

# The Boy Who Harnessed the Wind:

## Adapted Novel

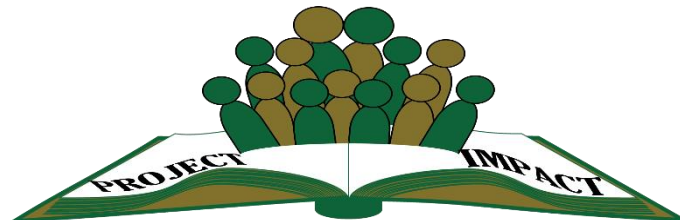
Lexile Approx: 500L-800L



[https://www.google.com/url?sa=i&url=http%3A%2F%2Fnhabitat.com%2Fmalawi-youth-bui-kids-windmill-to-power-village%2Fwind-turbine-high-school-student-africa-homemade-electricity-green-power-social-responsibility-malawi-william-kamkwamba%2F&psig=AOvVaw0DV5yblvXeMPRt2hr93\\_47&ust=1592053204647000&source=image&cd=vfe&ved=0CAIQJRxqFwoTCPCpmMmq\\_OkCFQAAAAAaAAABAJ](https://www.google.com/url?sa=i&url=http%3A%2F%2Fnhabitat.com%2Fmalawi-youth-bui-kids-windmill-to-power-village%2Fwind-turbine-high-school-student-africa-homemade-electricity-green-power-social-responsibility-malawi-william-kamkwamba%2F&psig=AOvVaw0DV5yblvXeMPRt2hr93_47&ust=1592053204647000&source=image&cd=vfe&ved=0CAIQJRxqFwoTCPCpmMmq_OkCFQAAAAAaAAABAJ)

This Adapted Literature resource is available through the Project IMPACT: Inclusion Made Practical for ALL Children and Teachers CFDA #84.326M

The text and graphics are adapted from the original source. These resources are provided for teachers to help students with severe disabilities participate in the general curriculum. Please limit the use and distribution of these materials accordingly



# Table of Contents

Chapter	Title	Page
1a	<a href="#">When Magic Ruled the World</a>	1
1b	<a href="#">Magic Tricks and Mangolomera</a>	13
2	<a href="#">Khamba</a>	24
3	<a href="#">Discovering a Thing Called Science</a>	32
4	<a href="#">The Uncertain Life of an African Farmer</a>	42
5	<a href="#">Malawi Begins to Starve</a>	46
6	<a href="#">My School Assignment</a>	56
7	<a href="#">A Time of Dying</a>	62
8	<a href="#">Twenty Days</a>	66
9	<a href="#">The Library</a>	70
10	<a href="#">Harvest Time</a>	80

# Table of Contents Con't

---

Chapter	Title	Page
11	<a href="#"><u>The Windmill Comes to Life</u></a>	89
12	<a href="#"><u>Bigger and Brighter</u></a>	97
13	<a href="#"><u>The Restless Inventor</u></a>	106
14a	<a href="#"><u>Wimbe Discovers William Kamkwamba</u></a>	112
14b	<a href="#"><u>The World Discovers Wimbe</u></a>	120
15	<a href="#"><u>Meeting Ted and Tom</u></a>	129

---



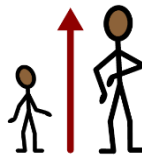
# Chapter One: Part 1 When Magic Ruled the World



My name is William Kamkwamba (Cam•ka-warm•ba), and to



understand the story I will tell you, you must first



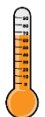
understand the country where I grew up. I live in the small



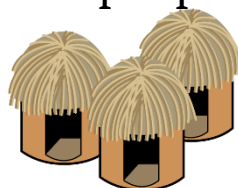
village of Masitala on the outskirts of Wimbe. This is in a small



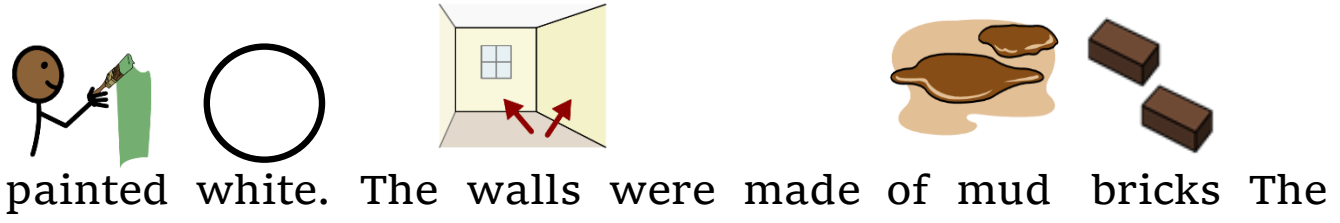
country called Malawi in southeastern Africa. Malawi is called



“The Warm Heart of Africa,” because the people are so nice.



In my village there were ten houses, all were



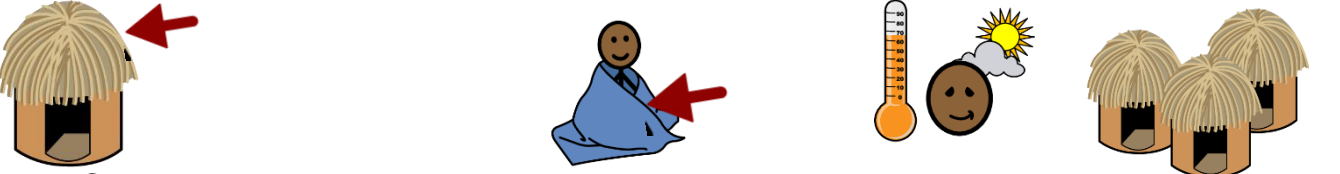
... painted white. The walls were made of mud bricks. The



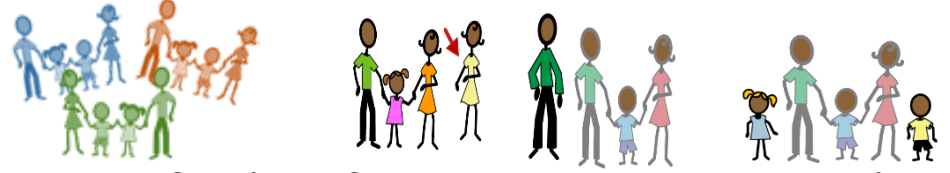
... roofs were made of *dambos*, or long grasses. Our roofs kept us



... cool in the summer. In the winter, air came through the grass



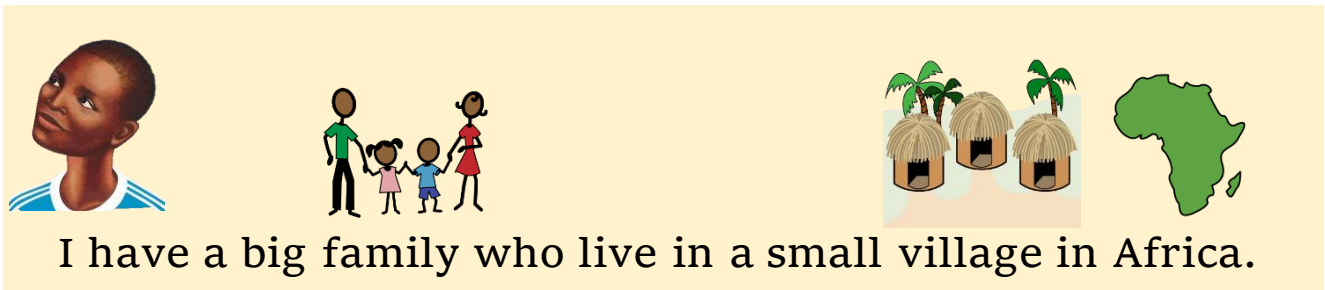
... roof so we needed more blankets to stay warm. The houses still



... belong to my extended family of aunts, uncles, and cousins. My



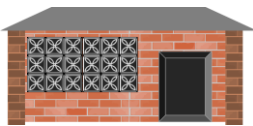
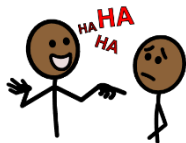
... mother, father and six sisters all live in the same house as me.



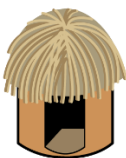
I have a big family who live in a small village in Africa.



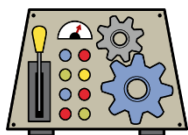
We also had some goats and guinea fowl, and a few



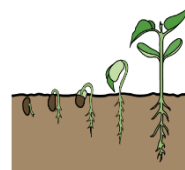
chickens. I was bullied in school because I had no brothers



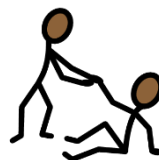
to protect me. At home my sisters liked to take and play with



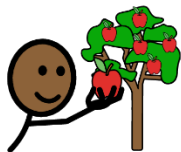
my tools and inventions.



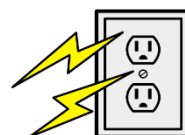
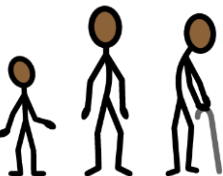
My family is a farming family. My family still grows white



corn or *chimanga*. My sisters and I had to help during planting



season and during the harvest. Most of my family lived their



whole life in the countryside where there is no electricity. That



means there are no computers, no video games, and almost



no T.V.s.



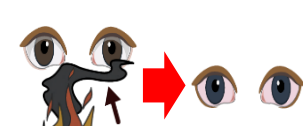
In my village, for people to see at night, they use oil lamps.



The lamps burn oil to make fire and are very dangerous. If one



fell over it could start a fire. The smoke from the lamps



hurt our eyes. When we breathed in the smoke it made us



cough. If you used the lamps a lot and breathed smoke a lot, it



could make you very sick.



The people in my village are very poor and do not get to see



doctors or learn about science. Many people in Malawi still



believe that magic rules the world. A *sing'anga*, or wizard who



uses magic, can be asked to heal someone or put curses on



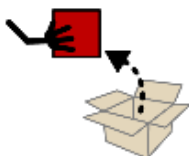
them. Sometimes when people get sick they go to the wizard



who will say “Oh, I know what’s wrong! You have a snail.”

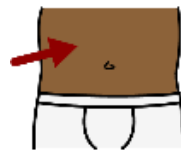
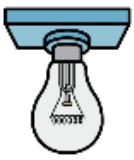


“A snail?” the sick person replies.



“We must remove it at once!” says the wizard who takes out a





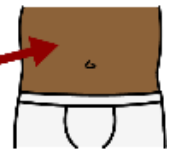
light bulb and puts it against their belly. “There it is, do you see it?”



“Yes I think I see it moving!” says the sick person.



The wizard splashes a liquid he calls a ‘magic potion’ on their



belly and says “All better, you must pay me now.” The wizard



will also put a curse on someone for a little extra money.



When I was six I thought I was cursed by a witch doctor, or



wizard. I was playing in a puddle when a group of boys walking



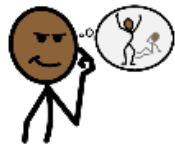
by offered me gumballs from their bag. I loved gumballs so I



stuffed them in my mouth. Colorful juices dripped out of my



mouth. The gumballs belonged to a local trader who was very



mad that the boys took his gumballs. The trader wanted revenge



so he went to the *sing'anga* and put a curse on whoever stole



the gumballs.



I have a big family who live in a small village in Africa.



I was terrified of the magic in the *sing'anga's* curse. He



could make me shrink into a worm, or worse, turn me into a



stone! The stories about wizards that scared me most were



about magical ghosts, or *Gule Wamkulu*. I was scared so I



confessed to my father that I ate the gumballs.



My father walked five miles to the man's house. He paid



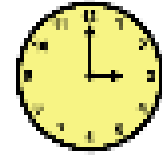
him for all of the gumballs even though I only ate a few. That



night I told my father how much the *Gule Wamkulu* scared me.



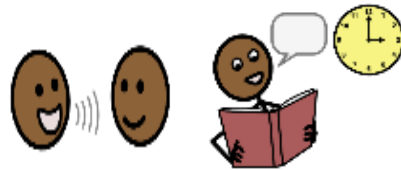
My father laughed when I told him. I asked if I was in



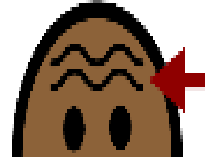
serious trouble. He joked, "We were just in time William,



who knows what was in store for you?"



My grandfather was the one who told me stories of



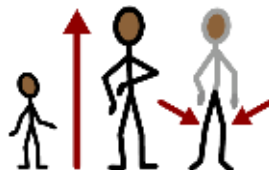
wizards. He was so old he had cracked and wrinkled hands



that looked like broken rocks. He wore the same tattered



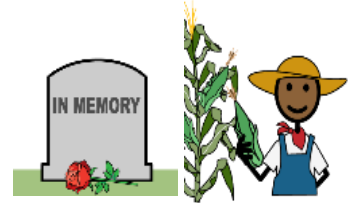
clothes every day. When he walked out of the forest you would



think one of the trees had grown legs and started walking.



I have a big family who live in a small village in Africa.



The time Grandpa saw a *sing'anga* wake up a dead farmer



was the greatest story about magic and wizards he ever told. A



poisonous snake had bit the man. The wizard stood on the man



and drank a potion. Grandpa told us that he saw the dead



farmer's fingers begin to move and then the farmer sat up. Then



the wizard threw fake medicine into the trees and hundreds of



snakes crawled out. Together grandfather and the wizard



inspected the fangs of each snake to find the one that had bit



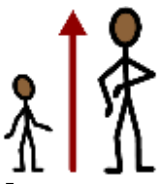
the farmer.



Grandpa's stories about the magical ghosts scared me. In



the stories they came to tribal ceremonies where boys



become men. They performed magical dances and looked scary!



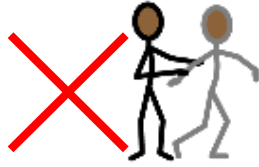
Grandpa believed in the wizards, but father was a Presbyterian.



He took his religion very seriously. Father told me to



"respect the wizards," he took a deep breath, "but with God on

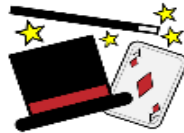
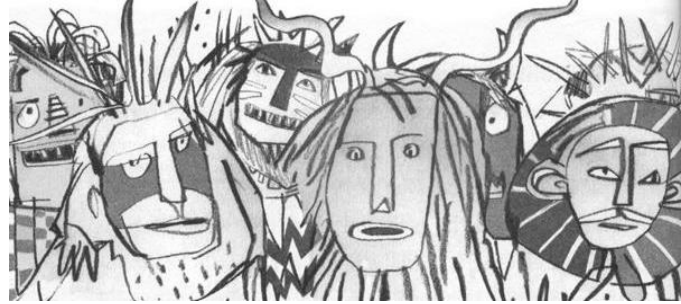


your side, they have no power against you."

