control of Hookworm

Session 6: Prevent Anaemia through Control of Hookworm

Kaka's Dream



Kaka and his friends used to play football bare footed in the field near the swamp. One sunny day he slept and had a dream. In his dream he became very small. I mean VERY VERY small.



The grass looked like tall trees. The rocks like mountains. Ants, as big as lions, ran after him. He ran and ran. He hid under the soil.

There he met many other small boys of his size. Kaka discovered he had become a baby hookworm. He and the others had just hatched from the many eggs that a little boy had left with his faeces on the bare damp soil near the latrines.



Kaka saw some of his brothers being held by the jaws of the giant ants; others were suffocating in the sun. Kaka was lucky, but he was scared and very hungry.

Great flies with dirty feet zoomed down near him and the smelly dirty feet of children playing bare footed in the soil thundered on the grounds next to him.



His brother-worms called, "Kaka, hold onto one of the feet of these children playing on the bare soil. That is the only way to escape those ants".

Kaka jumped onto one of the un-expecting bare feet and dug a hole to enter the soft skin. He found himself swimming and digging through many other places.



Prevent Anaemia through Control of Hookworm

Finally, he found himself in this big hollow tube, the intestines. It was dark in there but warm and cosy. He met many of his other worm-relatives; uncles, aunts, cousins, and grandparents. Some were very big and others fat.



Kaka and his brothers were taught how to bore into the tube and suck blood and other juices. It was yummy. They grew bigger and fatter but hungrier. They scratched and bore many more holes. There were holes and scratches every where.



The Host felt sick, weak and tired, but Kaka and his friends laughed and were happy. The host ached and grew weaker. Kaka and his friends were enjoying, making scratches and sucking blood.

Then one day something abnormal happened. Kaka and his relatives and friends were flushed with a smelly liquid. They could not scratch any more and had no strength to bore on the walls of the big tube. Kaka noticed he was becoming weaker and weaker. His friends were screaming. Kaka also was screaming, "Help! I'm dying!"



As he was losing breath he heard, "Kaka, wake up! Wake up!" It was his mother. Kaka woke. He was the right size again. He was happy.

Kaka told all of the other children about his dream. They did not want worms to make holes in their feet and suck blood from their stomachs. So, boys who had shoes to wear began to wear them. However, many boys didn't have shoes, so it was important to keep the soil clean. They were careful to use the latrines and told others to use the latrines so that they could keep the soil clean. They also told their parents about Kaka's dream, and their parents invited a health worker to come and teach the boys about hookworm and gave them medicine to kill the worms.



That's terrible. I don't want Kaka and his brother and sister worms sucking my blood and making me anaemic!

Worksheet 6.1: What would you or your family do to prevent hookworm?

1. For your self:
2. For a younger child who is two years old (and likes to play in the dirt outside)
3. For a pregnant relative
4. What can the community do to prevent hookworm?

Worksheet 6.2: Girl Guides Organize a De-worming Day

Together with your Guider organize a de-worming day at your school.

1. Work with the school administration and health services to set a date

Date the De-worming-Day was held:

2. Advertise the event to other classmates, with important messages about de-worming and its importance in preventing anaemia

Messages used:

3. Keep a record of what happened and write about it.
 - How many children were dewormed?
 - What other activities took place?

Information Sheet 6: I Will Support Hookworm Control

I. What is hookworm?

- Hookworm is a parasite that lives in dirty damp soil in areas where people do not use the toilets or where they leave faeces on the ground.
- Hookworm attaches to the small intestine and sucks lots of blood.
- It also causes scratches in the intestine that make you lose more blood and you may feel sick!
- Most people who have hookworm do not show any signs of disease.
- Losing the blood can cause anaemia.

II. How does a person get hookworm?

- Hookworms lie on the ground and wait for you to:
 - walk with your bare feet on the dirty soil
 - accidentally eat some of the soil (especially young children who play in the soil or pregnant women who sometimes eat soil)
- Once attached to your feet or hands the worms enter through your soft skin and rush to your intestines.
- The worms attach to your intestines and suck blood. You feel sick. You feel tired. You could get anaemia.

