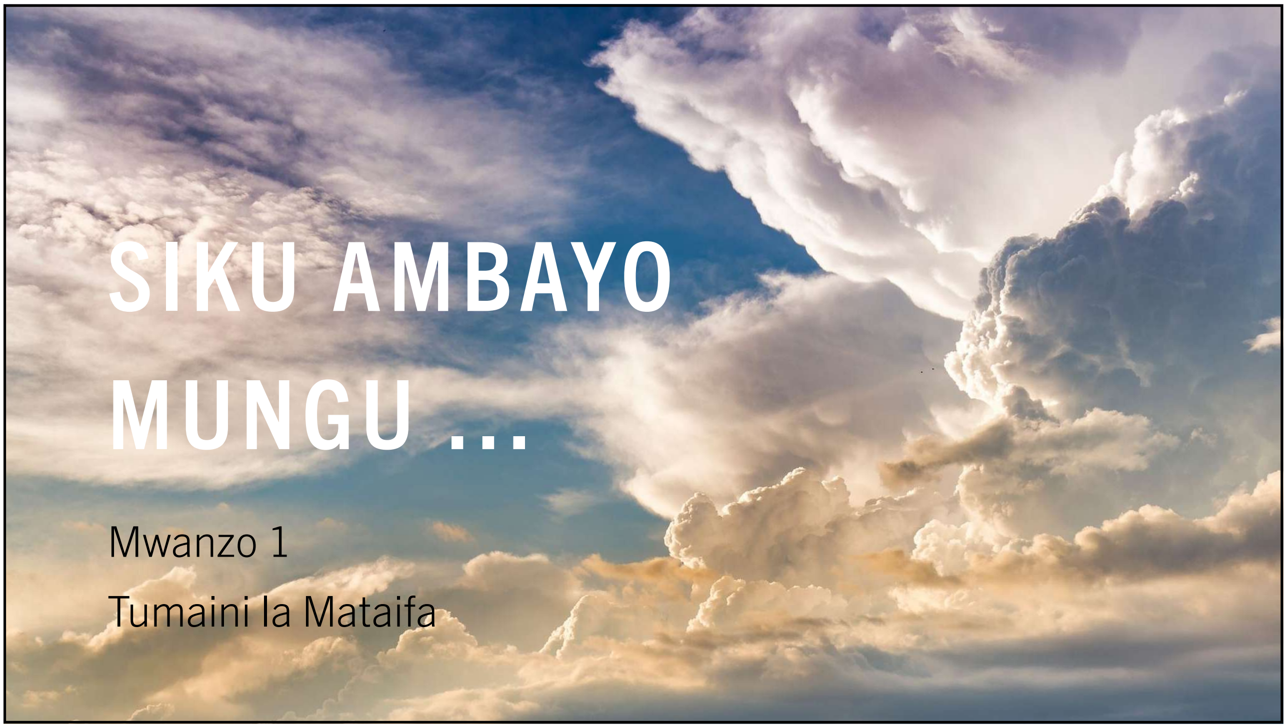
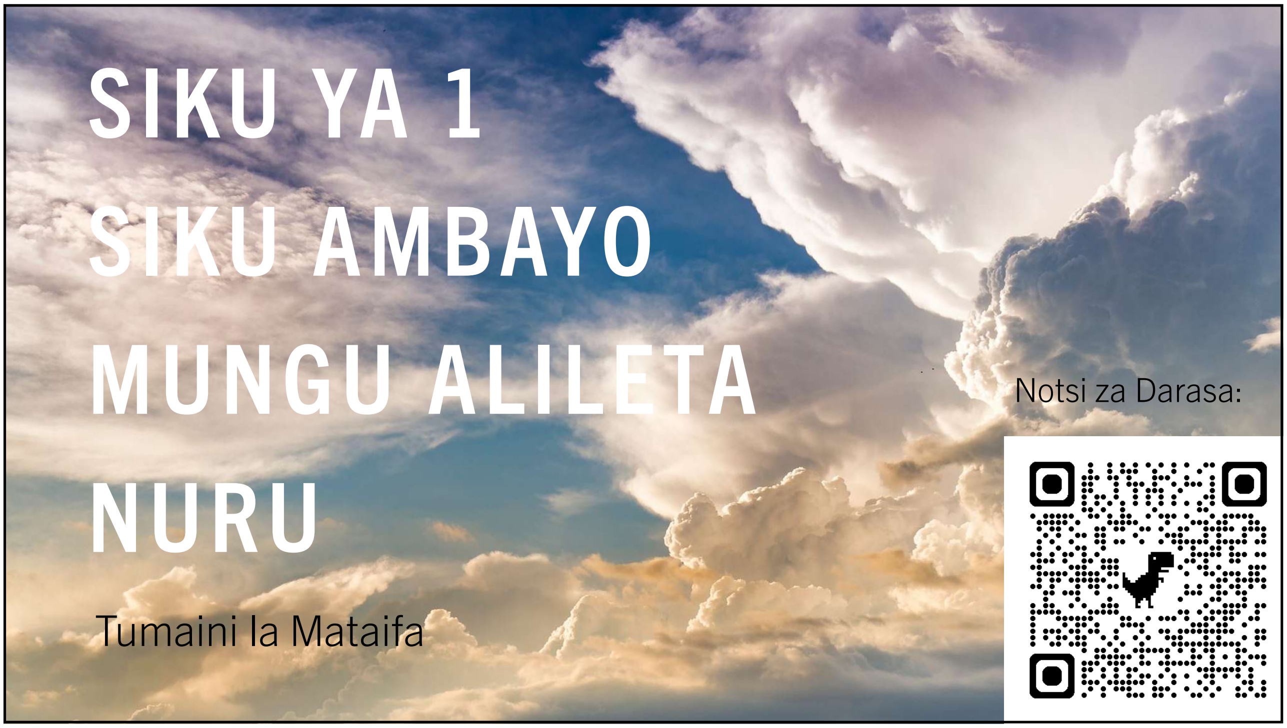

SIKU AMBAYO
MUNGU …
Mwanzo 1
Tumaini la Mataifa

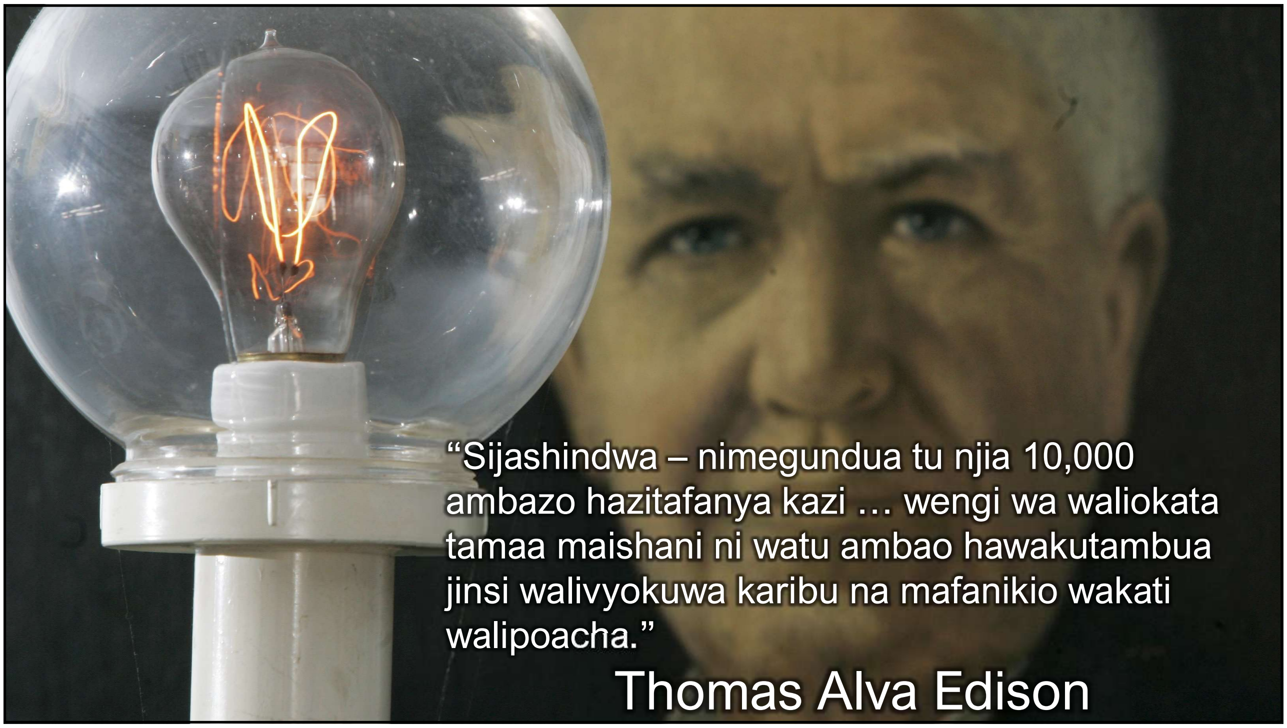
1


SIKU YA 1
SIKU AMBAYO
MUNGU ALILETA
NURU
Tumaini la Mataifa
Notsi za Darasa:

2

3

4

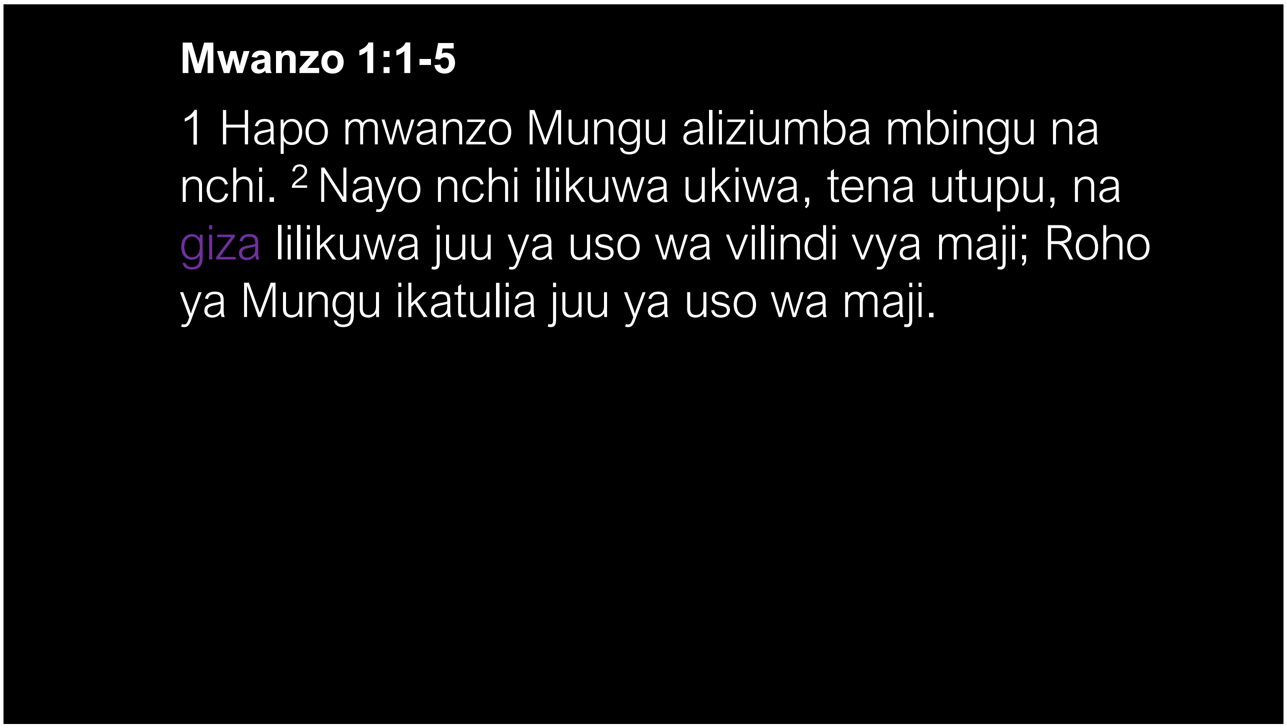


5

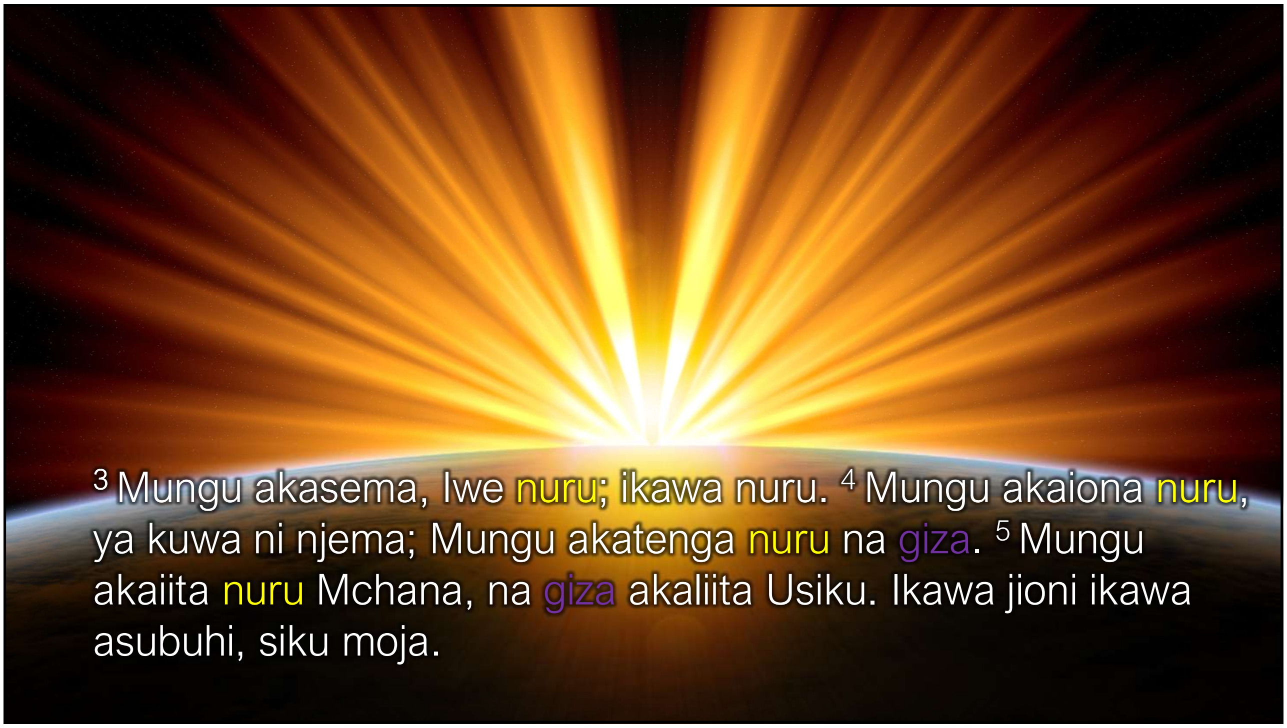
Ni nani aliyeiumba nuru?

Hakuna hata mmoja.

6


Mwanzo 1:1-5
1 Hapo mwanzo Mungu aliziumba mbingu na
nchi. 2 Nayo nchi ilikuwa ukiwa, tena utupu, na
giza lilikuwa juu ya uso wa vilindi vya maji; Roho
ya Mungu ikatulia juu ya uso wa maji.