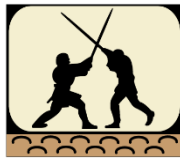


I have a big family who live in a small village in Africa.

# Chapter One: Part 2 Magic Tricks and *Mangolomera* (Man-go-Lo-meh-rah)



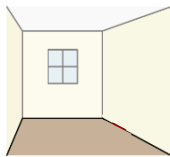
My father did not believe in the magic and strength of



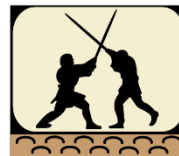
wizards, but the men in action movies seemed pretty powerful



to me! In my village we had a local “video show”. Our movie



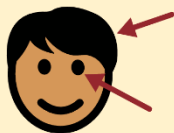
theatre was one room in a mud hut with benches, a television,



and VCR. I was not allowed to go to the movies because it was

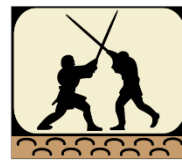
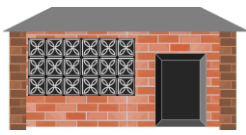


after the sun went down.



Traits tell you about a person, place or thing.

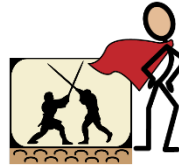
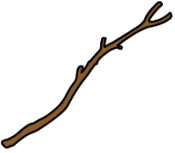




My friends at school told me about movies like Rambo and



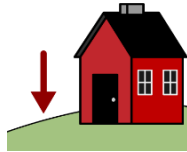
the Terminator. My cousin Geoffrey and I played games with



sticks and pretended we were the movie stars. Chief Wimbe 's



son, Gilbert, was the third friend in our group. When Geoffrey



and I got bored in our yard, we went to Gilbert's house.



At Gilbert's house there was a long line of people holding

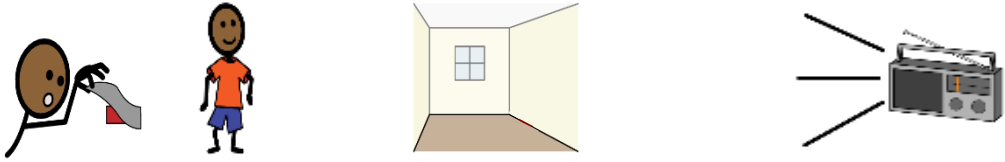


chickens. They were gifts for Chief Wimbe. As we walked past



the guard I turned to Geoffrey and said, "There must be a lot of

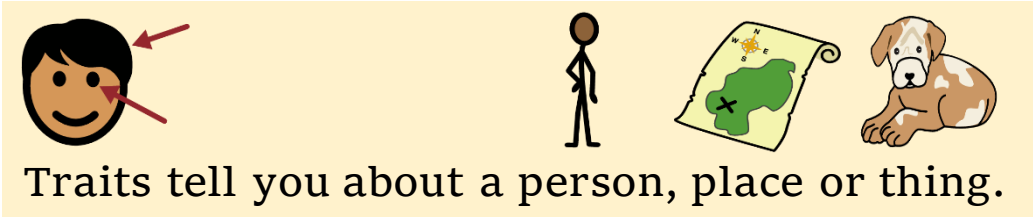
problems today.”



We found Gilbert in his room singing to the radio. His voice



was beautiful. My voice sounds bad, like a screaming chicken.



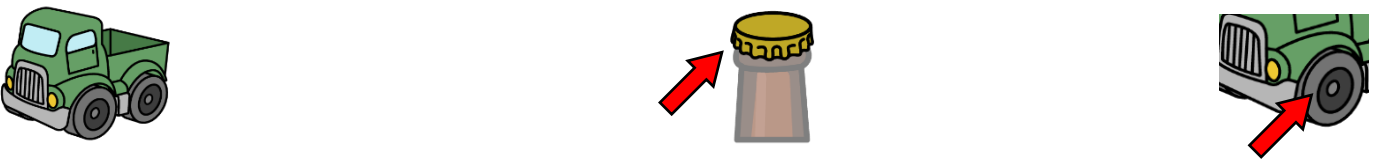
Traits tell you about a person, place or thing.



When the song ended we ran off to find cartons that the



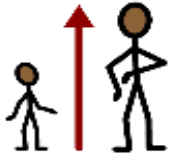
grownups threw in the alley. We washed them out to make toy



trucks. We found wire and bottle caps for the axels and wheels.



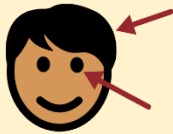
We even drew designs to make the wheels look cool! When I



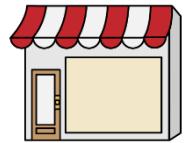
grew up and met friends in America, they told me children



everywhere like to make toys out of things they find.



Traits tell you about a person, place or thing.



When we grew tired from playing we went to the store to



buy a cold soda or candy.



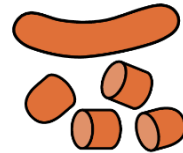
Then we went to the *kanyenya* stand. *Kanyenya* was our



version of a fast-food restaurant. There was no building. On the



side of the street, a huge pot hung over a fire. Grease boiled



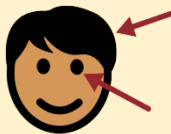
inside. The man cooking would throw small pieces of meat and



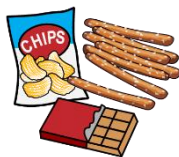
vegetables into the pot to fry them. People could come to the



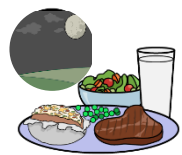
*kanyenya*, pay a little money and quickly get cooked food.



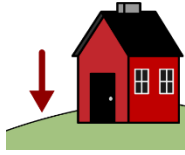
Traits tell you about a person, place or thing.



Even days I had a snack, I was still hungry when I got home



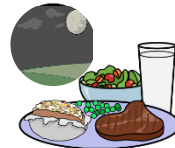
Dinner was usually not ready so I would play soccer with my



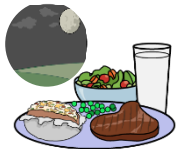
cousins in the courtyard. We had no money so we made a ball



out of plastic shopping bags (that we called *jumbos*). The games



never ended so I always left when dinner was ready. After



dinner my father would tell stories. “Be still and hush,” he



would say. “Now, have I told you the story about the leopard



and the lion?”



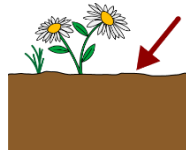
During planting and harvesting time, my father hires a man



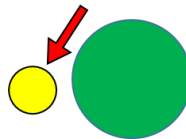
named Mister Phiri to work the land with us. Sometimes the



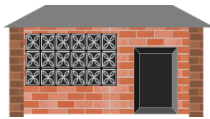
fields have big stumps that get in the way. Mr. Phiri can pull



them right out of the ground. The secret to his strength is magic



called *mangolomera*. I am very small so I get picked on a lot.



There were bullies at school and on the soccer field. At practice



I was doing so good scoring goals that some of the others called



me Kayira, my favorite professional soccer player!



During the next game the captains did not pick me. The



other players laughed at me. Calling me Kayira was only a joke.



They did not think I was good at soccer, they thought I was a



bad player! I wanted *mangolomera*, or super strength.

Traits tell you about a person, place or thing.



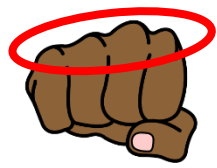
Mr. Phiri's son told me he was a real wizard. He told me he



knew how to give me *mangolomera*. I paid him 20 *tambala*, or



pennies. We went into the forest and he did a ritual and cut my



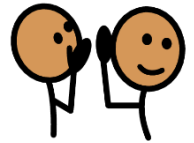
knuckles. Then he rubbed powder on my hands. They hurt so



bad my eyes squeezed shut. He told me, "In three days you will



feel your new power. Just don't eat any okra or sweet potato



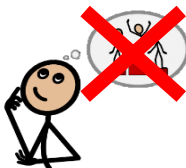
leaves.". "I'll remember I said back. "And lastly," he whispered,



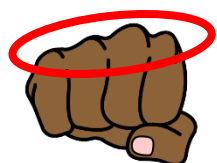
"tell no one!"



I hid at my grandparents for three days and did chores. I



did not want my father to see where the wizard cut my

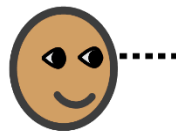


knuckles. I was tired. I wondered, "When will I become strong?"

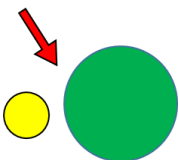




On the fourth day I woke up and I felt strong! I wanted to test



my new power. I went to the soccer field and looked for the



biggest kid. I stomped on his toes. He got mad and punched me

in the face.



It hurt so badly! Then he punched me again and again. My



uncle ran over and stopped him. He yelled, "What are you



thinking William, he is twice your size!"



I had been tricked. The wizard did not have any magic. He



just stole my money. Witches and wizards did not seem so

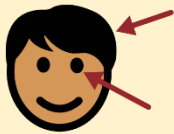


scary anymore. I began to think about the world differently. I



wanted to use facts and reason. No more magic and

hocus-pocus.



Traits tell you about a person, place or thing.



## Chapter Two Khamba



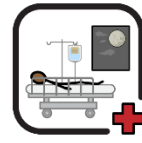
In January 1997, when I was 9 year's old, my Uncle John



suddenly died. One afternoon he became sick and fainted. His



lungs, which help us breath, were sick from the black smoke



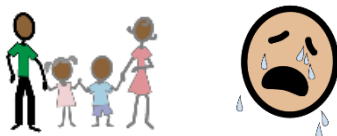
from the oil lamps. We had to take him to the hospital. No one



had a car and the hospital was an hour away. This was the first



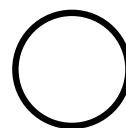
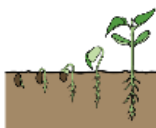
time I saw my parents cry.



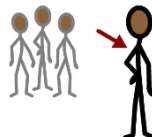
Uncle John was Geoffrey's father. I felt bad for Geoffrey.



Uncle John and my father were brothers and business partners.



They both owned the farm that grew chimanga or white corn.



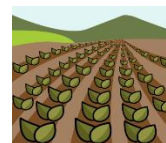
Now my father had to run the farm alone. Geoffrey and I had to



help the farm stay successful.



William and Khamba became friends.



Uncle Socrates worked at a tobacco estate, or tobacco farm.



Soon after Uncle John's funeral Uncle Socrates lost his job.



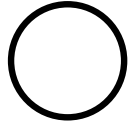
Uncle Socrates and his family of seven daughters moved back to



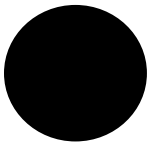
our village.



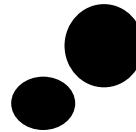
When Uncle Socrates was unpacking the truck, a dog



jumped out. I yelled, "Get back, shoo!" The dog was all white



with black spots on his head and body. It looked like someone



tried to throw paint on him but only spots landed on him. His



eyes were brown. His nose had bright pink dots. It was Uncle



Socrates dog, Khamba. Khamba was big but skinny.



William and Khamba became friends.



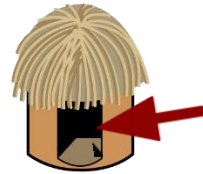
In Africa, I have never seen a fat dog. They are not pets;



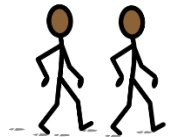
instead they protect homes and farms. Dogs only eat extra food



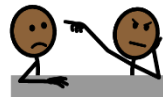
left on the table after we finish a meal. Sometimes dogs even



catch mice to eat! In America, dogs live inside and get to play



with squeaky toys and eat fancy food. Khamba kept following



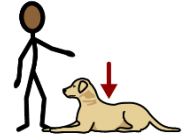
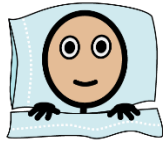
me even though I kept shouting "Eh, get away!" I did not want



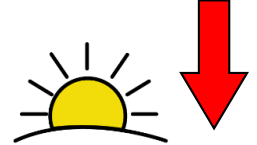
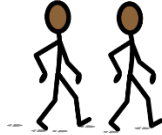
people to think I had a dog for a friend. I really did not want



people to see me talking to a dog!



When I woke up in the morning, he was even lying by my



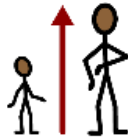
bedroom. He kept following me everywhere. By the end of the



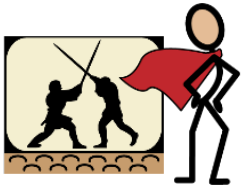
day I began to like having a friend following me around.



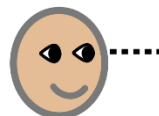
Khamba liked to run after the goats and birds on the farm. He



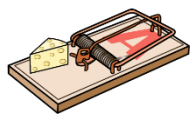
also liked to hunt. As I got older, I stopped pretending to be



movie heroes. Instead I went hunting in the forest for fun.



One day Khamba and I went looking for birds. We set up a



trap. It looked like a slingshot. We caught four birds! We took



the birds back to the house. After I cleaned the birds, I used a



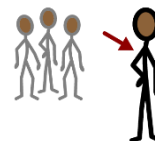
stick I found in the forest to hold them over the fire. The part of



the bird I got to eat was the size of a chicken nugget.



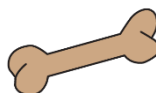
My sisters could smell the birds cooking. They ran over but



father stopped them. He said "Leave those guys alone. The two



hunters worked hard today; now let them enjoy their prize." I

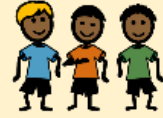


took small bites so I would not bite a bone. Khamba ate the



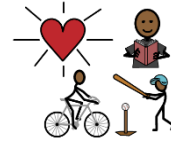
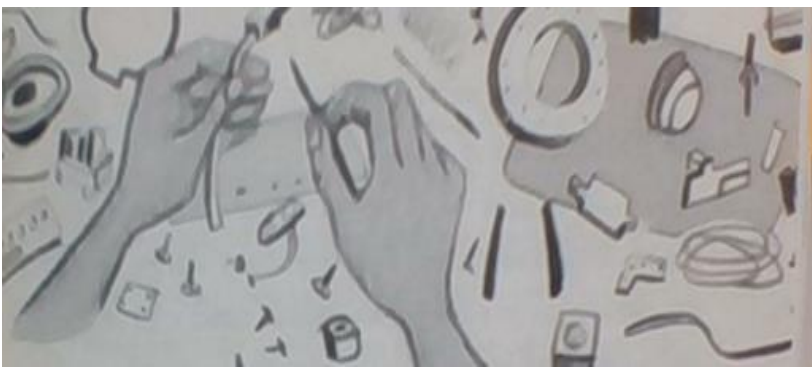


whole bird in one bite!