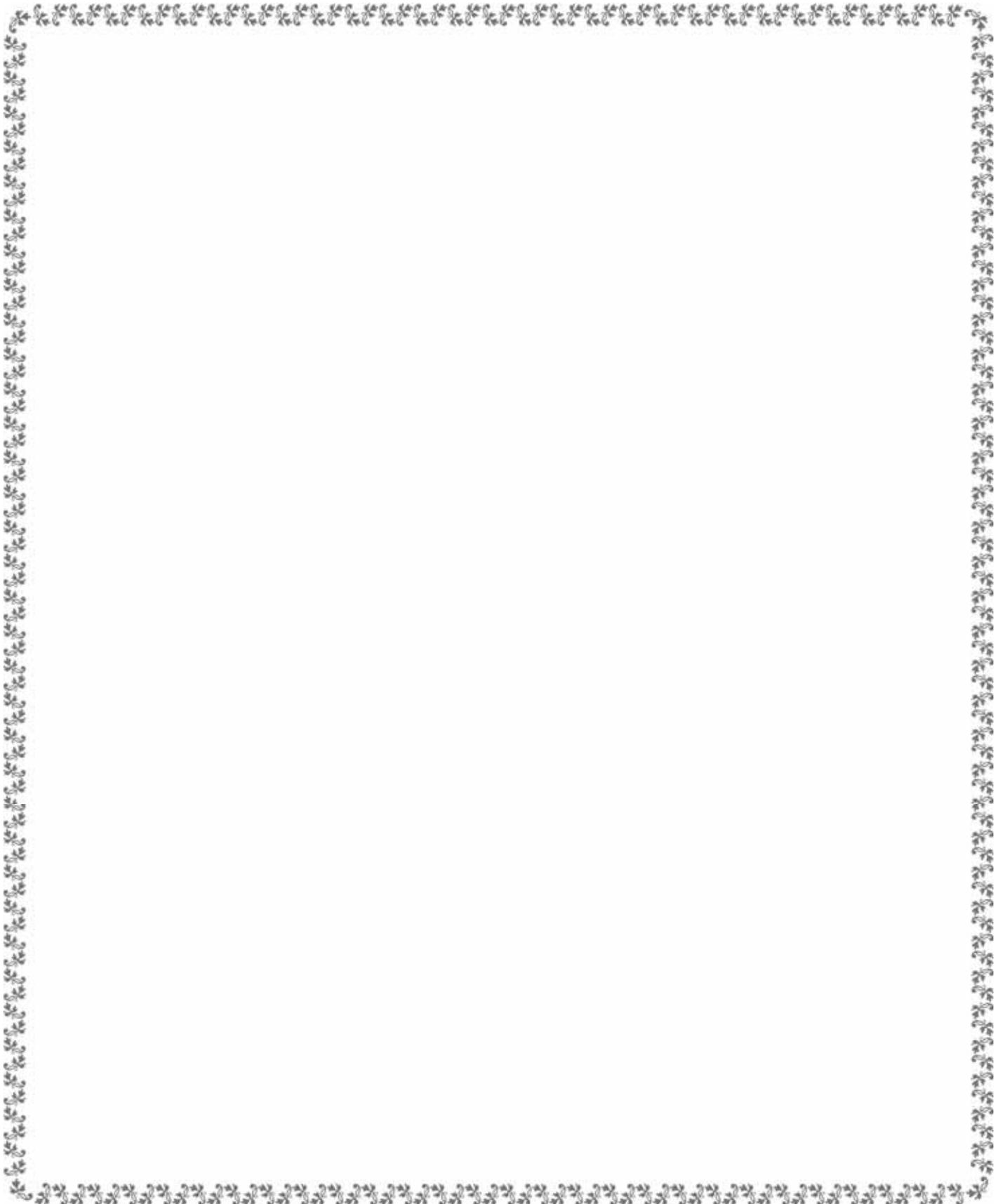
III. Teach others how to prevent hookworm

- Wear shoes when playing or walking outside
- Use toilets or safe latrines to properly dispose of human faeces
- Don't play or allow other children to play in dirty soil
- Pregnant mothers should not eat soil, it could have hookworm
- Don't use human faeces as fertilizer for crops

IV. Teach others how to treat hookworm

- Take de-worming medicine twice each year: for children over 1 year and adolescent girls:
 - Get de-worming medicines from a health worker every six months
- Pregnant women take de-worming medicine once or twice during pregnancy, even if they have no signs of hookworm.

Notes:





SESSION 7

Prevent Anaemia by Taking Iron Tablets

Prevent Anaemia by Taking Iron Tablets

Miriam's mum is having a baby



Worksheet 7.1: Girl Guides can support pregnant women to take iron tablets

Help the pregnant woman to respond to her questions on taking her iron tablets.



Pregnant Womans Questions

Why do all pregnant women need to take iron-folic acid tablets?

What will happen if I don't take the iron tablets?

Where can women get iron-folic acid tablets in our community?

How long do I have to take these supplements?

How many times in a month do I have to take the tablets?

Is it not boring to take the supplements for that period of time?

What do I do to make sure I don't forget to take the tablets?

Girl Guides Answers

Worksheet 7.2: Brownies Visit Local Health Clinic*

With your patrol, visit a health clinic (schedule in advance).