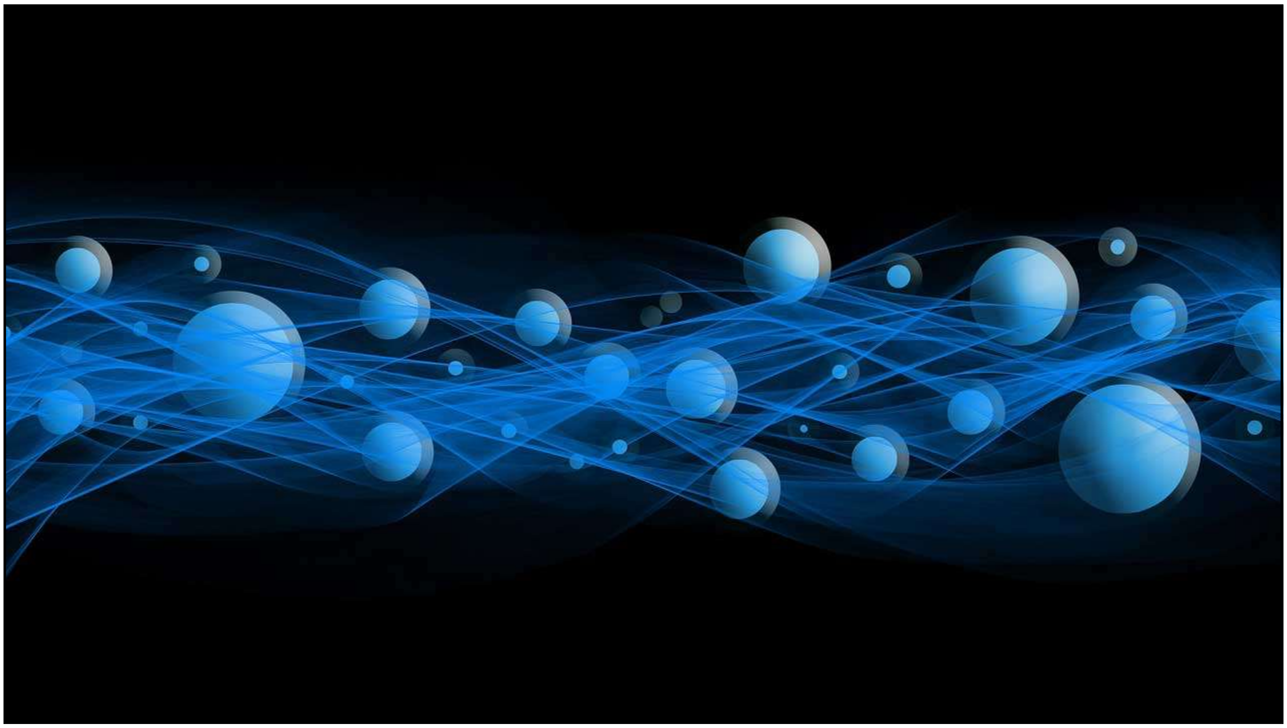
7


3 Mungu akasema, Iwe nuru; ikawa nuru. 4 Mungu akaiona nuru,
ya kuwa ni njema; Mungu akatenga nuru na giza. 5 Mungu
akaiita nuru Mchana, na giza akaliita Usiku. Ikawa jioni ikawa
asubuhi, siku moja.

8

9

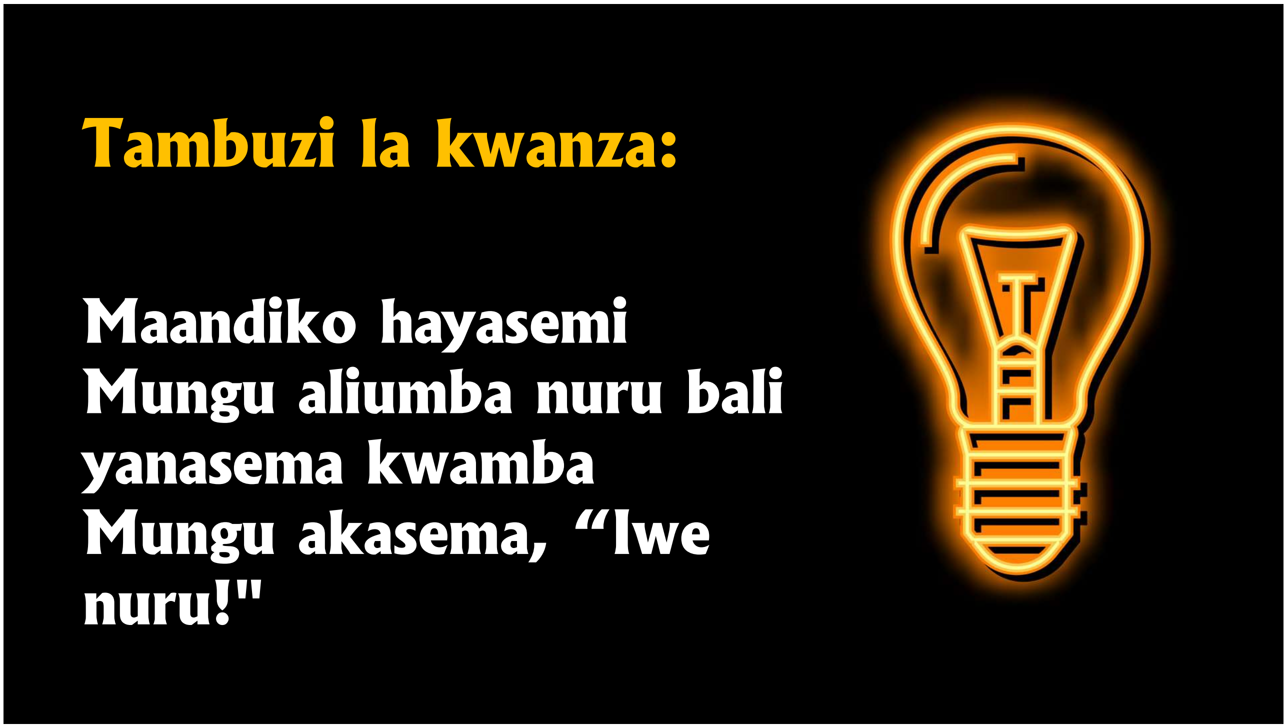
10



11

12

13


Tambuzi la kwanza:
Maandiko hayasemi Mungu aliumba nuru bali yanasema kwamba Mungu akasema, “Iwe nuru!"

14

1 Yohana 1:5
Mungu ni nuru;
wala giza lo lote hamna ndani yake.

15

Yohana 8:12
Mimi ndimi nuru ya ulimwengu, yeye anifuataye hatakwenda gizani kamwe, bali atakuwa na nuru ya uzima.

16

Ufunuo 21:23

Na mji ule hauhitaji jua wala mwezi kuuangaza, kwa maana utukufu wa Mungu huutia nuru, na taa yake ni Mwana-Kondoo.

17

18

Je, nuru hii ni ya kimwili au kiroho?

Yote mawili!

19

Wakolosai 1:15-17

Naye ni mfano wa Mungu asiyeonekana, mzaliwa wa kwanza wa viumbe vyote. Kwa kuwa katika yeye vitu vyote viliumbwa, vilivyo mbinguni na vilivyo juu ya nchi, vinavyoonekana na visivyoonekana; ikiwa ni vitu vya enzi, au usultani, au enzi, au mamlaka; vitu vyote viliumbwa kwa njia yake, na kwa ajili yake. Naye amekuwako kabla ya vitu vyote, na vitu vyote hushikana katika yeye.

20

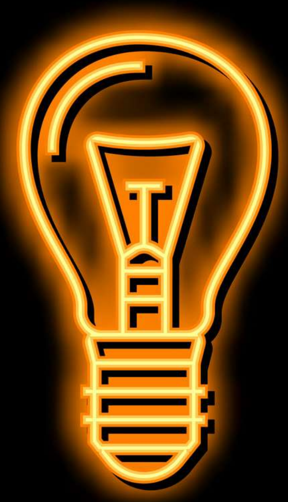
Mungu ni nuru.
Nuru siyo Mungu.

Mungu ni uzima.
Uzima siyo Mungu.

21

Tambuzi la pili:

Nini kiling’aa / kutoa mwanga.



22

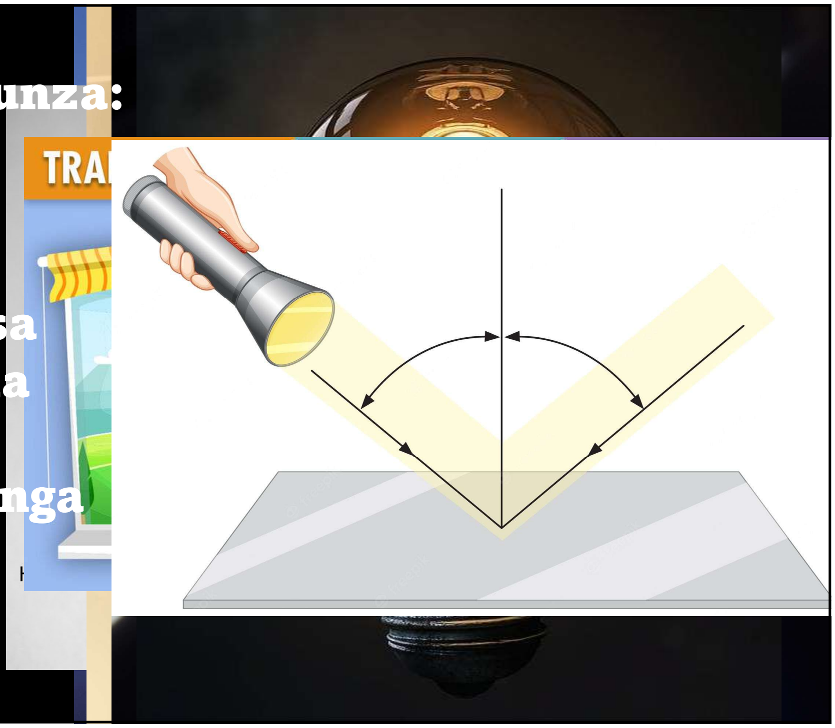
3 Mungu akasema, Iwe nuru; ikawa nuru. 4Mungu
akaiona nuru, ya kuwa ni njema; Mungu akatenga nuru
na giza. 5 Mungu akaiita nuru Mchana, na giza akaliita
Usiku. Ikawa jioni ikawa asubuhi, siku moja.