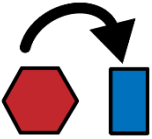


William and Khamba became friends.

# Chapter Three Discovering a thing Called Science



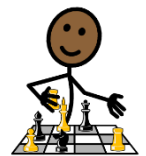
When I turned 13 my body and my interests began



to change. I did not hunt as much. Hanging out at the



trading center with Geoffrey and Gilbert was more fun. We



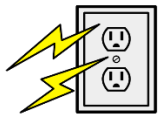
played the game Bawo a lot. To play the game I used strategy



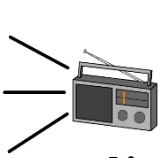
and quick thinking. I was really good and won a lot.



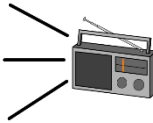
I did not always play in the trading center. Since we did not



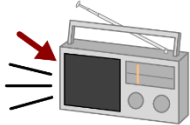
have electricity or television, many people in Africa relied on



the radio for music, news, and to relax. Geoffrey and I spent



some of our time cracking open radios to investigate how the



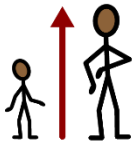
radio made sound. I liked to ask a lot of questions.



“Why are the wires different colors? Where do the wires



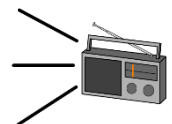
go? How can we hear Dolly Parton all the way from America?”



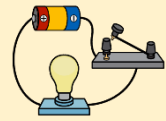
$$1 + 2 = 3$$



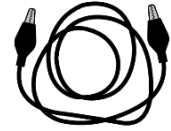
The grown-ups did not know the answers to my questions.



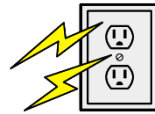
Geoffrey and I learned a lot from taking apart those radios.



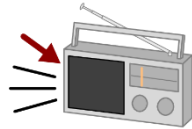
William and Geoffrey learned how things worked.



We did a lot of experiments to learn about the wires and



the circuit board. I learned how energy powered the radio. We



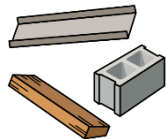
learned how the radio's speakers made noise. We also got really



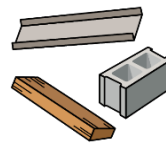
good at fixing the radios. People brought their broken radios to



us. In Geoffrey's room we had piles of circuit boards, wires,



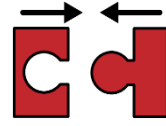
motors, and other odd junk. Just like we made our toy trucks



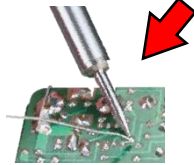
with recycled trash, we used recycled material to fix the radios.



Tools were expensive so we made our own. When fixing



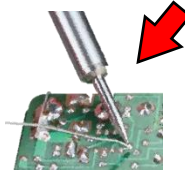
radios, we needed some metal pieces to stick together.



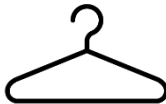
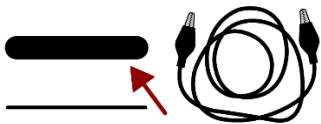
Soldering (saw-der-ing) uses a tool called a soldering iron to



melt the metal. Then the pieces could be stuck together.



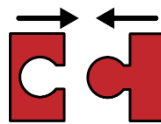
Geoffrey and I could not afford a soldering iron. Instead we



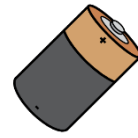
used thick wire like a coat hanger. We got the end really hot



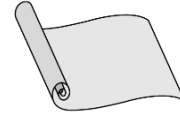
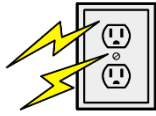
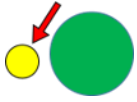
over the kitchen fire. Then we would touch the hot end to the



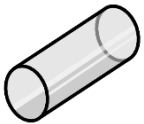
broken pieces to make them stick together like glue.



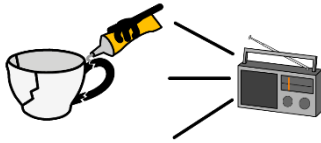
To test the radios we would hunt for batteries that had just



a little bit of energy left in them. Then we rolled up paper to



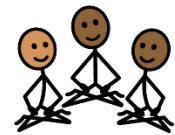
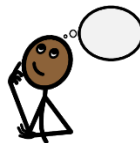
make a tube that fit two or three batteries. We had to be



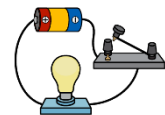
creative to fix the radios but it was fun!



William and Geoffrey learned how things worked.



I have always been curious, especially as a kid. I



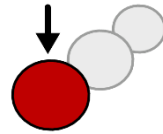
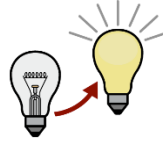
asked people in my village about how things worked.



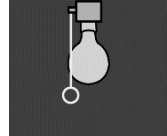
I wanted to know how songs fit on a CD or in an MP3.



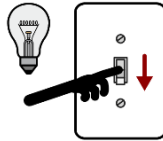
player. I wanted to know how a car uses gas to move.



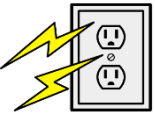
Some bikes in Malawi have a light on the front that



shines so the rider can see in the dark. When the rider



stopped pedaling, the light turned off. The light was



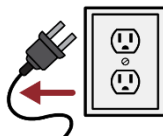
powered by a dynamo. I wanted to know how the



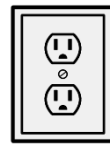
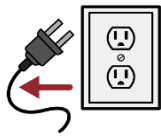
dynamo worked.



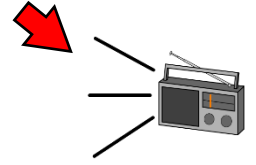
One day a visitor to our house had a dynamo on their



bike. Geoffrey and I unplugged the dynamo from the



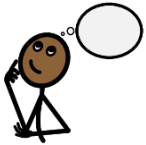
light. Then we plugged the dynamo into the AC socket of a



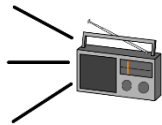
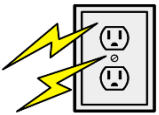
radio. Geoffrey got on the bike and pedaled. The radio played



music! When Geoffrey stopped pedaling, the music stopped. I



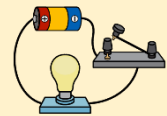
wondered, "How can I make the bike pedals spin to give



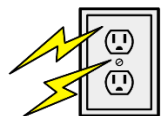
electricity to the radio so that Geoffrey and I can both dance to



the music?"

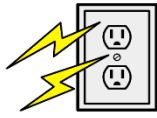


William and Geoffrey learned how things worked.

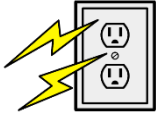


The dynamo opened my eyes to the power of electricity.

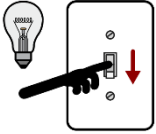




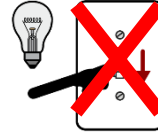
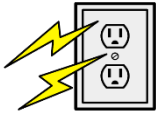
It is very difficult to get electricity in Malawi. Some people



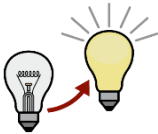
have electricity, but the government sometimes shuts the



electricity off. When that happens, it can be a long time before



you get electricity again. We did not have a light switch to turn



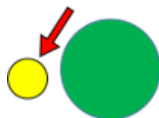
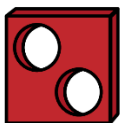
on the lights. We used oil lamps that made a lot of smoke. All



that smoke hurt our eyes and made us cough a lot.



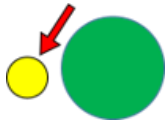
Many schools in Wimbe are not very pretty. The roofs have



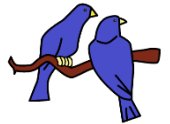
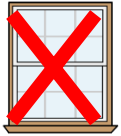
holes. The rooms are small and many students are in one



classroom. Many students write in the dirt because the schools



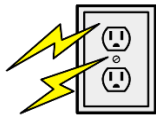
have only a little bit of chalk or pencils. The schools often do



not have real windows either so students can hear the birds,



people, and trucks drive by outside.



I wanted to bring electricity to my town. I wanted to be a



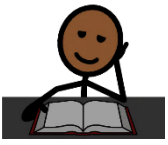
scientist. To be a scientist I needed to go to secondary school.



You may call it middle school in America. In Malawi, to go to



secondary school you have to pass tests then pay money. I

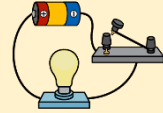


JAN	FEB	MAR
APR	MAY	JUN
JUL	AUG	SEP
OCT	NOV	DEC

studied very hard! After my test I had to wait three months to



find out my score.



William and Geoffrey learned how things worked.



# Chapter Four The Uncertain Life of an African Farmer



Many people in my village are farmers. Like my



family, they grow and if they are lucky they grow tobacco



too. Corn is very important to the people of Malawi. We



use the corn to make most of our food. The meal my mom



made most nights was *nsima* and relish. The *nsima* looks



and feels like white play-doh but tastes much better! We



scooped the relish with the *nsima*.

JAN	FEB	MAR
APR	MAY	JUN
JUL	AUG	SEP
OCT	NOV	DEC



Each year in November my dad would buy seeds and



fertilizer to plant the crop. We planted at the start of the rainy



season in December. My job was to make ridges, long dirt rows



in the field. The corn grew from December to March. It was



ready to be harvested, or picked, in May. Usually our storage



room was filled to the ceiling with corn to last us all year. Seeds



and fertilizer were expensive so we did not get gifts for



Christmas because we did not have much money left until the



crop was ready.



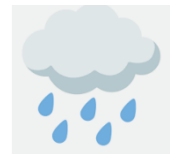
Corn is very important to the people of Malawi.



In December 2000 everything went wrong. The government



changed the price of fertilizer. The new leader made it too



expensive. When the rain came, there was too much water and



many farmers' fields flooded. When they were filled with



water it was hard for the crops to grow. Then the rain stopped.



But it did not come back and Malawi had a major drought. The



sun came up each day and made the land dry and hot. That



meant that most of the corn died or could not grow.



Corn is very important to the people of Malawi.

# Chapter Five Malawi Begins to Starve



After I took my tests for secondary school I had to wait a

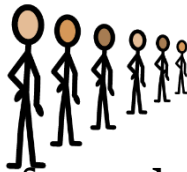
JAN	FEB	MAR
APR	MAY	JUN
JUL	AUG	SEP
OCT	NOV	DEC



few months. Geoffrey, Gilbert, and I played Bawo in the



trading center while we waited. One day as we walked home, I



noticed a line of people waiting in front of Gilbert's house. They

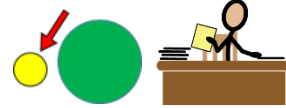


were waiting to talk to his dad, the chief.



In the far villages, people already had no food left. They

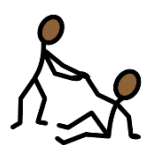




came to the chief to ask for food or for a small job called a



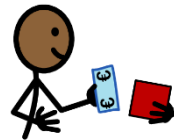
*ganyu*. The drought had killed many crops so people needed



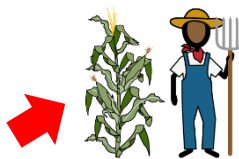
help from the government, from the chief. The government



usually stores extra corn in case there is a drought. This year



some dishonest men in the government sold the emergency



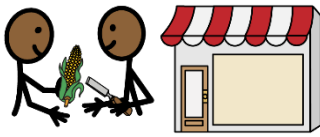
stock of corn. Then they ran away with the money. There was



no corn left at all.



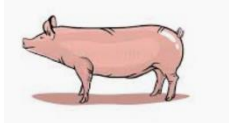
The people in Malawi were hungry and scared.



At the trading center women were selling *gaga*. *Gaga* is the



outside part of corn kernels. Usually we feed *gaga* to



chickens and pigs on farms. All of the people were so



hungry that they were pushing each other out of the way



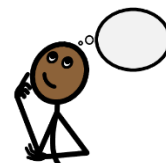
to buy *gaga*. At home my dad was gathering our goats,



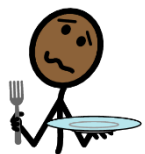
our prized possessions, to take to the market. We needed



money for food too and the price for goats was going down.



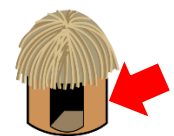
We only had two bags of grain left. I always thought being



hungry happened to other people, not to my family.



The next morning I got up at 4 am to help get the fields



ready to plant the next crop. When I walked inside to get



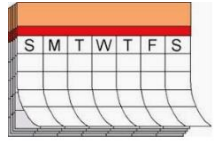
breakfast, my father said, "Not today, William. We need to save



our food. We will not eat breakfast for a while." I told Geoffrey



what happened. He was surprised. He had stopped having



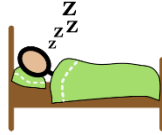
breakfast a few weeks before.



The people in Malawi were hungry and scared.



Since Geoffrey's dad died, he had to work harder and his



family was poor. He looked tired, so I joked, "We will be



back in school soon, then we will be on top!" Soon both



his family and my family had to cut back to only one meal a



day. My dog Khamba was hungry too. I could start to see



his ribs through his skin. Most days Khamba did not get to

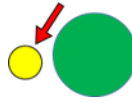


eat so he was starving.

JAN	FEB	MAR
APR	MAY	JUN
JUL	AUG	SEP
OCT	NOV	DEC



It was finally December and time to plant a new crop.



