

Glossary

Elementary School Level Science Glossary

English / Kinyarwanda

Translation of Science Terms Based on the
Coursework for Science Grades 3 to 5.



This glossary is to PROVIDE PERMITTED TESTING ACCOMMODATIONS of ELL/MLL students. It should also be used for INSTRUCTION during the school year. The glossary may be downloaded, printed and disseminated to educators, parents and ELLs/MLLs.

[Please click here for the New York State Office of Bilingual Education and World Languages Webpage on "Assessment and Testing Accommodations"](#)



THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234

Last Updated: October 2018



THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234

P-16

Office of Elementary, Middle, Secondary and Continuing Education and Office of Higher Education
Office of Bilingual Education and World Languages

<http://www.emsc.nysed.gov/biling/>

THE UNIVERSITY OF THE STATE OF NEW YORK

Regents of The University

BETTY A. ROSA, <i>Chancellor</i> , B.A., M.S. in Ed., M.S. in Ed., M.Ed., Ed.D.	Bronx
T. ANDREW BROWN, <i>Vice Chancellor</i> , B.A., J.D.	Rochester
ROGER TILLES, B.A., J.D.	Great Neck
LESTER W. YOUNG, JR., B.S., M.S., Ed.D.	Beechhurst
CHRISTINE D. CEA, B.A., M.A., Ph.D.	Staten Island
WADE S. NORWOOD, B.A.	Rochester
KATHLEEN M. CASHIN, B.S., M.S., Ed.D.	Brooklyn
JAMES E. COTTRELL, B.S., M.D.	New York
JOSEPHINE VICTORIA FINN, B.A., J.D.	Monticello
JUDITH CHIN, M.S. in Ed.	Little Neck
BEVERLY L. OUDERKIRK, B.S. in Ed., M.S. in Ed.	Morristown
CATHERINE COLLINS, R.N., N.P., B.S., M.S. in Ed., Ed.D.	Buffalo
JUDITH JOHNSON, B.A., M.A., C.A.S.	New Hempstead
NAN EILEEN MEAD, B.A.	Manhattan
ELIZABETH S. HAKANSON, A.S., M.S., C.A.S.	Syracuse
LUIS O. REYES, B.A., M.A., Ph.D.	New York
SUSAN W. MITTLER, B.S., M.S.	Ithaca

Commissioner of Education and President of The University

MARYELLEN ELIA

Executive Deputy Commissioner

ELIZABETH R. BERLIN

The State Education Department does not discriminate on the basis of age, color, religion, creed, disability, marital status, veteran status, national origin, race, gender, genetic predisposition or carrier status, or sexual orientation in its educational programs, services and activities. Portions of this publication can be made available in a variety of formats, including braille, large print or audio tape, upon request. Inquiries concerning this policy of nondiscrimination should be directed to the Department's Office for Diversity and Access, Room 530, Education Building, Albany, NY 12234.

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
A	
absorb	kumira
acceleration	ukwihutisha
acid rain	imvura isharira
adapt	gukoresha
adaptation	ikoreshaa
adjust	gutunganya
air	umwuka
air pressure	umuvuduko
air resistance	kwihangana umwuka
alto	aluto
amount	ingano
amphibian	imyoruru
analyze	gusesengura
anemometer	icyuma gipima umuvuduko w'umuyaga
animal	inyamaswa
apply	gusaba
around	hafi
arrange	gutegura
artery	umutsi w'umujoyana
arthropod	inigwahabiri
asteroid	kibonumwe
atmosphere	ikirere
atom	atome
axis	impembe
B	
balance	umunzani
balanced forces	imbaraga zapimwe
bar graph	imbonerahamwe nyamirongo
barometer	barometere
battery	batiri
behavior	imyifatire
beneficial	gifite akamaro
best	cyiza cyane
bird	inyoni
blink	guhumbya
block	gukinga
blood tissue	tisi z'amaraso
blood vessel	imitsi y'amaraso
body heat	ubushyuhe bw'umubiri
bone	igufa
bone tissue	tisi y'igufa