- Mtazamo wa maandiko ni kutoka au karibu na dunia.
- Si kutoka katika mtazamo wa ulimwengu mzima.
- Mchana na usiku humaanisha kwamba sehemu ya sayari iliyogeuka mbali na chanzo cha mwanga (Mungu) ilikuwa gizani, ikafafanuliwa kama "usiku".
- Hivyo, kiroho, tunapoelekea kwa Mungu, tunatembea katika nuru.

23

Maneno ya Kujifunza:

- **Nuru**
- **Chanzo**
- **Wazi**
- **Wazi si Kabisa**
- **Kisichopitisha mwanga**
- **Kuakisi mwanga**
- **Kupindisha mwanga**
- **Kivuli**



24

25

26

Mwanzo 9:13-16

Mimi nauweka upinde wangu winguni, nao utakuwa ni ishara ya agano kati yangu na nchi. Hata itakuwa nikitanda mawingu juu ya nchi, upinde utaonekana winguni, nami nitalikumbuka agano langu, lililoko kati yangu na ninyi, na kila kiumbe hai katika wote wenye mwili, wala maji hayatakuwa gharika tena kuwaharibu wote wenye mwili. Basi huo upinde utakuwa winguni; nami nitauangalia nipate kulikumbuka agano la milele lililoko kati ya Mungu na kila kiumbe hai katika wote wenye mwili kilichoko katika nchi.

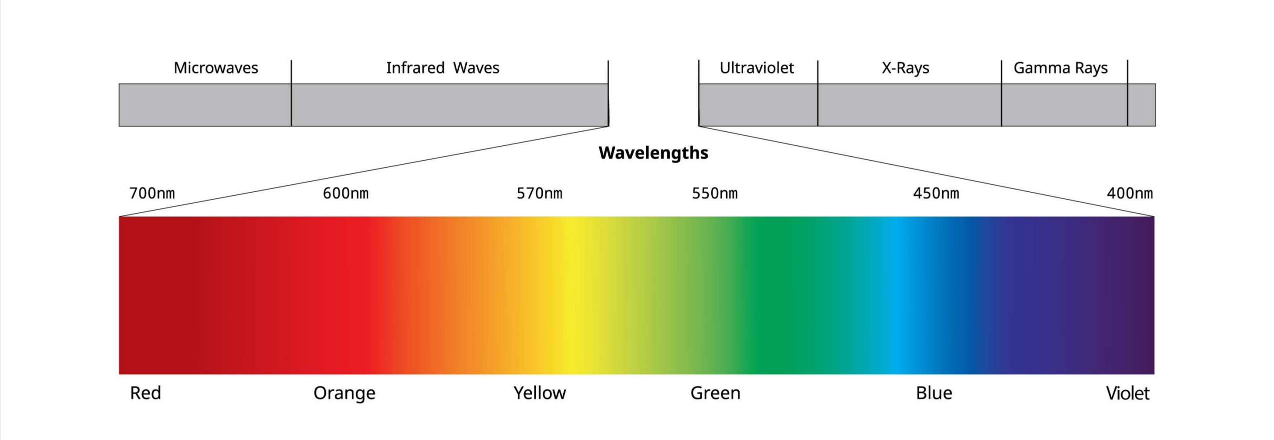
27

Tambuzi la Tatu:

**Nuru ni zaidi ya wigo wa nuru unaoweza kuonekana.
Nuru ni nishati.**

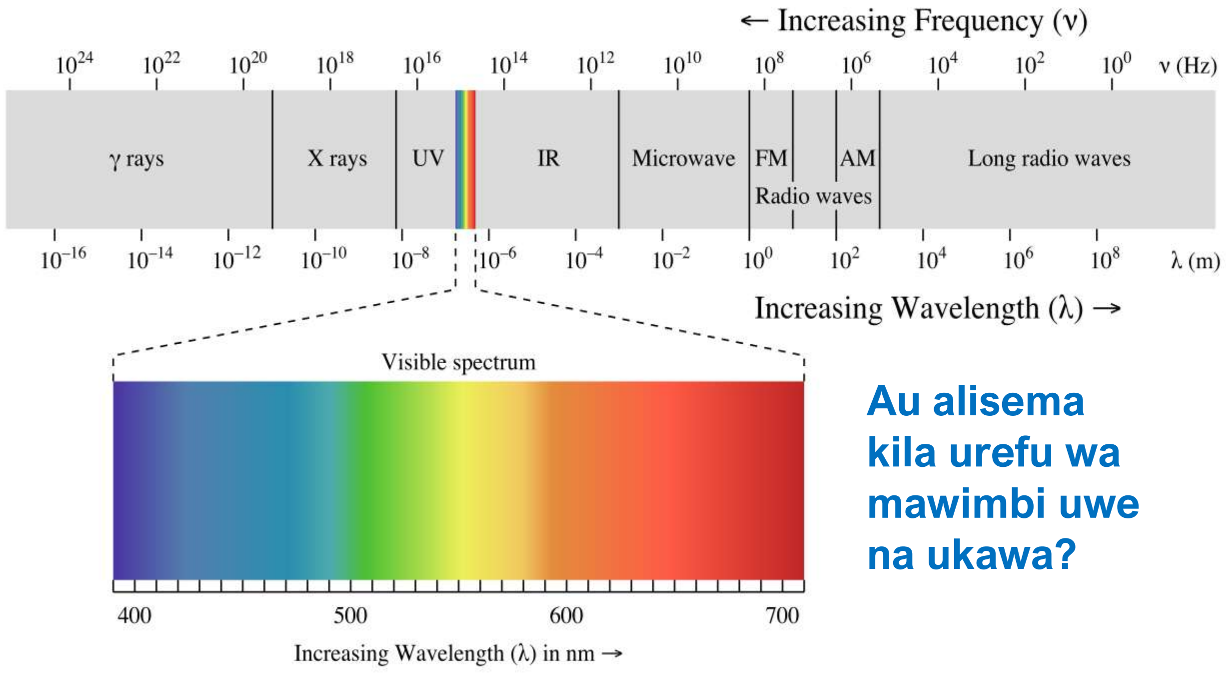
28

Wigo wa Nuru Unaoweza Kuonekana kwa



Je, ni kiasi hiki cha nuru ambacho Mungu alisema kiwe na kikawa?

29

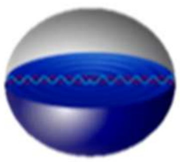


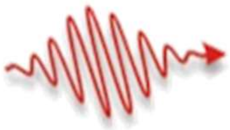
Au alisema kila urefu wa mawimbi uwe na ukawa?

