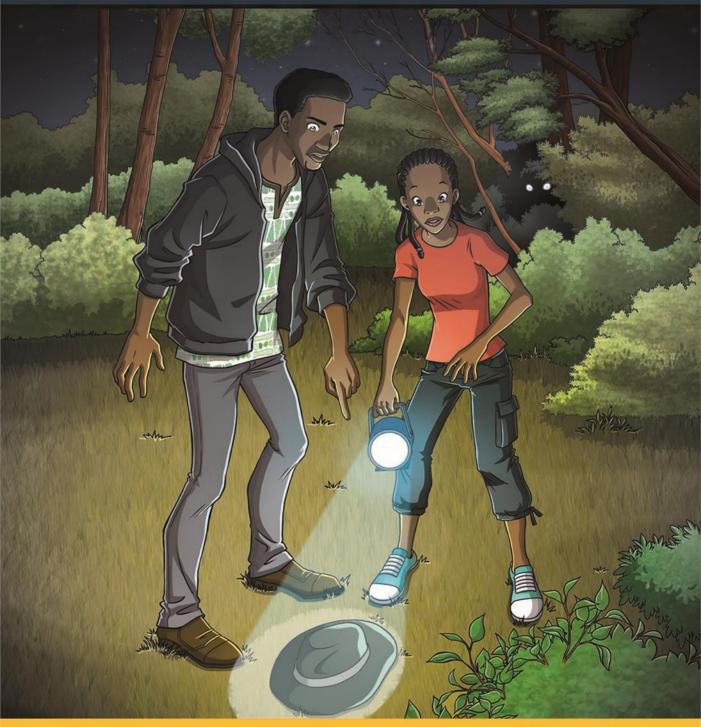
# SPOTLIGHT

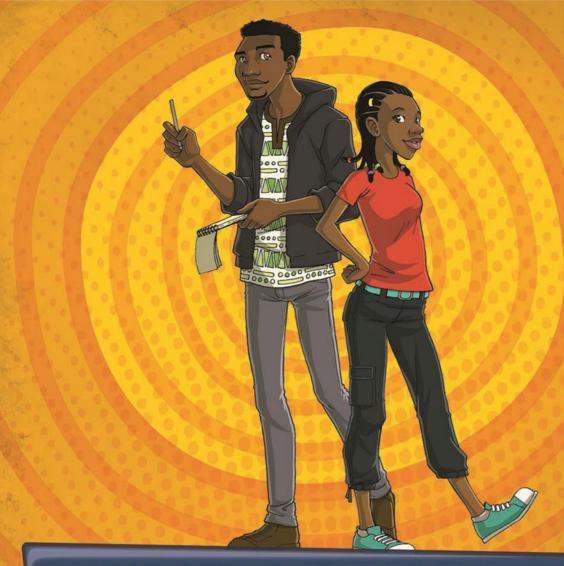
ISSUE #2

THE MYSTERY OF THE MISSING SUIT









## MEET THE TEAM

Ace is a reporter with a strong sense of duty and integrity who likes to delve deeply into all sorts of stories, occasionally the kind that people try to keep hidden. His methods are quite old-school, which means he's sometimes left in the dark when it comes to technology that could help him. Luckily, Malaika is always there to help him shine a light on the truth.

#### MALAIKA

This clued up young woman is Ace's young cousin. She stays with him during the week, while her mother works in the city. She uses portable solar power to charge her cell phone, which she uses to snap pictures, record conversations and quickly type up notes on the go. She always gets the evidence Ace needs.

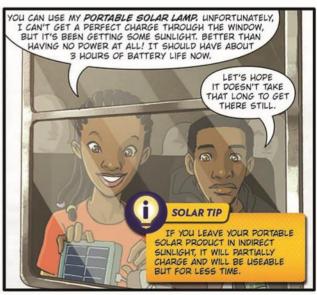
Together they uncover intriguing stories and solve many mysteries from superstitious curses to local theft syndicates. All the while they spread the knowledge and joy that comes with the ease of using solar power when you're off the grid.