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
brain	ubwonko
breathe	guhumeza
bronchi	imiheha y'ibihaha
buoyant force	ingufu z'ikireremba
C	
calculator	mubazi
camera	kamera
camouflage	kwiheha
capillary	udutsi tujyana amaraso
carnivore	indyanyama
caterpillar	ikinyabwoya
cause-and-effect	igituma n'ingaruka
cell	ingirangingo
cell membrane	uruhu rw'ingirangingo
cell wall	ibigize ingirangingo
Celsius (C°)	Dogere Selisiyusi (C°)
centimeter (cm)	santimetero (cm)
central nervous system	Urwungano rw'imikorere y'imitsi
change	ihinduka
change of direction	ihinduka ry'icyerekezo
change of motion	ihinduka ry'umuyego
change of speed	ihinduka ry'umuvuduko
characteristic	ikiranga
chemical	ikinyabutabire
chemical change	ihinduka ry'ikinyabutabire
chemical property	ikiranga ikinyabutabire
chemical weathering	itandukanya nyabutabire ry'urutare
chlorophyll	intangabara cyatsi
chloroplast	urubuto rw'intangabara cyatsi
choose	guhiyamo
cinder cone volcano	umutemeri w'ivu ry'ikirunga
circuit	sirikwi
circulatory system	urwungano nyamaraso
cirro-	kijyanye n'ubwoko bw'igicu
cirrus cloud	ubwoko bw'igicu
classification	itondeka
classify	gutondeka
claws	inzara z'innyamaswa
climate	ikirere
cloud	igicu
collect	kwegeranya
color	ibara

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
column	inkingi
comet	nyakotsi
common	rusange
community	umuryango
compare	kugereranya
compass	idira
competition	irushanwa
composite volcano	ikirunga cyiremye
compost pile	ikirundo cy'ifumbire y'imborere
compound	urupangu
compound microscope	mikorosikopi yagutse
computer	mudasobwa
conclusion	umwanzuro
condensation	uko umwuka uhindukamo ibisukika
condition	igisabwa
conduction	itwarwa
conductivity	ubushobozi bwo gutwara
conductors	ibitwara
conservation	ibika
consumer	umuguzi
contain	kushyiramo
container	ikibika
content	ibirimo
convection	ihindura
crest	isunzu
crust	urukoko
crystal	ubutare
cubic centimeter	santimetero kibe
cycle	umwikubo
cytoplasm	ingirabuzima
D	
dam	baraje
data	amakurushingiro
data table	imbonerahamwe y'amakurushingiro
decomposer	ibora
decrease	kugabanura
define	gusobanura
definite	gifututse
density	ireme
deposition	ishyira
derived	cyakuwe
describe	gusobanura

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
design	guhanga
development	ikora
diagram	imbonerahamwe
die	gupfa
difference	itandukaniro
digestive system	urwungano rw'igogora
direction	icyerekezo
directly	ako kanya
discuss	kuvuganira
disperse	gutatanya
distance	intera
distribute	gukwiragiza
draw	gushushanya
E	
earth	isi
earthquake	umutingito
earthworm	umunyorogoto
eat	kurya
echo	nyiramubande
ecosystem	urusobe
effect	ingaruka
efficient	kibereye
egg	igi
electric	amashanyarazi
electric current	umuriro w'amashanyarazi
electrical energy	ingufu z'amashanyarazi
electromagnet	rukuruzi
electromagnetism	imbaraga za rukuruzi
electron	elegitoro
elements	ibintu
elevation	ubutumburuke
eliminate	gukuraho
emit	gushyira
energy	ingufu
energy resources	ibitanga ingufu
environment	ibidukikije
equal	bingana
erosion	isuri
error	ikosa
eruption	iruka
esophagus	umuhogo
establish	gushyiraho

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
estimate	kugereranya
estimation	igereranwa
evaluate	gusuzuma
evaporate	guhindura igisukika umwuka
evaporation	ihindur igisukika umwuka
evidence	igihamyanya
example	urugero
exercise	umwitozo
exoskeleton	igikono
experiment	igerageza
explain	gusobanura
external	cy'inyuma
eyes	amaso
F	
fact	igifatika
factor	ikigenderwaho
Fahrenheit (°F)	Dogere Farineyiti (°F)
fault	ikosa
feather	ibaba
feature	ikiranga
features	ibiranga
fins	ibyubi
fish	ifi
fixed pulley	puli itimurwa
float	kureremba
flood	umwuzure
flowers	indabyo
food chain	uruhererekane rw'ibiribwa
food web	uruhererekane rw'ibiribwa
force	ingufu
form	imimerere
former	cyahoze
formula	ihinamvugo
fossil	ibisigazwa by'inyamanswa za kera
fossil fuel	amavuta akomoka ku bisigazwa by'inyamanswa za kera
frequency	inshuro
friction	amakimbirane
fruit	imbuto
fulcrum	igifashi
function	umumaro
fur	ubwoya