Name of the facility: _____

Date visited _____

In the space below, draw and colour the different tablets given to pregnant women to prevent anaemia (e.g. iron tablets, tablets to prevent malaria and tablets to treat hookworm). Write the use of each tablet to the mother.

What is the number of IRON tablets a woman is given for a month?

Draw and colour the number of iron tablets the mother is to take in a day.

Worksheet 7.3: Guides and Rangers Visit Local Health Clinic*

Name of health facility: _____ Date: _____

Name of health worker seen: _____

What nutrition services are given to pregnant women?

How does the health center help pregnant women prevent anaemia?

Reasons that some pregnant women don't go to the antenatal services?

What is the number of iron tablets women are given for a month?

How many tablets are women supposed to take in a day?

What are the reasons some pregnant women don't take their iron tablets?

What are some of the ways to help women take their iron tablets every day?

Information Sheet 7: Girl Guides support pregnant women to take iron-folic acid supplements

I. Educate pregnant women about the importance of preventing anaemia

- Tell pregnant women that they need more iron to help the baby in the womb to make its own blood, muscles, and other organs.
- Tell them they need iron for their own health and to deliver the baby safely. Anaemia increases the risk of death if a mother loses too much blood during delivery.
- Tell them that anaemia can cause them to deliver the baby too soon so that the baby could be small and weak.
- Tell them that a baby who is born with low iron levels is more likely to be born too small, to get sick and to die in the first few months of birth.
- Tell them that iron-folic acid tablets can prevent anaemia and help her to deliver a safe, healthy baby.

II. Encourage pregnant women to access iron tablets

- Encourage pregnant women to attend the nearest health facility that has antenatal care services for pregnant women. She should seek her antenatal care as soon as she notices she might be pregnant.
- She should ask for iron tablets as soon as she notices that she is pregnant.
- Check whether that pregnant woman has enough tablets to last her through to the next appointment date. If not inform her to go for more tablets as soon as the ones she has are finished.
- Check to make sure the woman knows the correct number of tablets to take. One tablet per day is the most common dosage.
- Encourage the pregnant woman to take iron tablets every day according to the advice of their health worker.

III. Support pregnant women to take their iron supplements

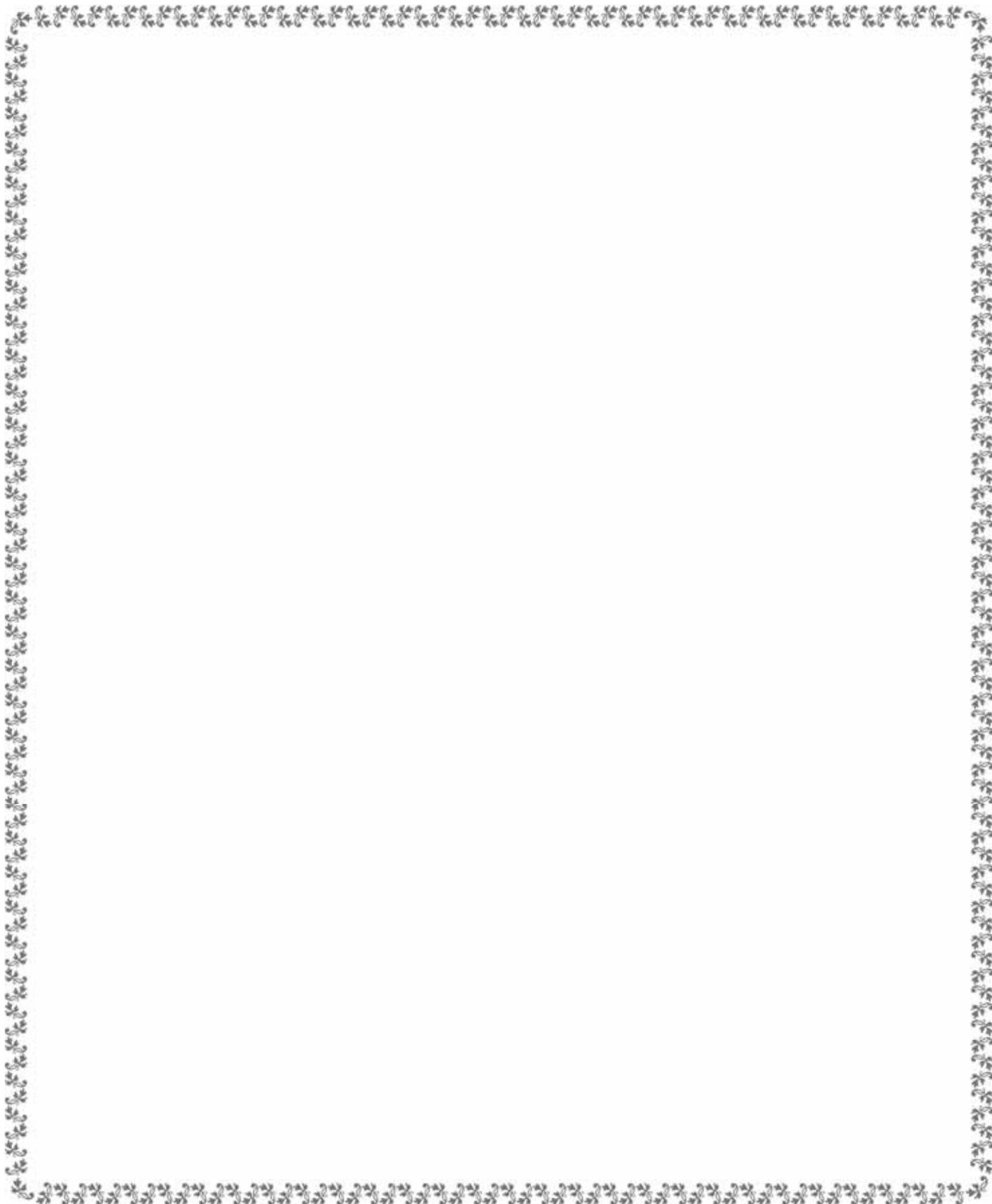
- Check to make sure the women take their supplements as recommended in the antenatal care visits.
- If a woman doesn't take them, ask why not.
- Advise pregnant women to use clean, safe water to take the tablets. They should avoid taking the tablets with coffee, milk, or tea. These make it hard for the body to use iron. When possible the tablet should be taken at least one hour before or after meals.
- Advise women who get problems (e.g. dark or black stools, feeling like vomiting, stomach pain, or diarrhoea) that they shouldn't worry. The problems are not dangerous to their health. To