30

31

Foton:



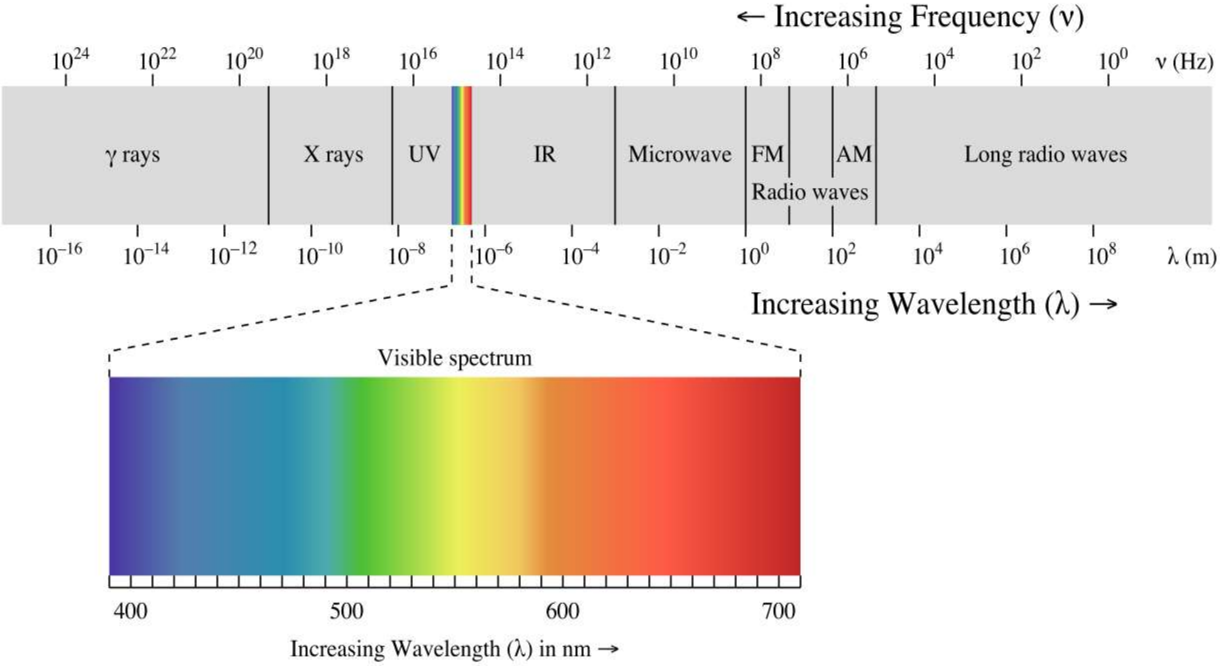


$E=mc^2$ $E=hf$

Kifurushi kidogo zaidi cha nishati ya nuru.

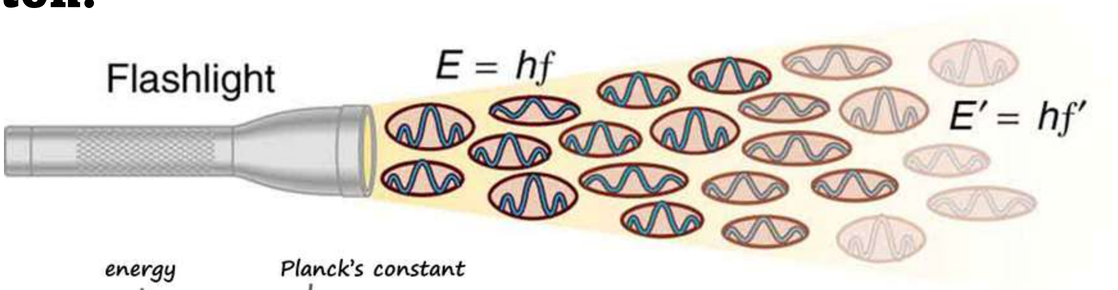
1. Hazina uzito wa kupumzika — hazina rest mass, kwa hiyo hazipimiki chochote zinapokuwa hazisogei.
2. Daima husafiri kwa kasi ya mwanga, kwa hivyo huwa na uzito wa dynamic (wa kutokana na mwendo) au relativistic.
3. Hazina chaji ya umeme.
4. Ni chembe thabiti, lakini zinaweza kuundwa au kuharibiwa wakati mionzi inapotolewa au kufyonzwa.
5. Zina mielekeo miwili ya spin (ya kuzunguka).
6. Zinaweza kugongana na chembe nyingine, kama elektroni, na katika mgongano huo momentum na jumla ya nishati huhifadhiwa.
7. Haziozi zenyewe, zinaonekana kana kwamba zimeepukana na kanuni ya entropy

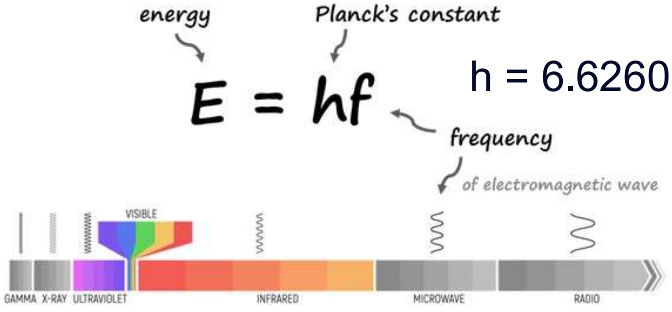
32



33

Foton:



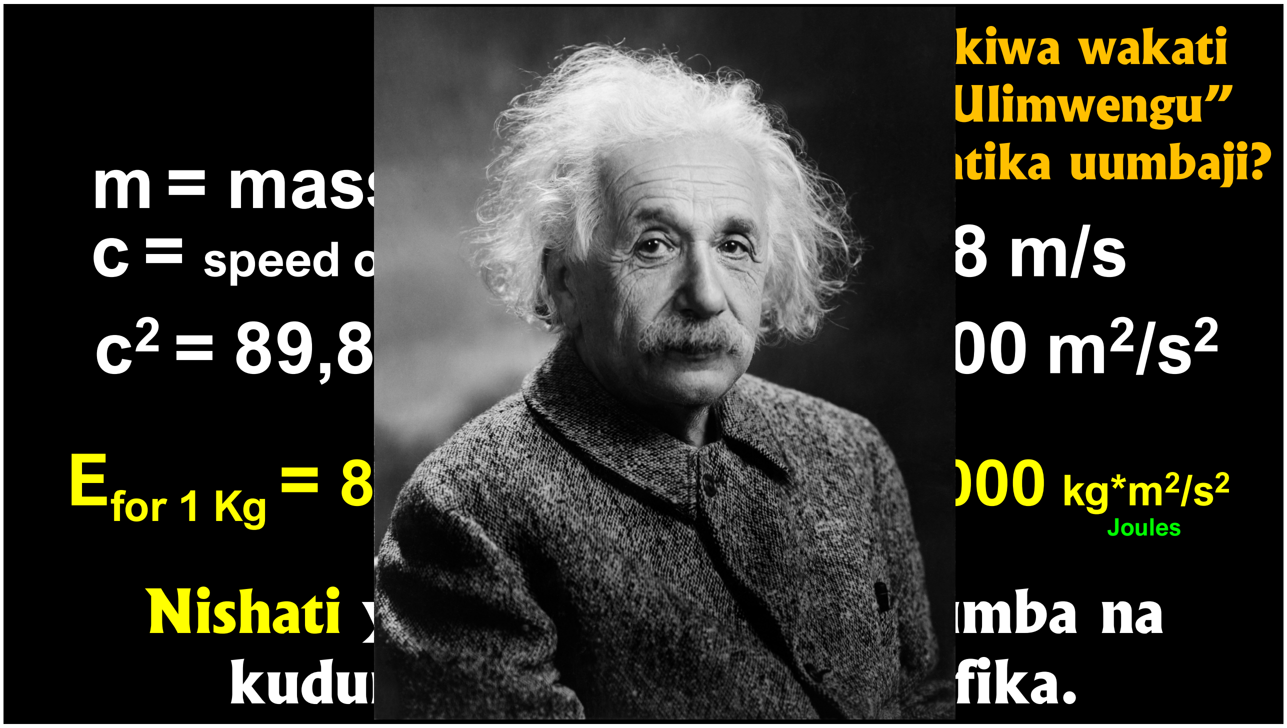


$h = 6.62607015 \times 10^{-34}$ joule/hertz

34

Nini kilitukiwa wakati “Nuru ya Ulimwengu” alipoingia katika uumbaji?
Nishati yote iliyohitajika kuumba na kudumisha ulimwengu ikafika.

35


kiwa wakati
Ulimwengu”
tika uumbaji?
m = mas
c = speed o
8 m/s
c² = 89,8
00 m²/s²
E for 1 Kg = 8
00 kg*m²/s²
Joules
Nishati
mba na
kudu
fika.

36

$E_{for\ 1\ Kg}$ = 89,875,517,870,000,000 Joules

Joule 1 ni nini?

37

Kuna nishati kiasi gani katika kipini hiki cha karatasi?