My father managed to plant a small amount of corn and some



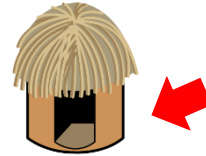
tobacco. We still had to wait almost six months for the new crop



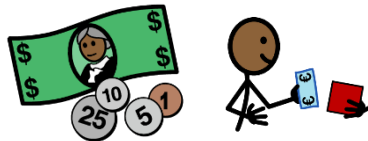
to grow. The storage room was almost empty, we only had a



few meals left! My mother took some of the corn we had and



baked *zigumu* cakes. She sold them in front of our house or at



the market to make money to buy more food.



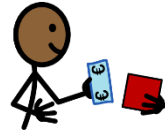
As my mother walked home one day she saw a truck go by



filled with corn flour. When she got home she said, "William,



in the morning you will ride your bike to Chamama. It is a



town twelve miles away. There you will buy us corn flour from



the government.”



The people in Malawi were hungry and scared.



When I got there, the lines were very, very long. People



were very hungry and did not want to wait. They began to push



to the front of the line and fights began. I was small so I was



able to escape the crowd. The men pouring the food did not



weigh the corn flour and cheated me. I did not get all the corn



flour I paid for but we were hungry and needed what they gave

us.



People I knew my whole life were selling things they



owned, like pieces of roof, to survive. Stores were closing



because no one had money to buy anything. Soon Geoffrey's



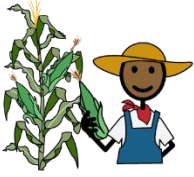
family ran out of food and money. He began to walk the roads



looking for small jobs or *ganyu*. He was getting very skinny



and I was getting scared that he would not survive to see the



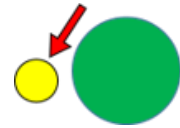
next harvest. Gilbert's family, the chief, gave away almost all of



their food to people in need.



On Christmas, people in Malawi usually have a great meal



of chicken and rice. This year we only had a small amount of



*nsima*. After we ate, I left to find my older cousin, Charity. He

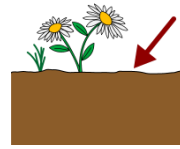


was hungry too. We found a friend at the marketplace who



fried pieces of meat and sold them at his *kanyenya*.

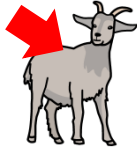




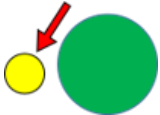
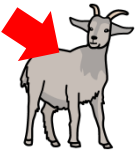
We saw a pile of goat skins sitting on the ground behind him.



We told him, “We are making a Christmas drum for the kids.”



So he gave us a skin he was going to throw out. We boiled the



skin over a small fire. Charity, Khamba, and I enjoyed meat for



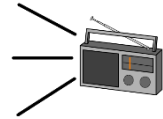
a Christmas meal.



The people in Malawi were hungry and scared.



# Chapter Six My School Assignment



The week after Christmas, as I listened to the radio, they



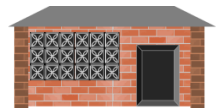
announced that the exam results were ready. I ran to see how I



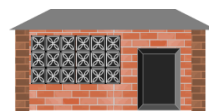
had scored. I did not do well on my placement exams. I wanted



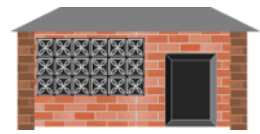
to be a scientist. I studied very hard, but I got C's and D's. That



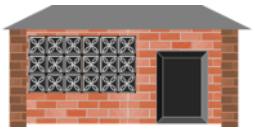
means I was placed in *Kachokolo*, one of the worst schools in



the area. We walked three miles to get to school. At least



Gilbert's grades stunk too. He had to go to school at



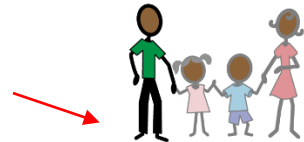
*Kachokolo*, too.



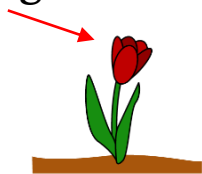
I was lucky to get to go to school.



The December rains were helping the crops grow. The



plants were a beautiful green and as tall as my dad's shins.



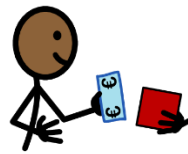
Flowers all over were blooming, but there was still nothing to



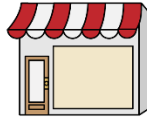
eat. There were still a lot of hungry people, but not a lot of food.



The businessmen made the price of corn very expensive.



At the market my mom still was selling her *zigumu* cakes.



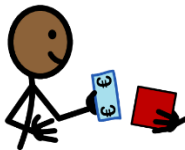
The crowd of people at the market were hungry and angry.



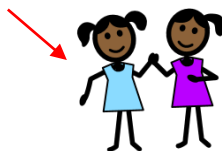
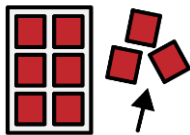
While my mom sold some of the cakes to customers, other



people snuck up and stole some of her cakes! That meant we



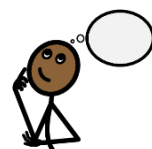
had even less money to buy food. At dinner, my sister



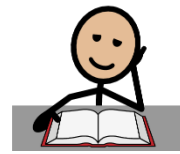
Rose took extra food. My sister Doris got very mad! My family



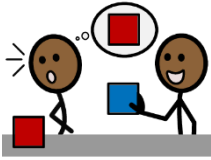
was very hungry.



At least school would start soon. At school I thought I



would be able to ignore how hungry I was. Learning would be a



good distraction. School is not free in Malawi. We had to pay for



our pencils and books but my family did not have money. Lucky



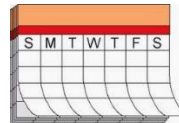
for me Gilbert would share.



I was lucky to get to go to school.



When school started everyone was excited to answer



questions and raise their hands. After a few weeks students



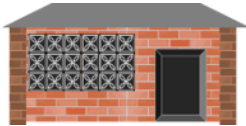
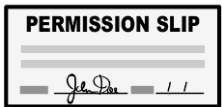
were too hungry and did not raise their hands as much. Then,



Mister Phiri, the school principal, made an announcement.



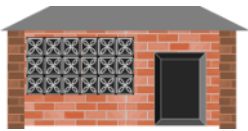
“All students who have not paid their school fees will not



be permitted to attend school.” I knew my family did not



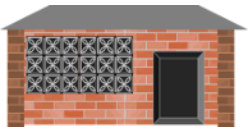
have much money. I was worried I would not get to go



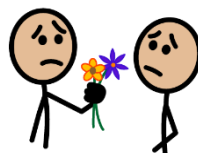
back to school.



When I got home I told father about the announcement



at school. He said, “You know our problems here, son. Right



now we have nothing to spare. I’m so sorry.” The next morning



I waited by the road for Gilbert. “Why do you look so sad?”



Gilbert asked me.

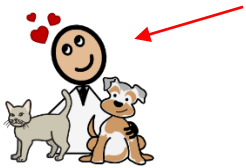


I was lucky to get to go to school.

# Chapter Seven A Time of Dying



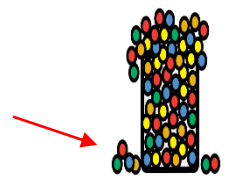
Dogs in America are a great pet. They love to play and their



owners feed them good food. It was very different in Africa.



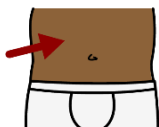
Dogs usually had jobs. They protected other animals, farms, or



people's homes. The food they ate was the extra, or leftover



food their owner's did not eat. My family did not have enough

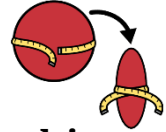
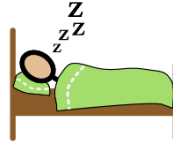
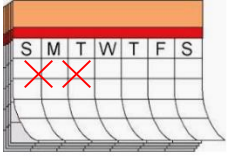


food for our bellies to be full.





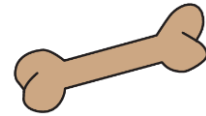
Khamba was not getting to eat much. He would go a few



days without anything. He looked tired. He looked skinny. He



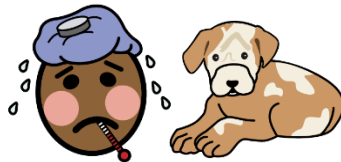
looked sick. One day my cousin Charity visited with a friend.



They looked at Khamba and said, "I can see his bones through



his skin! I cannot even look at him!" To me Khamba was a pet.



To them he was just a sick animal.



There is no food left in Malawi.



Charity and his friend did feel bad for the dog. They did not



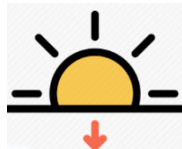
want him to be in so much pain. The only way for Khamba not



to be in pain was if he died. "Be a man," they told me. "If you



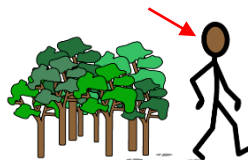
won't, we will." I was so sad but I knew what I had to do.



Charity came back that afternoon and we walked Khamba



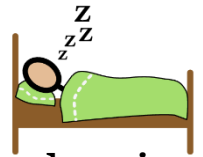
into the jungle. We tied him to a tree. I hugged and pet him for



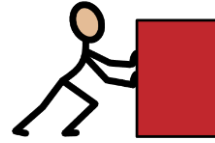
the last time. Then Charity and I left. I tried to hide my sadness



from Charity. He would not understand.



I went back later, and it looked like Khamba was sleeping.



He had not moved since we left. I softly pushed him. He did not



wake up. Finally, Khamba would not suffer anymore. I was sad

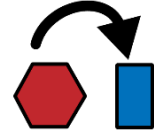


but I did what was right.



There is no food left in Malawi.

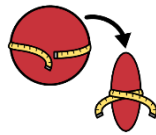
# Chapter Eight Twenty days



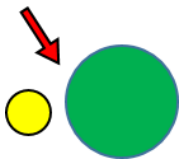
The famine, or having almost no food, was changing the



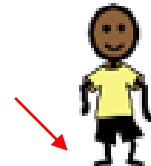
way people looked. Many people, like my dad, who used to be a



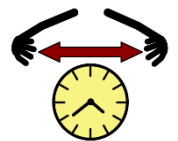
big man, were getting very skinny. The sickest people were



beginning to look fat but that was because they were getting



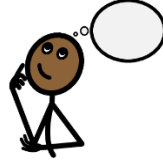
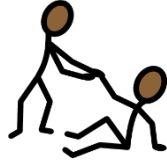
swollen with water. This happened to Geoffrey's legs. He said



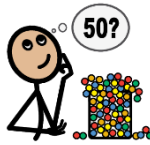
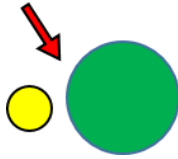
they hurt to stand on! The people who had gone too long



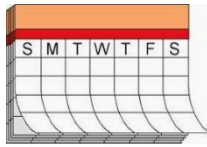
without food were dying.



One thing that helped was thinking about our corn crop.

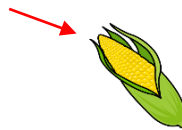


The corn was getting big! I predicted to my father “The corn

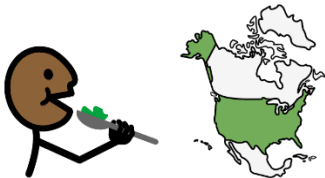


JAN	FEB	MAR
APR	MAY	JUN
JUL	AUG	SEP
OCT	NOV	DEC

will be ready in 20 days.” I was right! At the beginning of March



the first corn was ready. It was yellow and juicy, like the corn



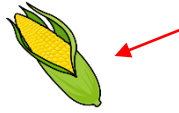
you eat in America.



A lot of people died before the crops were ready to eat.



My family finally got to eat. We put some ears of corn on



the fire until the green peel began to burn. I bit into the first



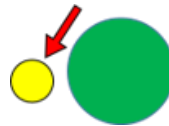
one and felt warm inside. My mother grew some pumpkins and



they were ready too. We had a **feast** of corn and pumpkins. We



were all smiling again. We even invited Geoffrey and his mother



to eat with us. **Slowly** his swollen legs shrunk back to normal.



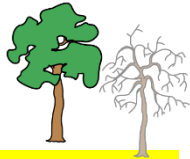
The next morning and each morning after, Geoffrey and I



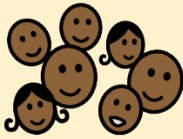
met in the corn fields. We built a fire with used corn cobs. We



cooked some corn and ate breakfast before our work for the



day. “We lived. We **survived.**” Geoffrey said.



A lot of people died before the crops were ready to eat.

# Chapter Nine The Library



Since my family could not afford school for me I tried to



help out on the farm. While we waited for the harvest there was



not much to do. I remembered they built a small library inside



Wimbe Primary. I visited as much as I could and Gilbert came

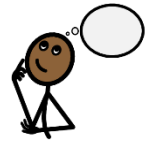
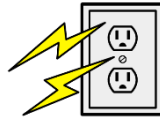
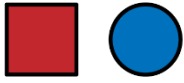


too when he was not at school. While at the library I found the



book Explaining Physics. I read all about magnets and the





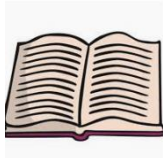
different ways to get and use electricity. It was so interesting. I



always had questions that the adults in my village could not



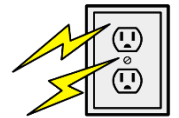
answer.



This book had so many answers to my questions. I even



saw a picture of a waterfall turning a giant wheel. Under it said



that the wheel was capturing the energy and making electricity.



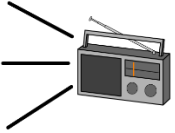
“It is just like the dynamo,” I excitedly told Gilbert. “When the



water makes the wheel turn, the light bulbs light up!” I thought



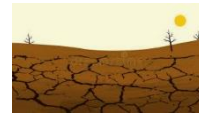
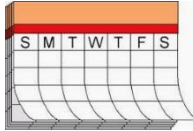
maybe I could make something like that. Then we could listen to



the radio whenever we wanted. My family could have lights in



the house. There was a problem though. The waterfall near my



house only lasted a few weeks before it got too dry.



The library books helped me answer my questions.



I did not take Explaining Physics home with me though. I

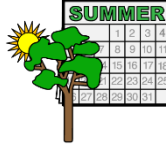


checked out the same textbooks they were using in school. I did

not want to get far behind. I knew one day we would be able to



to afford school again.