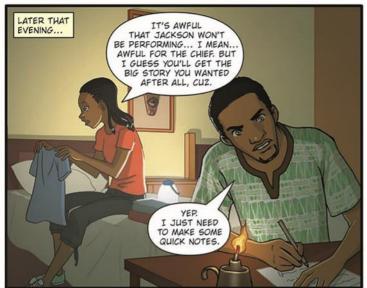
































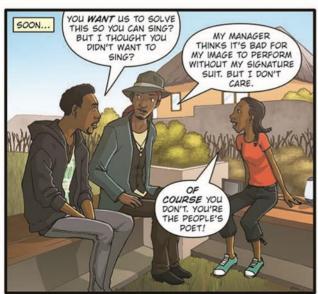






















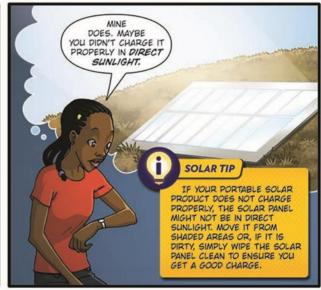






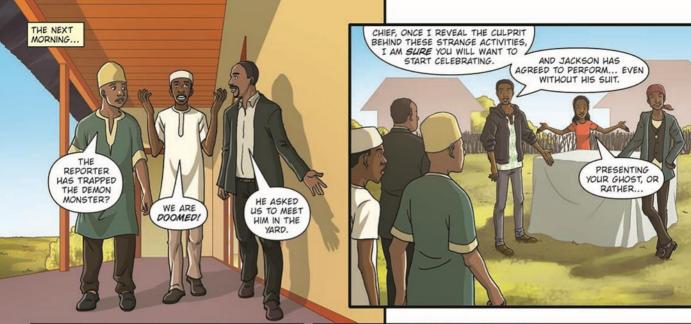




















## DID YOU KNOW?

How can solar powered products provide electricity at night, when there isn't any sunshine? The secret is the batteries. Batteries can store the electricity made during the day so you can use it whenever you want. Here are some other solar facts that are interesting to know:

It takes less than 9 minutes for sunlight to travel the
150 million kilometres between the sun and the earth.

In one hour, the sun provides Earth with more energy than the entire world uses in a year. In 20 days the sun could provide as much power as all of the world's fossil fuels combined.

Food can be cooked or dried and water can be disinfected using solar energy. In fact, when you hang your washing in the sun, you are using solar energy to dry your clothes.

Using solar powered products causes no pollution or harmful environmental effects.

Solar electricity is used all around the world in many different ways. There are small cells that charge things like phones and lights, and big solar power stations connected to the electric grid – the biggest one in California supplies 160,000 homes with electricity!

Plants are the oldest solar energy users in the world. They turn sunlight into chemical energy, which they use to grow. HERE'S ANOTHER

AMAZING FACT: REMOVING

SALT FROM SEA WATER IS ONE

OF THE OLDEST COMMERCIAL

USES OF SOLAR ENERGY.

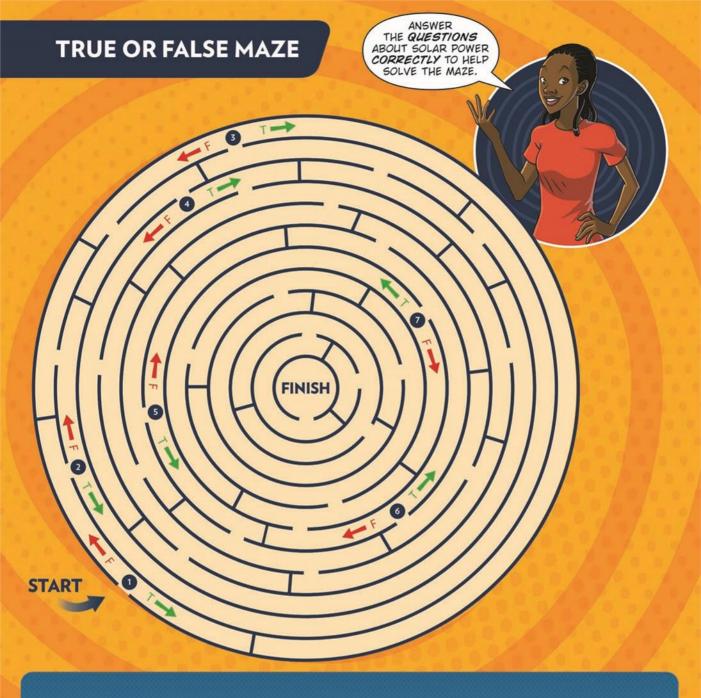


Source:http://www.conserve-energy-future.com/various-solar-energy-facts.php









#### TRUE OR FALSE

- 1. You cannot use any portable solar products to charge cellphones.
- 2. Portable solar products need to be left in sunlight to charge properly.
- 3. You can use candle light to charge a portable solar product.
- 4. If you charge your portable solar product in direct sunlight for a whole day it will only give you 5 minutes of light.
- 5. Portable solar lighting provides brighter light than kerosene lamps.
- 6. Kerosene fumes can hurt your eyes.
- 7. Some portable solar lights have brightness settings.