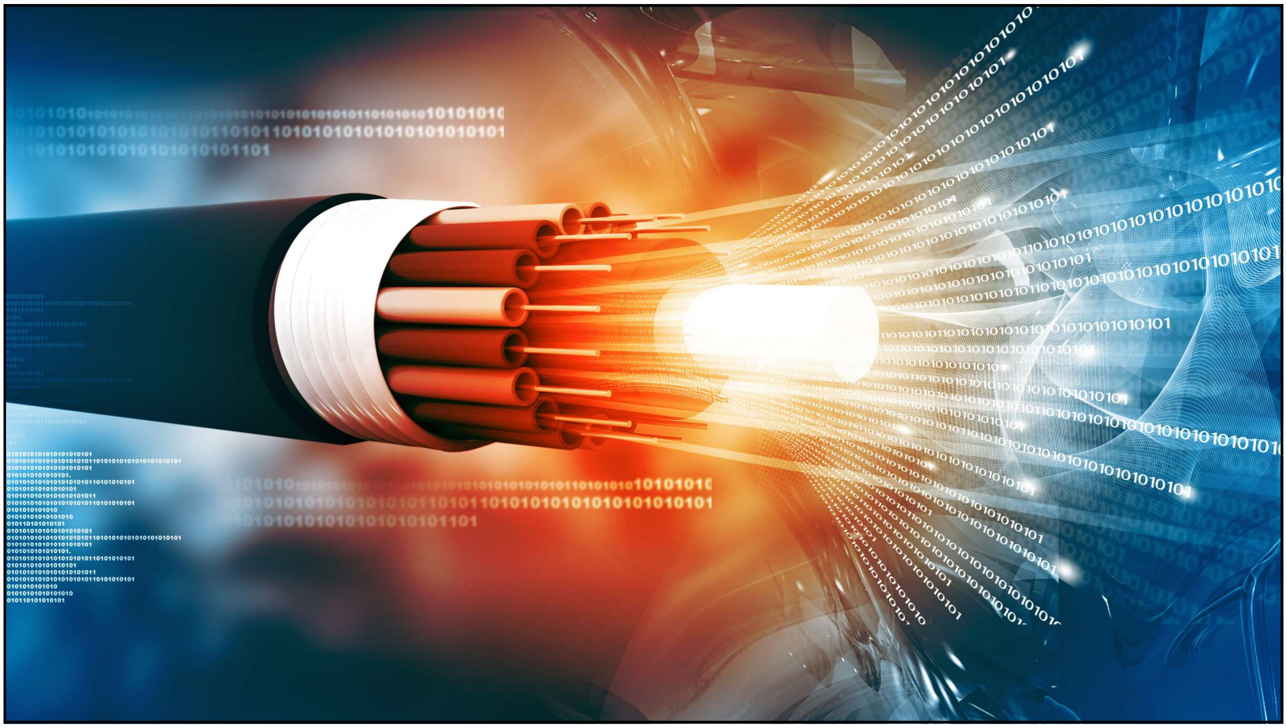
$$E = \frac{1\ gram}{1{,}000\ grams/kg} * 89{,}875{,}517{,}870{,}000{,}000\ m^2/s^2$$

E = 89,875,517,870,000 Joules

Radi moja hubeba zaidi ya joule bilioni moja za nishati – hiyo inatosha kuendesha nyumba ya kawaida kwa muda wa miezi kadhaa!

38

39



40

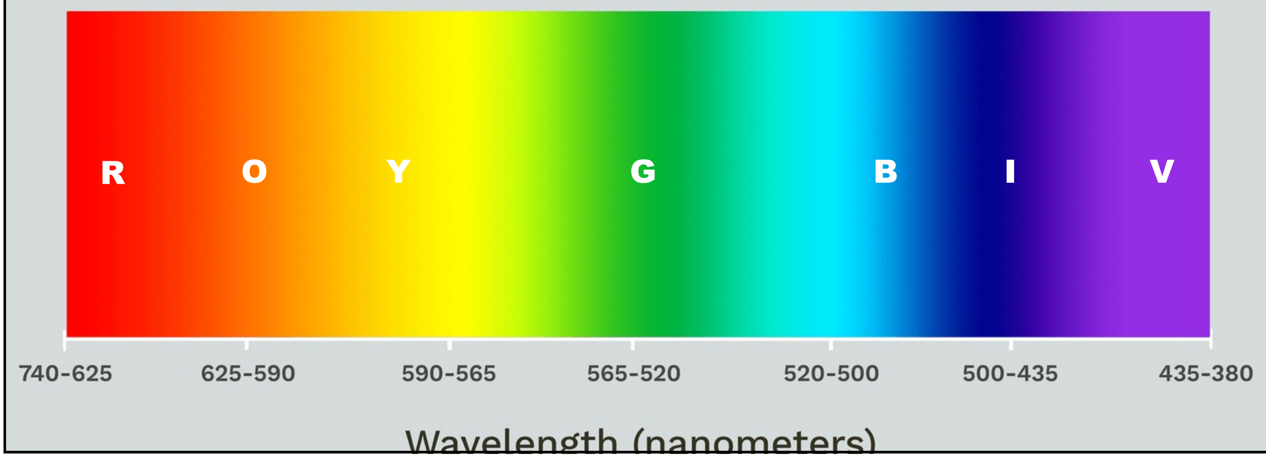
Yohana 1:1 - 5

Hapo mwanzo kulikuwako Neno, naye Neno alikuwako kwa Mungu, naye Neno alikuwa Mungu. Huyo mwanzo alikuwako kwa Mungu. Vyote vilifanyika kwa huyo; wala pasipo yeye hakikufanyika cho chote kilichofanyika. Ndani yake ndimo ulimokuwa uzima, nao ule uzima ulikuwa nuru ya watu. Nayo nuru yang'aa gizani, wala giza halikuiweza.

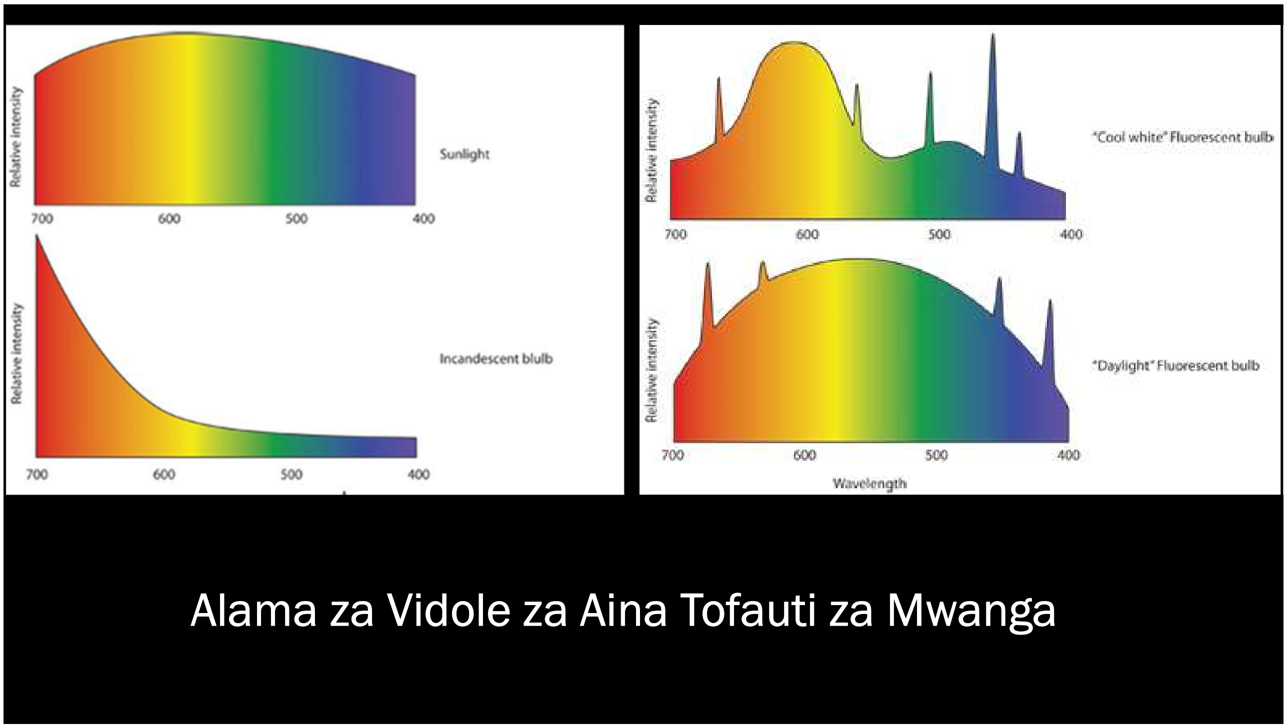
41

The Visible Light Spectrum

The visible light spectrum is the section of the electromagnetic radiation spectrum that is visible to the human eye.