When school was out for the summer, Gilbert came to the



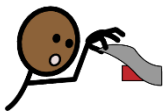
library too. We spent hours and hours there. Many of the books



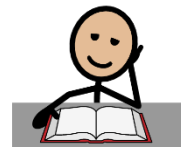
were in **disarray** so the shelves were a mess. It was hard to



always find what we wanted. Sometimes we had to go book by



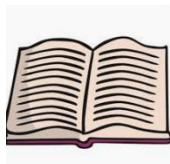
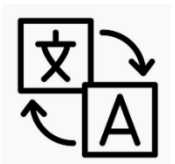
book to find what we wanted.



Many of the science books were in English. I learned



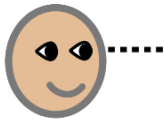
English in school, but my English was not very good. I would



use a translation dictionary and even ask the librarian for help.



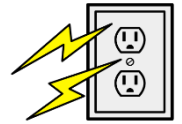
One day she was in a bad mood so I did not want to ask her for



help. As I searched for another dictionary to use I found a book



$1 + 2 = 3$



called Using Energy. This book had a solution to my electricity



problem. On the cover of the book was a picture. "Gilbert, look



at these. They look like the pinwheels we made as boys," I told

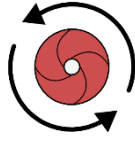
Gilbert.



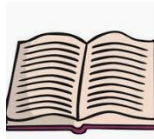
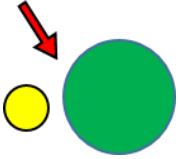
The library books helped me answer my questions.



“I remember,” Gilbert said. “The wind would blow them



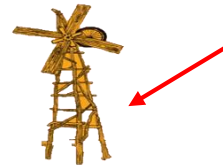
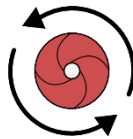
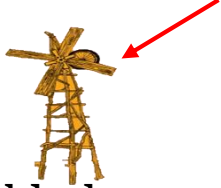
and they would spin.” The pinwheels in the picture were much



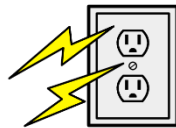
bigger. We quickly opened the book to find out what they were.



We learned that they were windmills. The wind blew. The



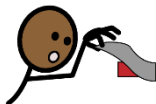
blades on the windmill would spin, and the tower would collect



the energy and make electricity. “This is it! This is how we can



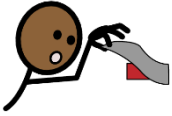
make the dynamo work so we do not have to pedal!” I was so



excited at our discovery.



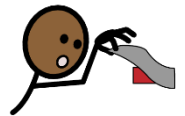
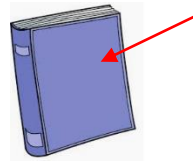
I put the books away and left the library. We went



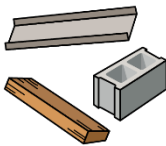
searching for materials, old junk, that we could use to make a



small windmill. Bigger than the toys we played with but a lot



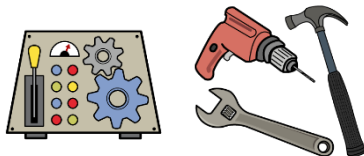
smaller than the windmills on the cover of the book. We found



all of the materials that we needed around the village to build



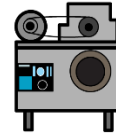
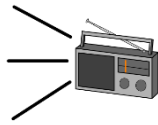
the model windmill. We did not have the tools, like a drill,



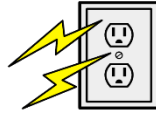
though. We invented tools with what we did have.



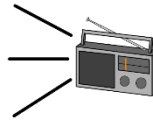
The library books helped me answer my questions.



Geoffrey had a big radio that used a generator, or



machine that turns energy into electricity. Gilbert and I went to



Geoffrey's house to ask to borrow the radio. Geoffrey asked us a



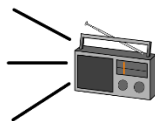
lot of questions. He never visited the library with us, he thought



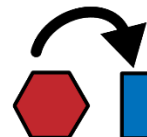
it was a waste of time. When we told him about the windmill he



got excited and wanted to help.



We **took apart** the radio and tried to test our model



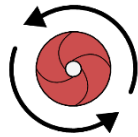
windmill. It did not work. We made a few changes and fixed



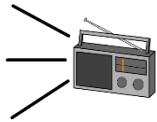
the gears. Then we waited for the wind. In Wimbe, it



did not take long for wind to come. As the wind blew, the



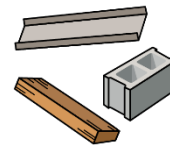
windmill started to spin. As the blades turned faster and faster,



the radio began to play. "It worked! Now we can go for



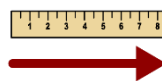
**superpower!**" I yelled with excitement.



That night I made a list of all the materials. I still did



not have money and the giant windmill needed to be at least 20

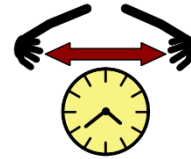


or more feet high. My list was long but there was an old scrap

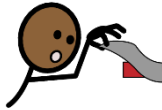
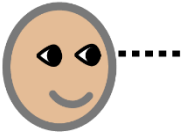




yard next to *Kachokolo*, my old school. I set out over the hills



the next day with an empty bag. I spent a lot of time there

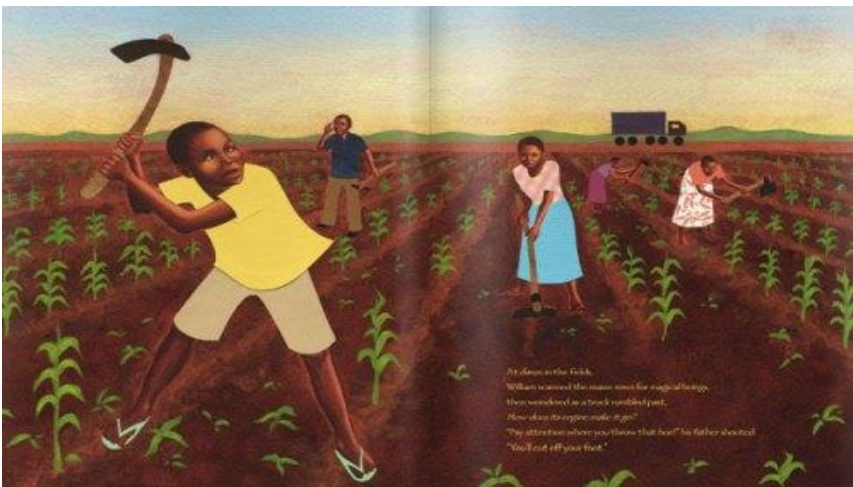


hunting and digging. I found almost everything that I needed.



The library books helped me answer my questions.

# Chapter Ten Harvest Time



My family had a great harvest and I knew I would get to go



back to school when it began again. Just like last year the



principal made an announcement about paying for school. This



JAN	FEB	MAR
APR	MAY	JUN
JUL	AUG	SEP
OCT	NOV	DEC

JAN	FEB	MAR
APR	MAY	JUN
JUL	AUG	SEP
OCT	NOV	DEC

year he told us that we had to pay for last year and this year to



stay. Again my family did not have enough money. I did not

want to give up.



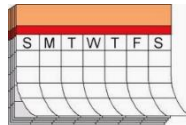
Each day I walked with Gilbert to Kachokolo but hid during



morning assembly. I snuck into the back of the classroom and



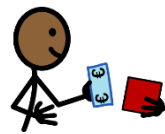
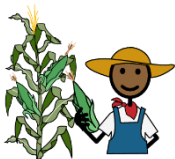
kept my hand down. I did not want to get caught. It was



working. Then after a couple weeks I was caught. My father



came to the school and asked if I could stay. He told them they



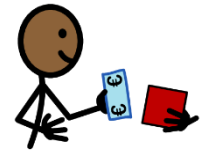
would harvest a crop soon and could pay my school debt.



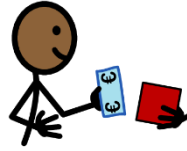
I recycled junk to build my windmill.



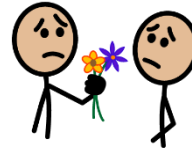
The school agreed and I stayed! Soon it was time to



harvest the tobacco crop. We used the money to pay off many



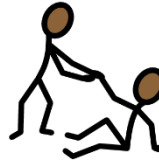
debts my family owed. After we paid I asked my father what



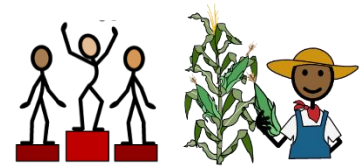
was left for my school. He told me he was sorry but there was



not enough money left to pay. I had to drop out of school again.



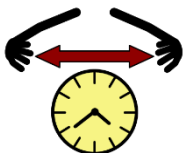
With no school to go to, again I helped my father on the



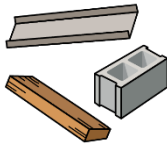
farm. The corn was soon ready too. It was the best harvest we



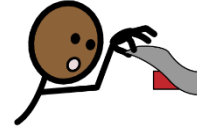
had in many years. After we finished the harvest I had more



time to spend on my windmill. I went back to the scrapyards to



find more material for my windmill. My bedroom was starting



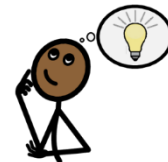
to look like the scrapyard with everything I found.



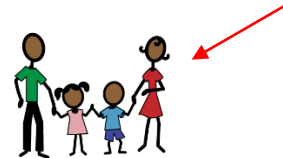
While I looked through the scrapyard the kids from school



could see me. They yelled mean things at me. They called me



crazy. At first I tried to explain my idea, but they did not care.



They even told their parents. One day my mom heard about the



crazy boy in the scrapyard.



I recycled junk to build my windmill.



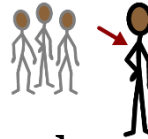
When I came home she was upset. "What is wrong with you?"



she said. "Your friends do not look through the garbage. Look at



your room! It looks like a madman lives here."



My father told her, "Leave the boy alone. Let's see what he



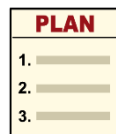
can do. Give him a chance." Later I asked my father for his old



bike. It was rusty and broken. No one was using it. Even



though he helped me when mom was angry, he did not want me



to break his bike. I told him about my plan for the bike and



what I would do. He said “Ok, William, you may use the bike,



but do not break it.”



I recycled junk to build my windmill.



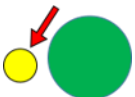
I needed to weld pieces together for my windmill to be



strong. The tools I made could not get hot enough to weld.



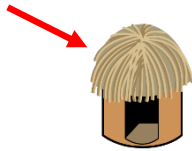
Welding means to melt metal and stick it together like glue. I



found small jobs around the village to make some money. When



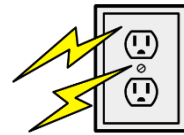
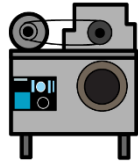
I had made enough money I went to Mister Godstein in the



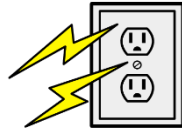
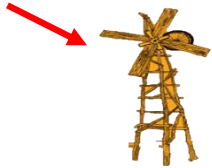
trading center. His shop had a grass roof and inside he had a



welding machine.



I still needed a generator to turn the energy from the



spinning blades into electricity. Bikes all around Malawi had



dynamos. Some did not even have wires that connected to



anything. "If you are not going to use the dynamo, give it to

me," I thought.

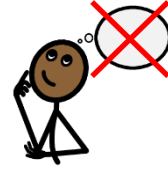


As I walked with Gilbert one day, he asked how my





windmill was going. I told him I still needed a dynamo. “If I just

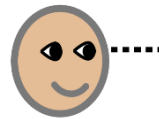


had that I could be finished tomorrow! I do not think it will ever



get finished.” Just then a bike with a dynamo was riding

towards us.



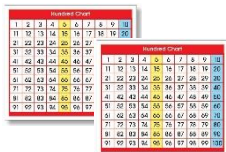
I asked the man if I could look at it. While I looked



at the dynamo, Gilbert asked the man “How much, sir?”



The man said he did not want to sell his dynamo.



“I will give you two hundred kwacha,” Gilbert said.



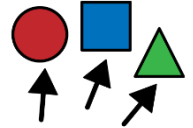
The man changed his mind I had my dynamo.



I recycled junk to build my windmill.



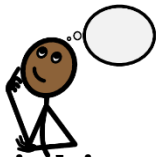
# Chapter Eleven The Windmill Comes to Life



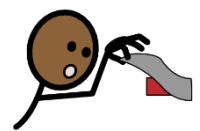
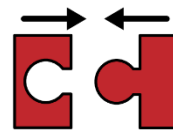
I finally had everything



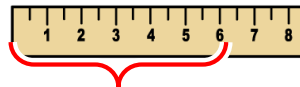
I needed to finish my windmill. It was hard work. I had to do



a lot of thinking and be very creative to get all my junk to fit



together like a puzzle. Once it was all put together I found a



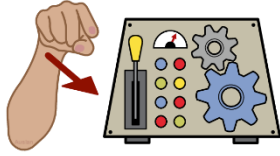
piece of bamboo that was 6 inches wide. I stuck one end way



down in the dirt to make a post that would not fall over. Just



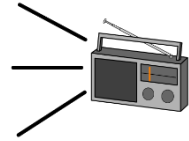
then Geoffrey rode up on his bike.



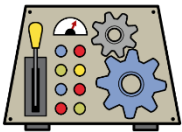
“Is this your project?” he asked. “Yes! It is almost done.



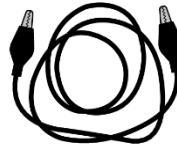
Help me lift it onto the post.” I said to him. We attached my



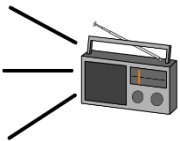
machine to the post. Then I borrowed my father’s radio. If my



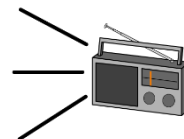
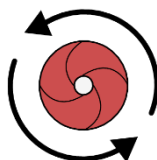
experiment went wrong, I would get in a lot of trouble for



breaking his radio. I stuck the wires from the dynamo into the



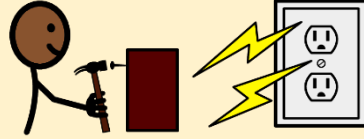
radio and stood back. In Wimbe you did no need to wait long for



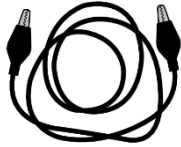
wind. The blades spun faster and faster. The radio started to



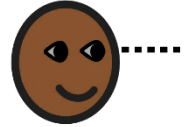
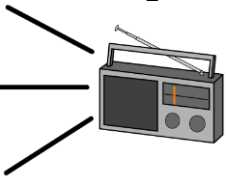
play then smoke came out the top.