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
G	
galaxy	inyenyeri
gas	gaze
generation	urungano
generator	intanga
germinate	kumera
germination	imera
glacier	urubura
graduated cylinder	agacupa gafite ibipimo
gram (g)	garama (g)
graph	imbonerahamwe
graphic	igishushanyo
gravity	ireme
greatest	gikomeye cyane
green plant	ikimera cy'icyatsi
ground	ubutaka
groundwater	amasoko y'ikuzimu
grow	gukura
growth	ikura
H	
habitat	ubuturo
hail	urubura
hair	umusatsi
hand lens	rupe
hardness	ubukomere
harmful	cyangiza
health	ubuzima
healthy habit	ubuzima bwiza
hearth	iziko
hearth muscle	imikaya y'umutima
heat	ubushyuhe
heat energy	ingufu z'ubushyuhe
herbivore	indyabyatsi
hibernation	isinzira
host	umusangwa
human	umuntu
humidity	ubuhere
hurricane	serwakira
hygrometer	icyuma gipima umwuka w'amazi
Hypothesis	Igitekerezo

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
I	
identify	kugaragaza
identical	bisa
igneous rock	ubwoko bw'amabuye
illuminate	kumurika
illustrate	kugaragaza
inclined plane	ahaberamye
increase	kwongera
Independent variable	umubare wigenga
indicate	kwerekana
inference	impamvu
information	amakuru
inherit	kuragwa
inherited adaption	ibiranga nkomoko by'ikimera
inherited trait	ikiranga nkomoko
inquiry	ikibazo
insect	agakoko
insulator	kugabanya ikwirakwira ry'ubushyuhe
interact	gukorana
internal	imbere
interpret	gusobanura
interval	intera
invertebrate	ibiburangoro
investigate	guperereza
J	
jaw	urwasaya
jellyfish	medusa
joint	uruhiniro
journal	ikinyamakuru
K	
kilogram (kg)	kilogarama (kg)
kiloliter (kl)	kilolitiro (kl)
kilometer (km)	kilometero (km)
kinetic energy	ingufu z'umuyego
kingdom	ubwami
kitten	akajangwe
knowledge	ubumenyi

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
L	
label	ikirango
land	ubutaka
landslide	inkangu
large intestine	urura runini
larva	urunyo
latitude	ratitude
lava	Igikoma cy'amazuku
leaf	ikibabi
learned	yize
learned adaptation	ibyoyize
least	nibura
leaves	ibibabi
leg	ukuguru
length	uburebure
levee	ikidamu
lever	leviye
life cycle	umwikubo w'ubuzima
life span	icyizere cy'ubuzima
light	urumuri
lighting	imirambyo
line graph	imirongo
lines of force	imirongo y'ingufu
liquid	igisukika
list	urutonde
liter (L)	litiro (L)
live	kubaho
living	ukubaho
living thing	ikinyabuzima
location	ahantu
lunar eclipse	ubwirakabiri
lungs	ibihaha
luster	ugushahagirana
M	
magma	ibikoma by'ikirunga
magnet	rukuruzi
magnetic field	ahari imbaraga za rukuruzi
magnetic force	imbaraga za rukuruzi
magnetism	ibya rukuruzi
magnifier	rupe
maintain	kugumishaho
major	gikuru

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
mammal	inyamabere
mass	uburemere
mates	urungano
matter	ikibazo
measure	gupima
mechanical	cyerekeye imashini
mechanical energy	ingufu z'imashini
metamorphic rock	ubwoko bw'amabuye
metamorphosis	ukwihindura
meter (m)	metero (m)
meter stick	irati ya metero
method	uburyo
metric ruler	irati ya metero
microscope	mikorosikopi
migration	iyimuka
milligram (mg)	miligarama (mg)
millimeter (mm)	milimetero (mm)
mineral	ibuye ry'agaciro
mitochondria	intima y'ingirabuzima
mixture	uruvange
models	ibyitegererezo
moisture	urume
molecule	molekile
mollusk	ikinyamunjonjorerwa
motion	umuyego
motor	moteri
mouth	umunwa
movable pulley	puli yimurwa
muscle tissue	tisi y'umukaya
muscular system	urwungano rw'imikaya
N	
nail	urwara
natural events	ibiza
negative	mburwa
nervous system	urwungano rw'imitsi
neuron	umwakura-bakwe
niche	umwobo
nimbus	ibicu
nonliving thing	ikiburabuzima
nonrenewable	bitizazura
nonrenewable energy resource	ingufu zitisazura
nose	izuru

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
nucleus	intimatima
number	nimero
nutrient	itungamubiri
O	
object	intego
objective lens	indorerwamo zipima
observable	ibigaragara
observation	igaragara
observe	kugaragaza
obtained	kubona
occur	kuba
odor	impumuro
offspring	urubyaro
omnivore	indyabyose
opinion	igitekerezo
orbit	inzira y'imibumbe
order	urutonde
organ	urugingo
organ system	imikorere y'ingingo
organism	urugingo
organize	gutunganya
original	umwimerere
ovary	umurerantanga
overabundance	umurengera
ozone	akayunguruzo k'izuba
P	
parallel circuit	sirikwi ibangikanye
parasite	icyonnyi
path	akayira
pattern	ishusho
percent, percentage	ku ijana, ijanisha
period	igihe
permanent magnet	rukuruzi ihoraho
phases	ibice
phenomena	igombana
photosynthesis	fotosenteze
physical	ku mubiri
physical change	ihinduka rigaragara
physical environment	ibidukikije bigaragara
physical property	ikiranga kigaragara
physical weathering	ukumenagurika kw'urutare
pie graph	imbonerahamwe ruziga