#### **BEND LIGHT TO LIGHT UP A ROOM**

HERE'S
HOW YOU CAN USE
REFRACTION THROUGH
A WATER BOTTLE TO
LIGHT UP A WHOLE
ROOM.



#### YOU WILL NEED:







CLEAR TAPE



2 LITRE CLEAR BOTTLE FILLED WITH WATER



DARK ROOM



#### INSTRUCTIONS

- Make sure the solar torch is fully charged.
- Tape the solar torch to the side of the 2 litre plastic bottle, ensuring the light faces inward. The torch should be about halfway down the side of the bottle.
- Place the bottle in a dark room, switch on the torch, and light up your life.

#### WHAT HAPPENS?

Because the water is more dense than air it causes the light to slow down when it passes through the water. When this happens, the light bends and is spread out in different directions. The process where the path of light changes when passing through a different medium is called refraction.

### BUILD A WATER PURIFIER USING SOLAR ENERGY

WATER
CAN BE DISINFECTED
AND MADE DRINKABLE
USING THE RAYS OF
THE SUN.

ALL IT
REQUIRES IS A SUNNY
DAY AND CLEAR PLASTIC
BOTTLES.

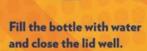
BY DISINFECTING
THE WATER ONE CAN PREVENT
THINGS LIKE DIARRHOEA WHICH IS
ONE OF THE MOST COMMON CAUSES
OF DEATH AMONG PEOPLE LIVING
IN DEVELOPING COUNTRIES.

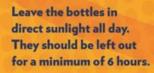


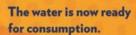


Wash the bottle well the

first time you use it.







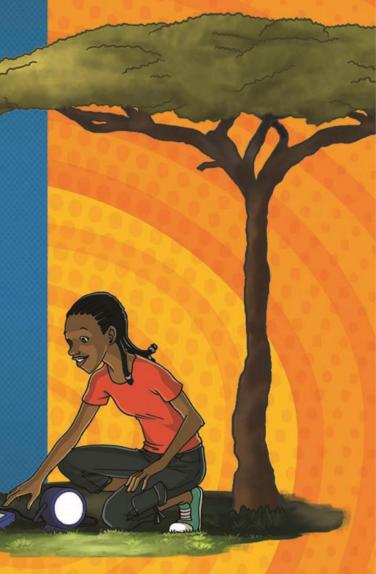


#### IMPORTANT POINTS TO CONSIDER

- The plastic bottles must be transparent and colourless. Heavily scratched bottles must be replaced.
- The bottles must not hold more than 3 litres.
- If the water is very murky, the effectiveness of the method is reduced. To test the water, the filled bottle can be placed on top of a newspaper headline. If the letters of the headline are readable when looking through the water, then the water can be used.
   If the letters are not readable, the water must be filtered.
- If less than half of the sky is clouded over, 6 hours will be enough to completely disinfect
  the water.
- If more than half of the sky is covered with clouds, the bottle must be placed in the sun for 2 consecutive days.
- The method does not work satisfactorily during lengthy periods of rain. On these days, collecting rainwater is a good alternative.

# MORE REASONS WHY YOU SHOULD CHOOSE PORTABLE SOLAR POWER

- Portable solar products let you study later at night for an improved education.
- It also gives you the power to choose your own working hours, for a thriving business.
- Many can even charge cell phones so you can stay in touch with loved ones.
- There's no need to buy fuel or batteries as the battery charges off the sun, which is free, saving you time and money.
- Portable solar products are safer than other lighting solutions because they do not negatively affect your health (like kerosene) and they won't cause fires (like candles).
- Portable solar products are good for your community as they help to reduce pollution (you don't have to throw out old batteries anymore).



### TIPS FOR USING YOUR PORTABLE SOLAR PRODUCT

- To make the most out of your portable solar product, you need to leave the solar panel in direct sunlight, storing the battery and light safely.
- Move your solar panel out of shady areas to ensure it gets the maximum charge.
- If the solar panel is dirty, wipe it clean with a soft cloth, to ensure it absorbs more energy.

Portable solar products should be reliable, affordable, and warranted. For a list of quality-verified solar products visit the Lighting Africa website: <a href="www.lightingafrica.org/products">www.lightingafrica.org/products</a>

## FIND OUT MORE!