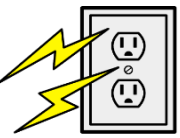
They windmill was ready to make electricity.



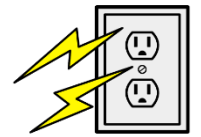
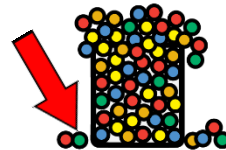
I pulled the wires out. Geoffrey was scared we broke the



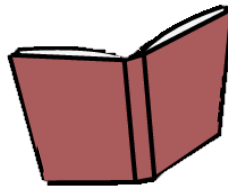
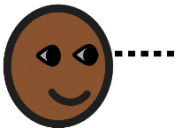
radio. I was excited my windmill worked. "Did you see all that



power!" I yelled. "Did you see that smoke?" Geoffrey asked.

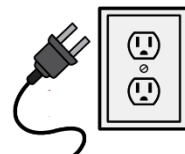
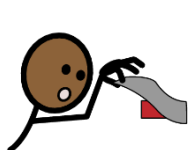


The problem was that my windmill created too much electricity.

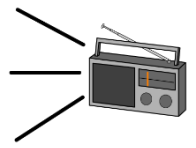
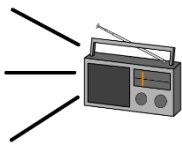


$$1 + 2 = 3$$

I looked in my *Explaining Physics* book to find a solution. We



found one and fixed the windmill. Then we plugged the dynamo

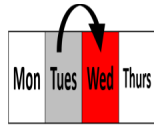


back into the radio. Soon the wind blew again and the radio

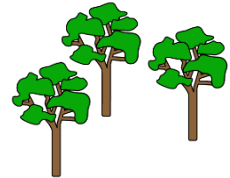


started playing beautiful music. There was no black smoke this

time.



Three days later, Gilbert and Geoffrey came over with their



machetes. We went into the jungle and found three trees we



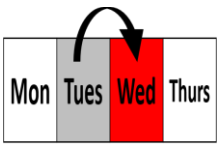
could use to make a tower. We cut them down and dragged



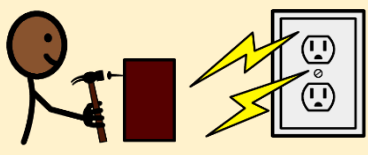
them to my house. We dug holes and put the bottom of the trees



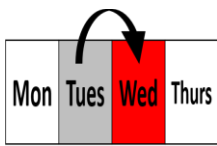
in the hole. When the tower was finished it was late. "Get some



sleep friends, tomorrow we raise the machine,” I told them.



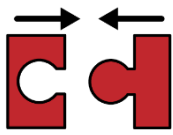
The windmill was ready to make electricity.



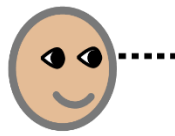
I could barely sleep. The next day I went outside and my



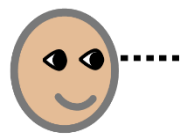
friends were waiting for me. We pulled the windmill to the top.



As we finished attaching the windmill to the tower people from



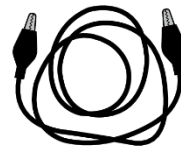
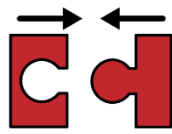
all around town came. They could see the windmill and were



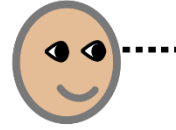
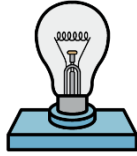
curious about what we were doing. They had all seen me



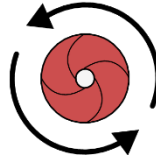
collecting junk or heard about me in the trading center.



I was feeling nervous. We attached the wire from the



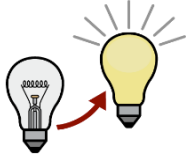
dynamo to a light bulb. Everyone was watching. Then the



wind blew. The windmill started spinning. The crowd was



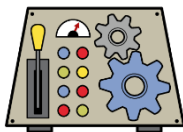
holding their breath. They did not know what would happen.



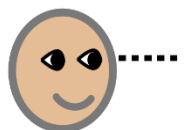
Then the light turned on. Everyone was amazed. Yesterday I



was the crazy boy and today I had made light from the wind.



My project worked. For the next 30 days visitors from

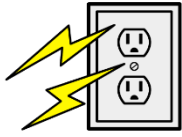


nearby villages heard about my windmill and wanted to see it.

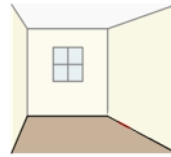




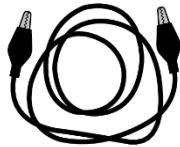
My mother and father were very proud that their son had



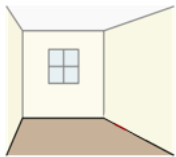
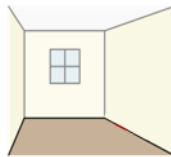
made electricity.



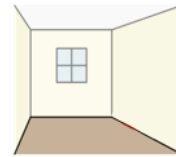
Next I wanted a light in my room. Gilbert, again,



helped me pay for wires that were long enough to go



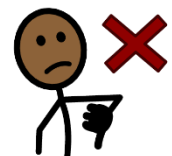
from the tower to my room. I tested out my new bedroom



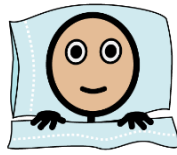
light. The whole family came into my room. "I am so



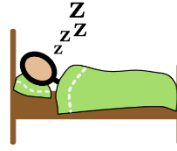
proud of you William," my mother said. "You proved us all



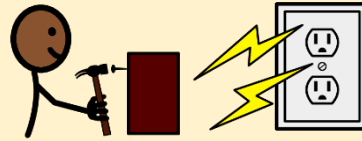
wrong." We all stayed there the rest of the night until



It was bedtime. I stayed up all night reading *Explaining*



*Physics* while the rest of Wimbe was asleep.



Their windmill was ready to make electricity.

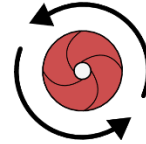
# Chapter Twelve Bigger and Brighter



When the wind does



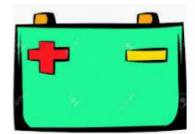
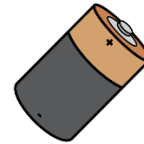
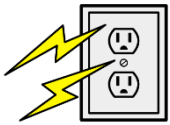
not blow, the windmill



stops spinning and the



light in my room turns off. I wanted to be able to save

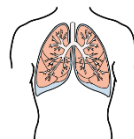


energy for later, but I needed a big battery. A car battery

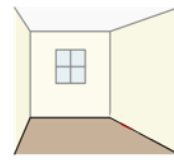
would work but they are very hard to get. Without a



battery my family still had to use kerosene lamps. The



black smoke hurt our lungs and eyes. I really wanted



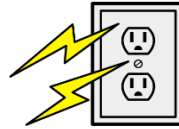
a battery so I could put lights in everyone's room.



Just like in America, people in my village had cell phones. It



was not easy to charge the phones. You could pay businessmen



in the trading center to use their electricity. Sometimes there



were lines of people waiting to charge their phone. One day my



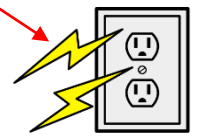
cousin Ruth asked, "William, how come your windmill can not



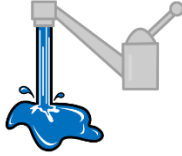
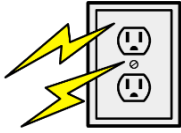
charge my phone?"



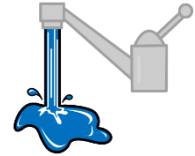
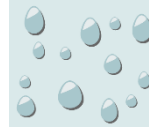
William wanted to make the windmill better.



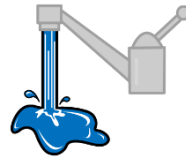
I knew why. The dynamo could not create enough voltage.



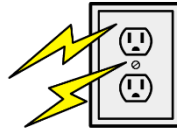
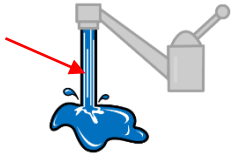
Compare electricity to water coming out of a sink. If the water



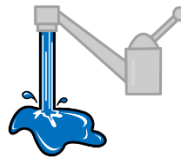
is coming out slowly, everything gets wet, but the water won't



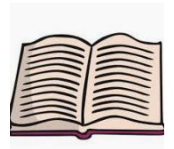
wash anything away. If I turn the water all the way on it comes



out fast. I needed to make the electricity coming out of the



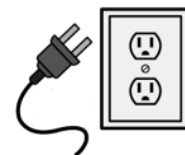
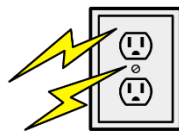
dynamo like a sink that is turned on all the way.



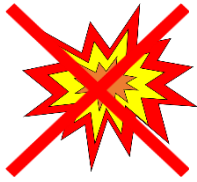
I remembered reading about this in one of my books. I



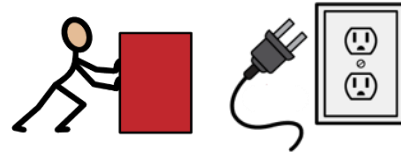
used some scrap metal and wire to create something that would



boost, or increase the electricity. I started to plug the phone in.



“Don’t blow it up,” Ruth sounded nervous. “I know what I am



doing.” I was not telling the truth. I pushed the plug into the



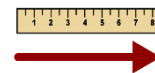
phone. The screen got bright. It worked!



William wanted to make the windmill better.



Soon people in the trading center heard that I could charge



a cell phone. The line outside my house got very long. People



were standing outside holding their cell phones. Some people



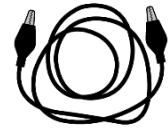
pretended not to believe that it worked. They tried to trick me



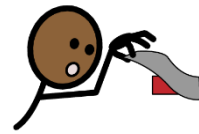
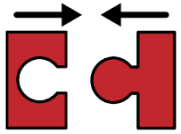
into charging their phone for free. I did not mind. Many of the



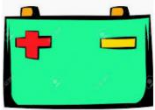
people still believed in the *sing'anga*, or wizards and magic.



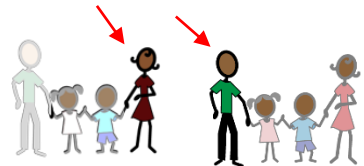
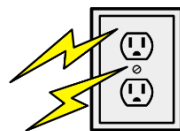
Just like it was Charity who had enough wire to



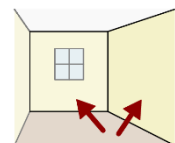
connect my windmill to my house, he also found me a



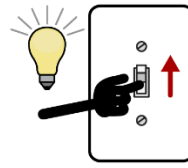
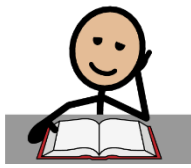
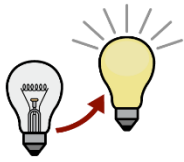
car battery. Since we are cousins, he sold it to me for a fair



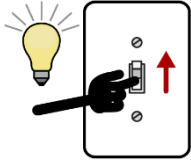
price. I could finally give electricity to my mother, father, and



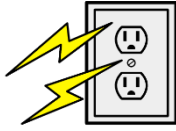
six sisters. At Gilbert's house he could touch the wall and the



room would light up. I learned he had light switches. Now my



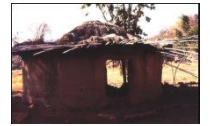
family had light switches too.



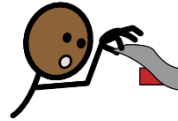
Having electricity was great but it was also dangerous. A



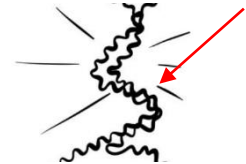
big storm passed over our home while I was away one day.



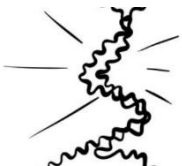
When I got home, I saw that the roof over my bedroom fell or



collapsed. I ran into my room and found that my wires had



disconnected. I was lucky. The wires could have crossed.



Crossed wires could start a fire and burn down my family's

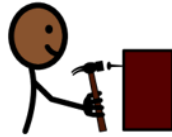




house.



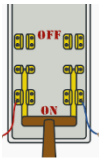
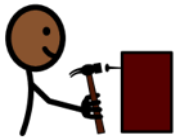
William wanted to make the windmill better.



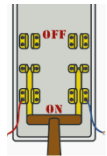
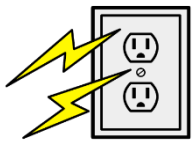
The next day I built something that would save us if a storm



came again. I read my books and again found a solution. I could



create a circuit breaker. That means that if there is too much



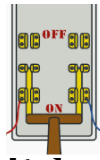
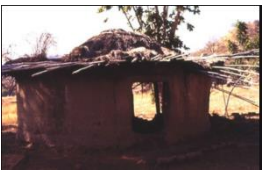
electricity, it will turn off and keep us safe. You have circuit



breakers in your home behind a small grey door. They do the



same thing to keep your home safe. A storm came soon and my



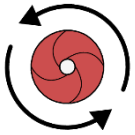
roof collapsed again. My circuit breaker worked, and everyone



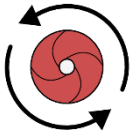
was safe.



There were problems with the windmill too. As the blades



spun around, they pedaled the bike. On the bike was a chain



that went around and around as the wind blew. The chain broke



a lot. Each time I had to climb the tower and fix it. That was a



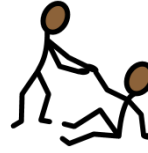
dangerous job. If the windmill blades hit me, I would get cut



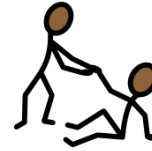
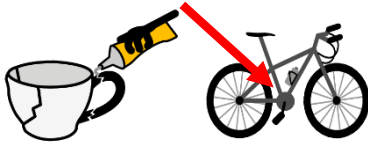
and hurt bad.



William wanted to make the windmill better.