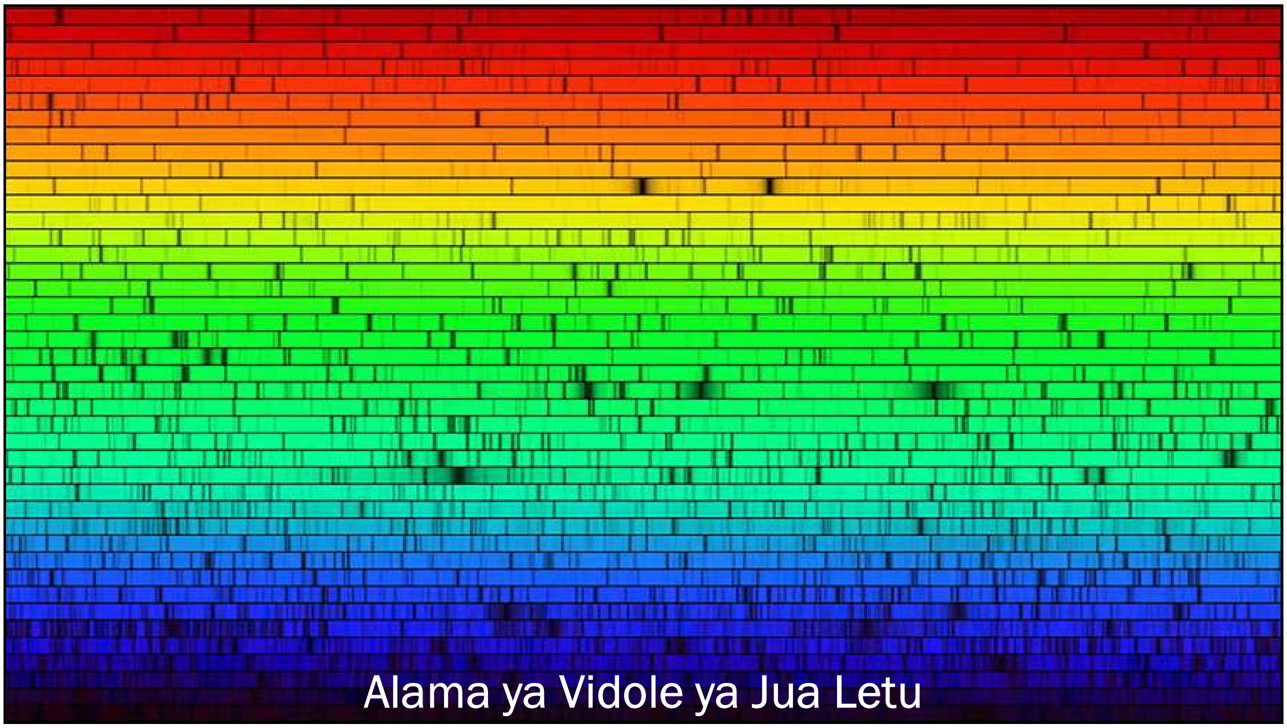
42


Relative intensity
Sunlight
700
600
500
400
Incandescent blulb
"Cool white" Fluorescent bulb
"Daylight" Fluorescent bulb
Wavelength
Alama za Vidole za Aina Tofauti za Mwanga