handle the problems, they can cut the tablet in half and take each half at different times during the day; or take the tablet just before going to bed. If necessary, they can take the tablet with food (not iron blockers).

IV. Keep iron tablets in a safe place

- Help pregnant women to keep their iron supplements in a safe place where children and pets cannot reach. Inform them that iron tablets are very dangerous for infants, young children and pets if they accidentally eat them.

Notes:



SECTION 2

Badge Earning Community Outreach Activities

Workbook Section 2: Badge Earning Community Outreach Activities ★

This section has worksheets to support some of the Community Outreach Activities needed to earn the Anaemia Prevention Badge. The specific instructions of what is required to complete each are in the Anaemia Prevention Badge Award Handbook that your Guider can share with you.

Community Outreach Activity 1: Girl Guides love to write songs, poems, plays and dances and to make posters and food

Which activity did you choose to complete for your first community outreach activity? _____

In the space below: Write down your song, poem, play or poster or to describe your dance. Or, if you are a Ranger and chose to cook iron-rich foods, describe what foods you made, and who you shared it with.

Where and when did you perform it or pin it up? _____

Brownies: Also draw yourself performing this song, poem or play.

Community Outreach Activity 2: Posters (Brownies only)

Which poster did you choose to make for your second community outreach activity? _____

In the space below: Draw what your poster looked like

Where and when did you pin it up? _____

Community Outreach Activity 2: Girl Guides & Rangers

Plan to teach your Science Class about anaemia

Use the space below to:

- Make an outline of the presentation on anaemia that your patrol will make to the Science Class, including important anaemia prevention information.

or

- Prepare “talking points,” to talk to three friends about anaemia. These are three messages about anaemia that are so important that you want to be sure to remember to discuss them. Also write down the anaemia prevention actions you agreed to take, and the date you completed them.

Community Activity 2: Rangers

Volunteer in the community

Use the space below to:

- prepare the points you shall use to talk to pregnant mothers at the antenatal clinic about anaemia: its dangers for them and their babies, iron tablets, etc.

or

- Prepare a draft of the reminder card you will make so that pregnant women remember to take their supplements.

or

- Make an outline of the presentation on anaemia that your patrol will make to the Science Class, including important anaemia prevention information.

In the card, write down the name of the mother, and the dates you followed up with the mother.

This manual is made possible by the generous support of the American people through the support of the United States Agency for International Development (USAID) East Africa Office partnerships for Health Networks, USAID activity numbers 623-0010,623-1007.01 and 623-1008.01 through the Regional Centre for Quality of Health Care.

The contents are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

This manual is made possible by the generous support of the American people through the support of the USAID East Africa Office and the USAID Office of Health, Infectious Disease, and Nutrition in the Bureau for Global Health under terms of Cooperative Agreement No. HRN-A-00-98-00046-00, through the FANTA Project, operated by FHI 360.

The contents are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