To build my windmill I needed help from my friends



and family. To fix the chain I needed their help again. This time



Geoffrey helped. He found an extra rubber belt at the factory



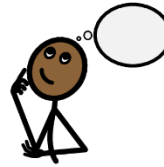
where he worked. The belt worked great. I did not have to climb



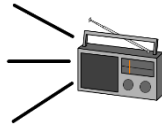
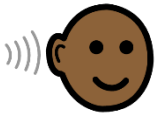
the tower as much anymore.

# Chapter Thirteen

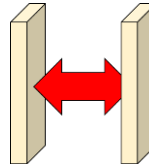
## The Restless Inventor



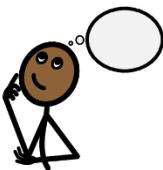
Time passed and I could not stop thinking about school. I



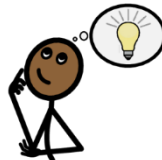
tried to listen to the radio to distract myself. That did not work.



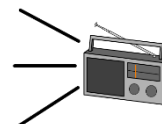
They played ads for school in between songs. I did not want



people to think I was lazy. I went back to the library and tried



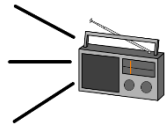
to come up with a new idea for an invention.



I had the idea to create a radio station. Radios use



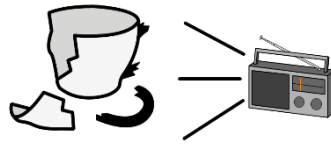
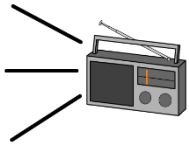
antennas that are high up to catch the radio signal. The signal



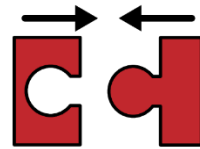
plays through the radio as sound. The windmill was already



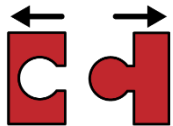
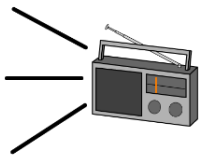
very tall like a radio antenna. Geoffrey and I experimented with



two radios. We also found a broken radio and made a



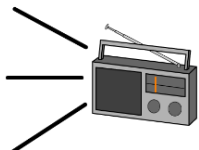
microphone. When the microphone was attached to one radio,



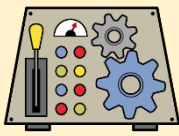
we turned the radios to the same station and moved them apart.



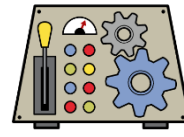
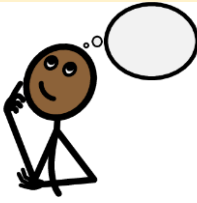
I spoke into the microphone. "William, I can hear you through



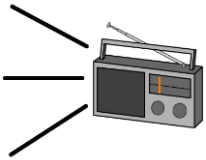
the other radio!" Geoffrey said.



Some inventions do not work but William never gave up.



I kept thinking and creating new projects. The windmill



and radio were my best ones. Most of the others did not work so



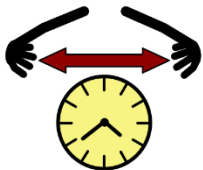
well. I tried to make a water pump for my family. Without a



pump, my mother had to walk to a well. There she had to pull a



long rope with a bucket out of the well. It was hard work and



took two hours each day. My water pump failed. I could not help



my mom.



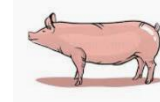
Another experiment that failed was my biogas. I thought I



could make a gas that could burn and help my mother cook. I



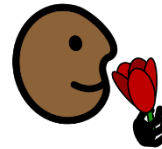
read about it in my books from the library. Biogas was made



from fertilizer. Fertilizer was made from animal waste, or poop.



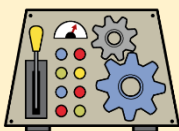
I found some goat waste and tried to boil it. I have never seen



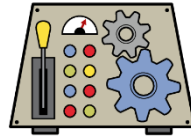
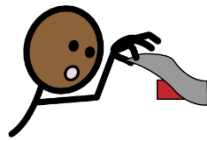
my mother so mad when she smelled her kitchen. I



did not try biogas again.



Some inventions do not work but William never gave up.



While I was trying to find another project that would work,



another famine came to Malawi. The crops died again. The



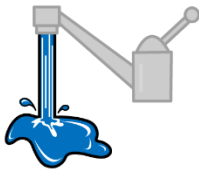
people of Wimbe were hungry and scared. I believe in science,



but many people still believed in magic. Science was hard to



learn. One day when rain clouds looked like they were going to



finally give us water, they blew away before any rain fell. My

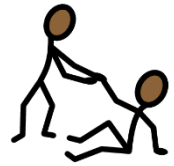


neighbors blamed my windmill. They thought it made evil magic



that blew away the clouds.

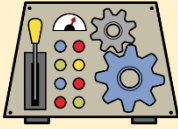




This year the government had kept extra corn. They helped the



people and no one starved.

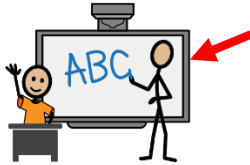


Some inventions do not work but William never gave up.

# Chapter Fourteen

## Part 1

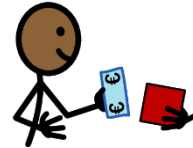
### Wimbe Discovers William Kamkwamba



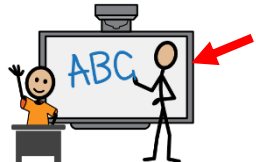
A teacher from my



old primary school, Wimbe Primary, asked me to start a science



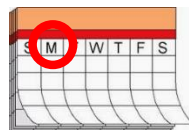
club. My family still did not have money to pay for me to go to



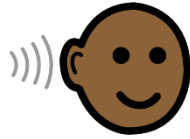
my school, so I agreed. “The kids look up to you,” the teacher



told me. I was excited to teach younger kids science!



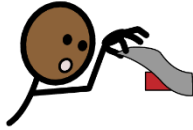
The science club met on Mondays. I made them a small



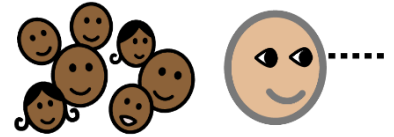
windmill so they could listen to music and news. They also



charged their parents cell phones. I taught them how I made it



from things I found, everyday items. "So many things around



you are reusable," I told them. "Where other people see



garbage, I see opportunity." Some experiments we did were



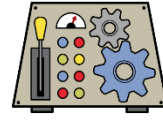
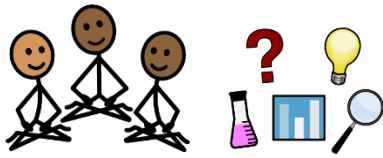
making an ink pen using charcoal and making a play telephone



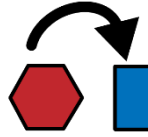
using cups and string.



All of Wimbe is beginning to learn about the windmill.



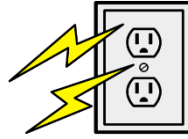
I told the kids in science club, “If we can all invent something to



make our lives better, we can change Malawi.” Some kids were



so excited about science. They even went home and made their

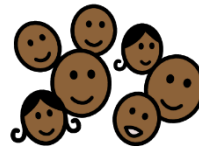


own windmills. My dream of electricity in every home in

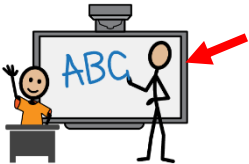


Malawi did not seem crazy anymore.

JAN	FEB	MAR
APR	MAY	JUN
JUL	AUG	SEP
OCT	NOV	DEC



In November 2006, important people who taught people to



be teachers visited my village. They saw my windmill on Wimbe



Primary. Soon a man named Dr. Hartford Mchazime, or Dr. M,



drove 5 hours to see my small windmill. He was amazed. When



he spoke to me, I had never heard my language or English sound

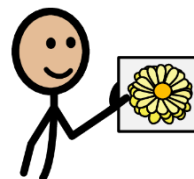


so beautiful. "Tell me everything about your windmill," he said

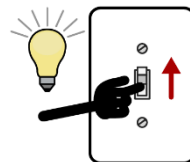
to me.



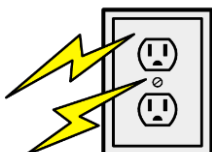
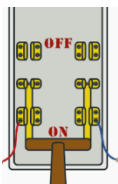
All of Wimbe is beginning to learn about the windmill.



I told him the whole story, just like I told you. I showed

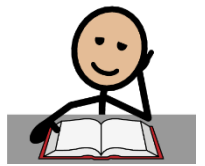


him around my house. He saw my hand made light switches and

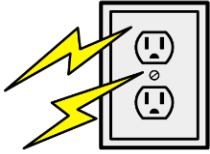


circuit breaker to keep the electricity from starting a fire. "You

JAN	FEB	MAR
APR	MAY	JUN
JUL	AUG	SEP
OCT	NOV	DEC



only went to one year of secondary school? How did you learn



so much about electricity?” he asked me.



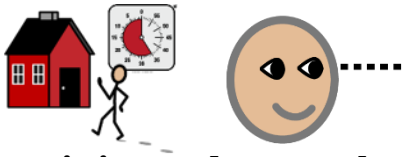
I told him how I went to the library. I told him how I used a



dictionary to read the English words. He told my parents,



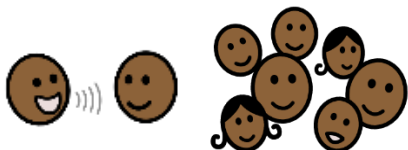
“William has done something amazing. Many more people will



want to visit and see what he has done. You should be very



proud of your son.” He went back to his office 5 hours away. He



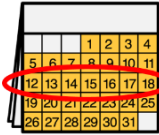
told the people he worked with about William’s windmill. “That



is amazing!” they all said. “More people need to hear his



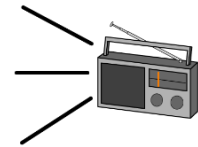
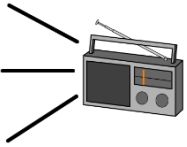
story.”



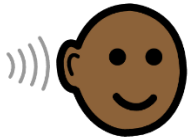
The next week Dr. M visited again. This time Everson



Maseya came with him. Everson was a reporter who worked for



the radio station. I knew his voice. I heard it on the radio when



I listened with my friends. I was amazed that he wanted to



interview me, William Kamkwamba! He asked me, “In the



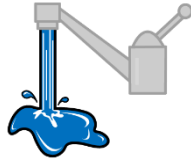
future, what do you want to do with this?”



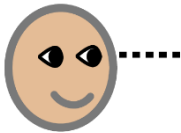
All of Wimbe is beginning to learn about the windmill.



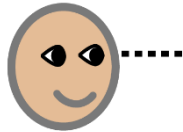
“I want to reach every home and village in Malawi so



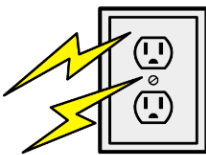
people can have lights and water.” I told him. More reporters



came to see what I had made. They brought cameras and



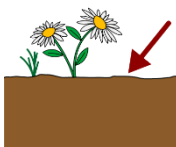
tape recorders. They asked a lot of questions and wanted to see



how I made electricity give light to my home. One reporter



climbed the windmill and took a lot of pictures. He yelled down

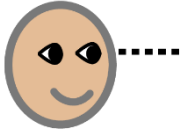


to us on the ground, “This boy is a genius!”

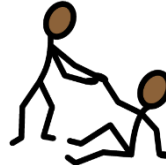




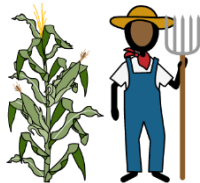
Dr. M said, "I brought you all here because I want the world



to see what this boy has done. Too many kids in Malawi do not



get to go to school. I want the world to help." Dr. M liked me.



His father was a poor farmer just like my father. Dr. M knew



how hard it was for the people of my village. Dr. M knew how



important school and learning is for everyone.



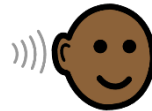
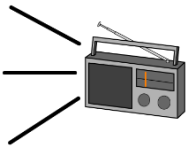
All of Wimbe is beginning to learn about the windmill.

# Chapter Fourteen Part 2

## The World Discovers Wimbe



The next day my interview with Everson Maseya came on



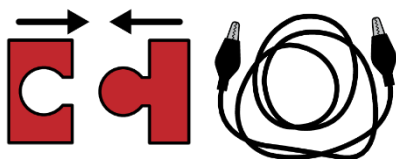
the radio. My family all sat down together and listened. When



they heard my voice, they all began to cheer. The next week,



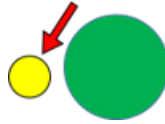
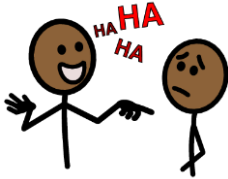
another reporter's story was in the newspaper. There was even



a picture of me connecting wires together. I was very proud of



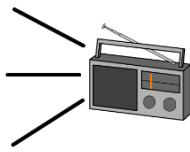
the news story about me. I had a big smile on my face.



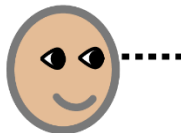
I used to be bullied for being small and bad at sports. Now



people in my village said, "We are so proud of you. You spoke



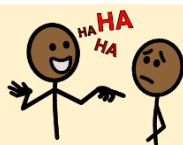
very well on the radio!" Now even more people visited my



village and my house to see the windmill with their own eyes. I



was finally accepted by my family and neighbors.



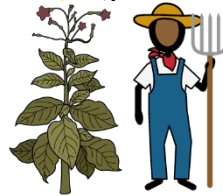
I used to be bullied but now people are proud of me.



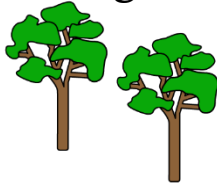
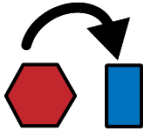
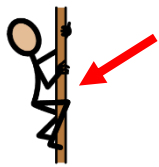
Now that newspapers had articles about me and my



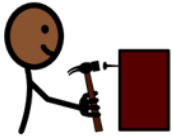
windmill, more people helped me. They would give me items to



make the windmill stronger. A tobacco farmer gave me strong



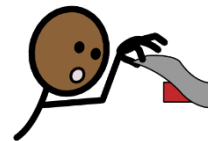
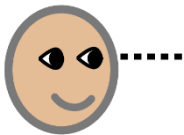
poles to replace the trees Geoffrey, Gilbert, and I used when we



first built the windmill.



A famous Nigerian author and blogger also heard my story.