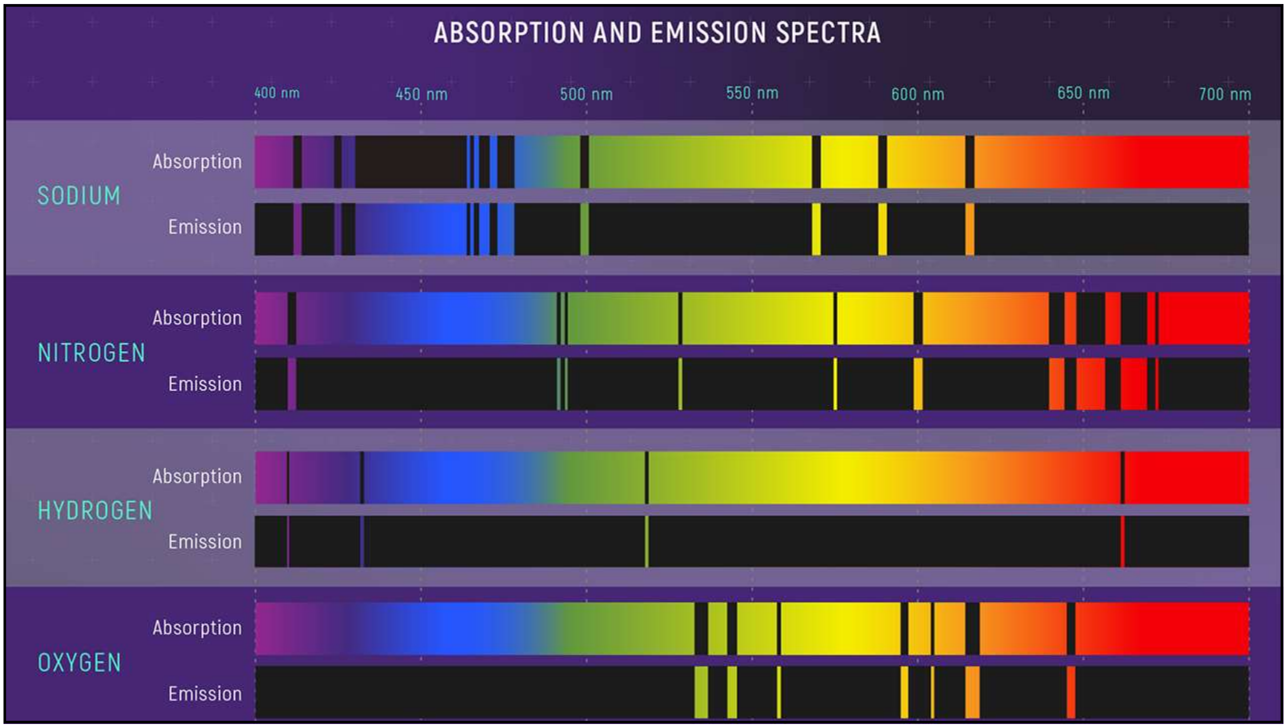
43

BBC TWO

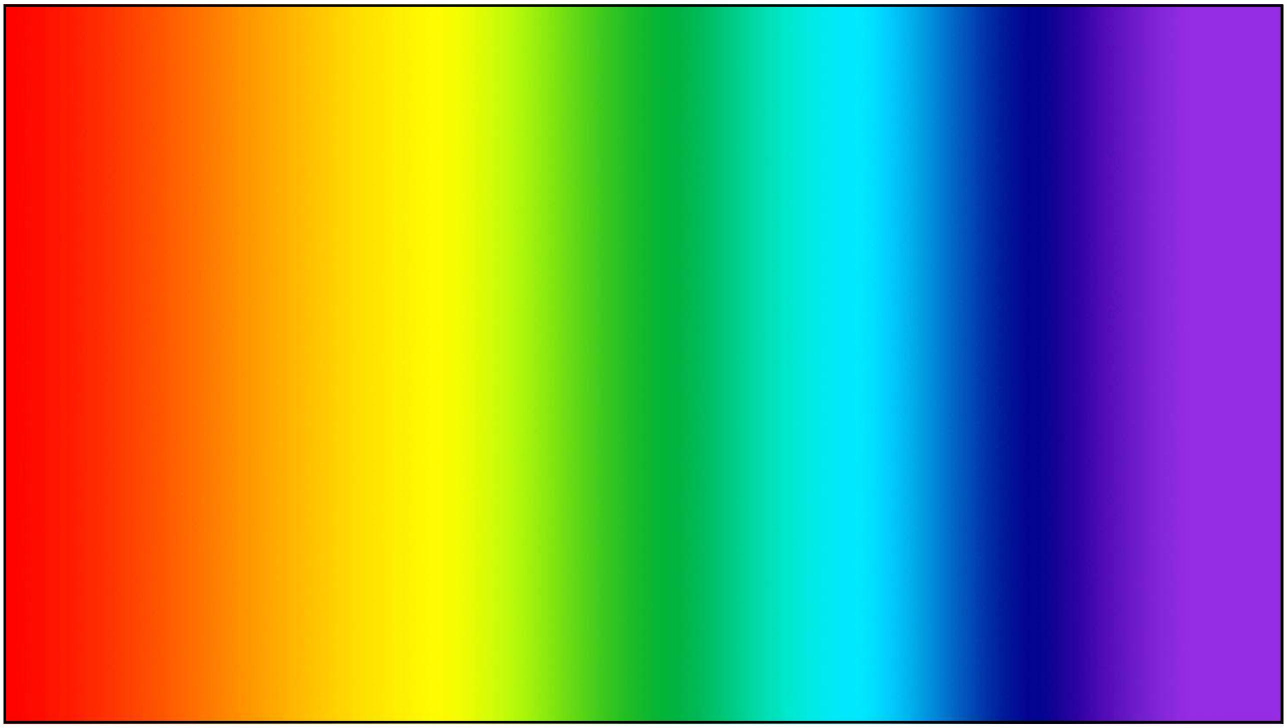
44


Alama ya Vidole ya Jua Letu

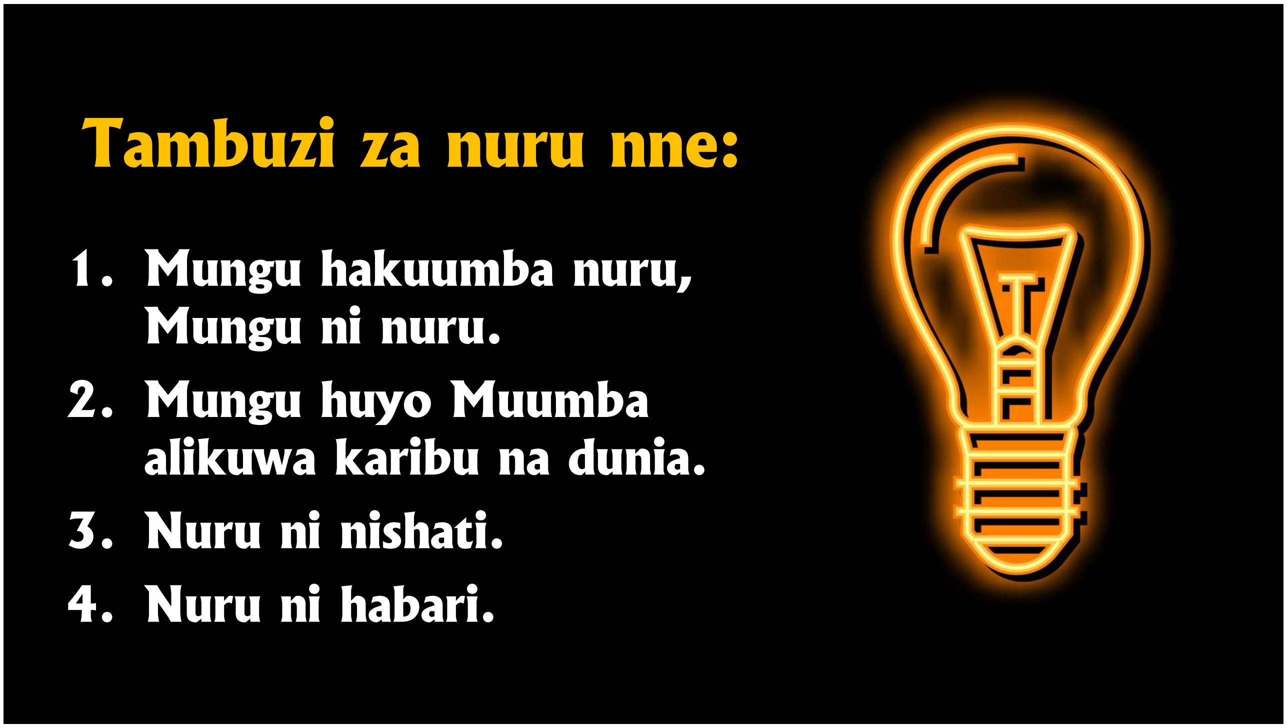
45


ABSORPTION AND EMISSION SPECTRA
400 nm
450 nm
500 nm
550 nm
600 nm
650 nm
700 nm
SODIUM
Absorption
Emission
NITROGEN
Absorption
Emission
HYDROGEN
Absorption
Emission
OXYGEN
Absorption
Emission

46



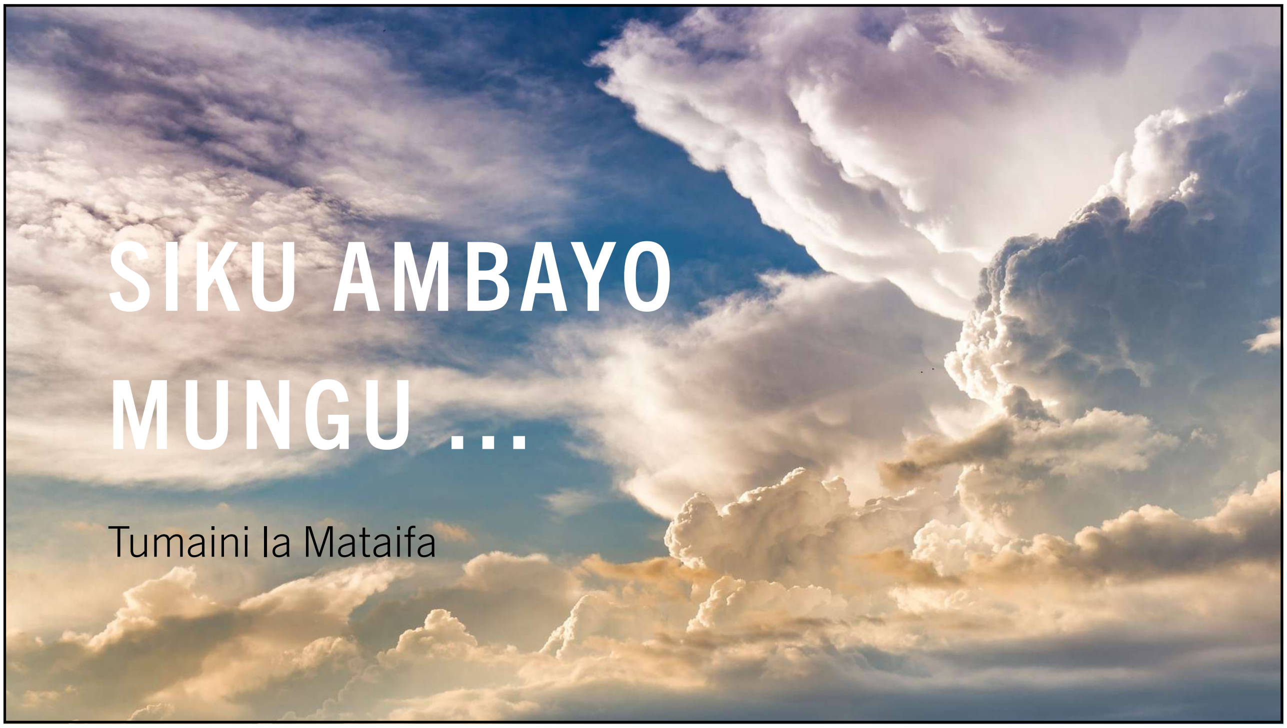
47


Tambuzi za nuru nne:
1. Mungu hakuumba nuru, Mungu ni nuru.
2. Mungu huyo Muumba alikuwa karibu na dunia.
3. Nuru ni nishati.
4. Nuru ni habari.

48

Giza ni nini?
Wakati tunapoenda mbali na chanzo cha nuru.
Wakati kitu fulani kinapoliwa kimekuja kati yetu na chanzo cha nuru.
Watu wale waliokwenda katika giza Wameona nuru kuu; Wale waliokaa katika nchi ya uvuli wa mauti, Nuru imewaangaza.
Isaiah 9:2

49


SIKU AMBAYO MUNGU …
Tumaini la Mataifa

50