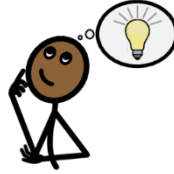
He looked for me for three weeks until he found Dr. M.. He



wanted me to apply to come to TED. TED is a meeting that



happens every year. Scientists, inventors, and people who make



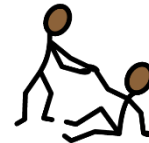
things better all meet. They share ideas of how to make the



world better.



JAN	FEB	MAR
APR	MAY	JUN
JUL	AUG	SEP
OCT	NOV	DEC



Dr. M. visited again in December 2006 and helped me with



my application. Only a week later he called me. He told me that



**TED**



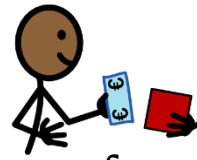
TED picked me to come to the 2007 TED meeting! “You will be



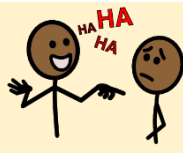
honored with other scientists and inventors,” he told me.



“People from all over the world will be there.” I was so excited



but did not know how my family could pay for me to go.



I used to be bullied but now people are proud of me.



Dr. M told me I would be flying on a plane and staying in a



hotel. I had never even seen a plane or hotel up close. Then he



told me I was to go back to school. I was so excited! I was to go



to a school an hour from my house. It was called a boarding



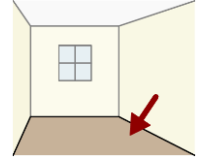
school. That meant I lived in a dorm. A dorm is like an



apartment building. It had many bedrooms but no kitchens.



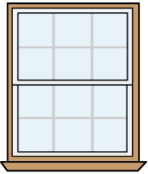
The school was much better than Wimbe Primary or



Kachokolo Secondary. The roof did not leak, and the floor were



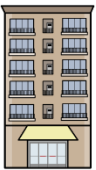
smooth concrete, not dirt like at home. My new school had real



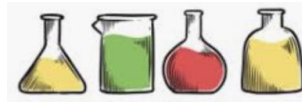
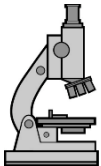
windows that let in sun and kept the wind, cold, and sound



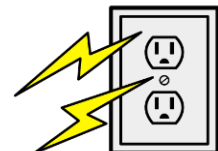
outside. I had a real desk and at night I could read because the



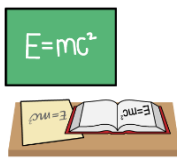
dorms had real lights. Science class was in a science lab with



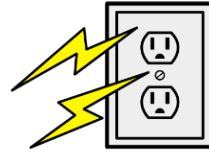
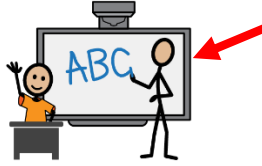
real microscopes and chemicals.



In my first science class we learned about electricity.



I knew most of the information already from reading *Explaining*



*Physics*. Hearing a teacher explain electricity felt like I was



learning it for the first time. This school was nice, but it was



still old, and many things did not work anymore. We still had to



use our imagination because we did not have all of the tools we



needed to do experiments.



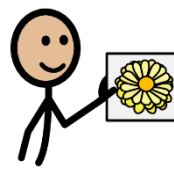
JAN	FEB	MAR
APR	MAY	JUN
JUL	AUG	SEP
OCT	NOV	DEC

I had not been in school for 5 years when I started. I was a

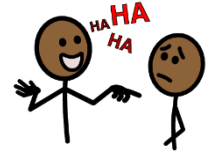


lot older than the other students at my new school. They made





fun of me and called me “old man.” I showed them the



newspaper articles about my windmill. They did not make fun



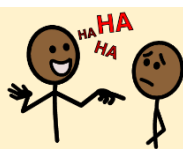
of me anymore after that. Sometimes I would miss my home.



When I felt this way, I would hide in the library and study my



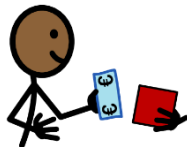
geography, social studies, science, and math.



I used to be bullied but now people are proud of me.



Soon it was time to go to the TED meeting. Dr. M and the



people at his work bought me a new white shirt and new pants.

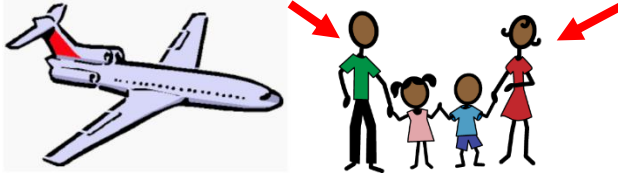


They were the nicest clothes I had ever owned. I visited home

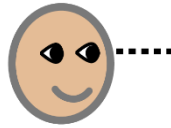
**TED**



before I left for TED. I packed all the things I needed. "Our son



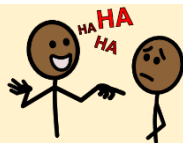
is traveling by airplane," my parents said to each other with



excitement. "We will be watching for you when you fly over

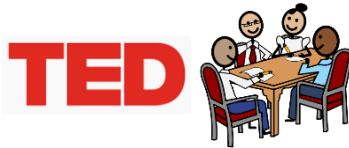


Wimbe!"



I used to be bullied but now people are proud of me.

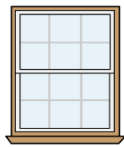
# Chapter Fifteen Meeting Ted and Tom



The TED meeting was in Tanzania, another country in



Africa. I rode on a bus from the airport to the TED meeting. I



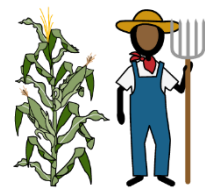
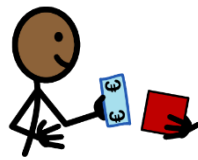
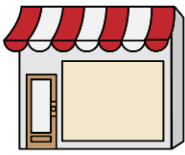
looked out the window and saw that Tanzania was similar to



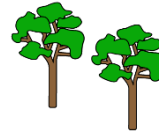
Malawi. Many people rode bikes to travel. Women held baskets



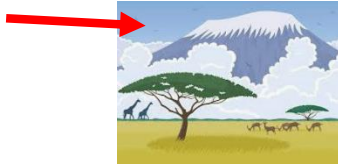
of vegetables on their heads to take to market. Kids at the



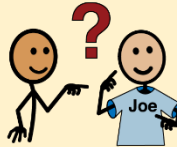
market were hawking, or selling, things too. Farmers were in



their fields. Malawi did not have many trees, but Tanzania did. I



could also see Mt. Kilimanjaro, the highest mountain in Africa.



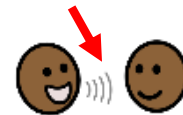
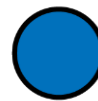
William got to meet other great scientists and inventors.



The bus took me to a hotel. In the lobby were many white



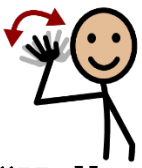
people and African people. The white people spoke English



and the African people had different accents or sounded



different than me. Soon a man walked up to me and said,



# TED

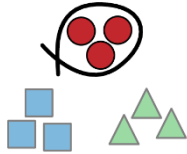
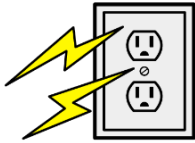
“Hello, welcome to TED. My name is Tom. Who are you?”



When I told him I was William Kamkwamba from Malawi he

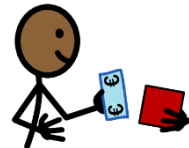
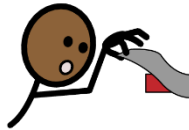


became excited. He knew who I was. He knew I built a windmill



to create electricity. We talked for a while. Tom helped organize

# TED



TED and had even helped find money to pay for my airplane



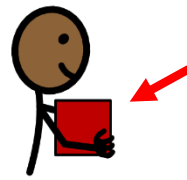
flight and hotel. He asked me, “Do you want to tell your story



on stage?”



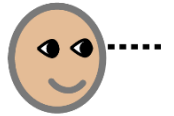
William got to meet other great scientists and inventors.



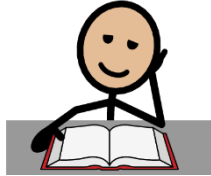
I said yes and handed him a cube Dr. M had given me. The



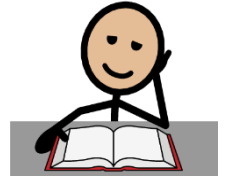
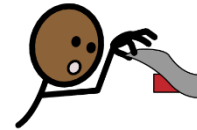
cube was a flash drive and had pictures of my windmill to show



the scientists and inventors. At TED was the first time I saw an

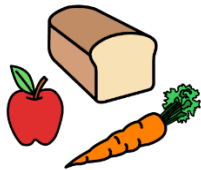


iPod. The first time I learned about the internet. It was the first

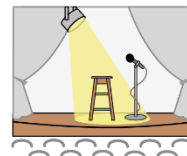


time I saw Google. I was amazed that I could find and learn

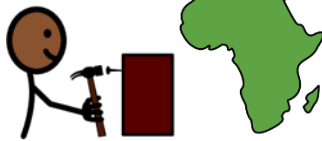
anything!



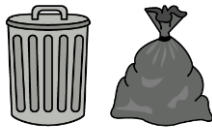
The hotel and food were amazing. They were not as



amazing as the other Africans who went on stage. So many



people like me wanted to make Africa a better place. One person



said, "Where the world sees trash, Africa recycles. Where the



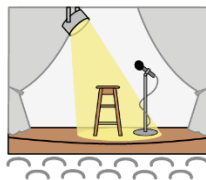
world sees junk, Africa sees rebirth." It felt like he was talking



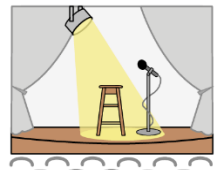
to me. I had to use old parts and recycled junk to make my



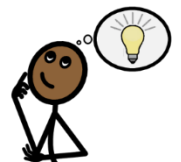
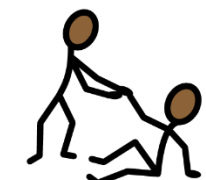
windmill.



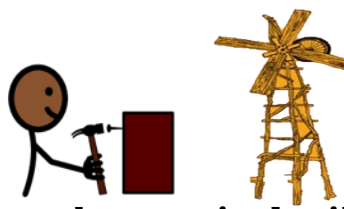
When it was my turn to go on stage, my heart started to beat



fast. I was nervous. Tom told me it would be okay. On stage he



helped me by asking me questions. He asked me what idea I had



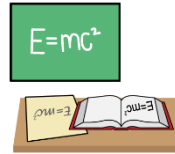
5 years ago. I said, "I want to make a windmill." My English



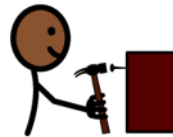
was getting better but was not perfect. Then he asked how I



learned to make a windmill with no help from school. I told the



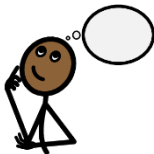
crowd, "I went to library, I get information about windmill," I



was still nervous. "And I try, and I made it."



William got to meet other great scientists and inventors.

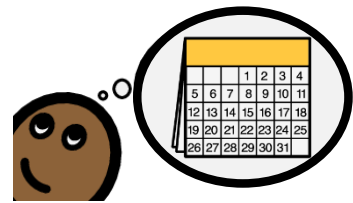
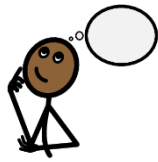


I thought they were going to laugh at my bad English, but



they didn't. Everyone in the crowd began to clap. I felt like a





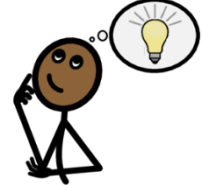
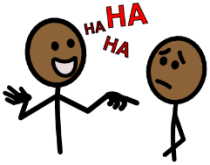
celebrity. I thought about everything I had experienced over the



last 6 years. My village almost starved with no food. I dropped



out of school with no money. Khamba did starve and die. I was



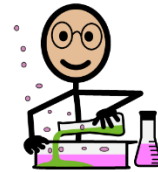
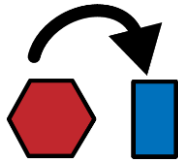
teased by so many other kids and adults for my silly ideas. The

**TED**

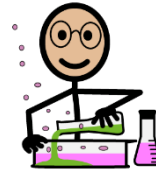


people at TED made me feel so happy.

**TED**



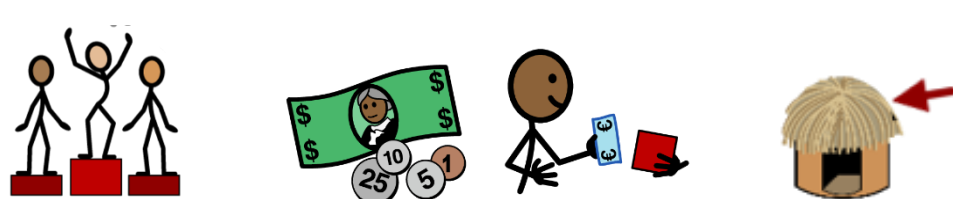
After TED my life changed. I met other scientists and



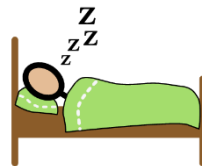
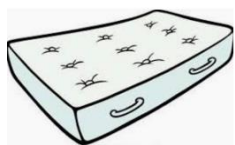
inventors. They showed me their cool experiments and tools.



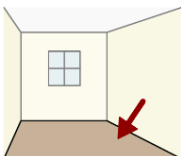
Workers visited my village to help make the windmill even



better. I had money to buy a better roof for my family. I bought



mattresses for my sisters, so they did not have to sleep on the



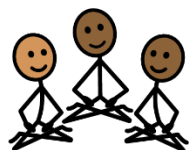
floor.



Chief Wimbe passed away and Gilbert had to drop out of



school too. I paid for Gilbert, Geoffrey, my sisters, and other



kids to go back to school. I was finally able to build the



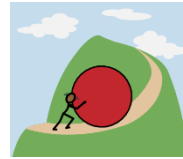
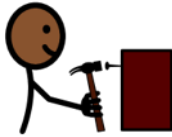
water pump to help my mother and other people in the village. I



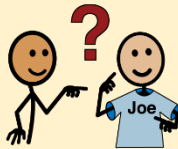
even went to college in America.



Whatever I decide to do, I always remembered one lesson.



If you want to make it, all you have to do is try.



William got to meet other great scientists and inventors.