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
pistil	umwumba w'ururabyo
pitch	ikibuga
planet	umubumbe
plant	ikimera
polar	hakonje
pollen	intsinda
pollinate	kubangurirwa
pollution	iyangiza
position	akazi
positive	mbonwa
potential energy	ingufu zishoboka
precipitation	imvura
predator	icyaruzi
predict	guteganya
prediction	iteganya
presence	iboneka
previous	igiheruka
prey	umuhigo
primary	kibanza
probable	agateganyo
procedure	uburyo
process	inzira
produce	gutanga umusarruro
producer	utanga umusaruro
properties	ibiranga
protect	kurinda
proton	poroto
provide	gutanga
pull	gukurura
pulley	puli
pupa	intsinda
puppies	ibibwana
push	gusunika
R	
rabbit	urukwavu
radiation	imirasire
rain	imvura
rearrange	kongera gutondeka
reason	impamvu
receive	kwakira
record	icyafashwe
rectum	umwoyo

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
recycle	kongera gukoresha
reduce	kugabanya
refer	kwifashisha
reflect	gutekereza
refract	guhindura inzira
relationship	isano
relative humidity	ubukonje buringaniye
relevant	cy'ingenzi
remain the same	kudahinduka
renewable	gisazurwa
renewable energy resource	ingufu zisazura
repair	gusana
repel	kwirukana
represent	guhagararira
reproduce	kororoka
reproduction	ukororoka
reptile	igikururanda
required	ibisabwa
respiratory system	urwungano rw'ubuhumekero
respond	gusubiza
response	igisubizo
responsible	ubishinzwe
result	igisubizo
rest	kuruhuka
reuse	kongera gukoresha
revolution	ihinduka
revolve	kuzenguruka
riding a bicycle	kunyonga igare
rock	urutare
rock cycle	umwikubo w'urutare
role	uruhare
root	umuzi
rotate	kuzenguruka
rotation	izenguruka
rubbing	ikuba
ruler (metric)	irati (yo gupima)
runoff	ibyarenze

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
S	
saliva	amacandwe
salivate	kumira amacandwe
scale	umunzani
scientific inquiry	ikibazo cya siyansi
scientific investigation	iperereza rya siyansi
scientific thinking	igitekerezo cya siyansi
screw	ivisi
seasonal	kijyanye n'ibihe
seasonally	cya buri gihe
seasons	ibihe
secondary	cya kabiri
sediment	ibyatembanywe n'amazi
sedimentary rock	ubwoko w'urutare
seed	imbuto
seedling	umumeri
select	guhitemo
senses	ibyumviro
sense organ	urugingo rw'ibyumviro
sequences	itondekanya
series circuit	sirikwi iri mu bice
sewage	amazi yo muri ruhurura
shadows	ibicucucucu
shape	ishusho
shells	ibikono
shelter	ubwugamo
shield volcano	ubwoko bw'ikirunga
shiver	gutitira
significant	gisobanutse
similarity	ugusa
simple machine	imashini isanzwe
sink	gutebera
situation	imimerere
size	ingano
skeletal muscle	imikaya ifashe ku magufa
skeletal system	urwungano rw'amagufa
skin	uruhu
sky	ikirere
sleet	amahindu
small intestine	urura ruto
smooth muscle	imikaya yoroshe
snow	urubura

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
soil	igitaka
soil texture	ibigize igitaka
solar cell	ibyuma bitanga amashanyarazi akomoka ku mirasire y'izuba
solar system	inkozo
solid	gikomeye
solidification	ugukomera
solubility	gishobora kuvangwa
solute	kuvanga
solution	ibyavanzwe
sound	ijwi
sound recorder	agafatamajwi
source	isoko
space	umwanya
species	amoko
specific	cyihariye
speed	umuvuduko
spine	uruti
spinal cord	uruti rw'umugongo
sponge	ubwoko bw'igisimba cyo mu mazi
spore	igi ry'uruhumbu
spring scale	umunzani wa gakwege
sprout	kumera k'urubuto
stages	inzego
stamen	umwumba w'ururabyo
stalks	uruti
star	inyenyeri
state	leta
static charge	imbaraga z'amashanyarazi zitangana
static electricity	amashanyarazi atangana
stem	igihimba cy'ikimera
stigma	uruyange
stimulus	ikigusunika gukora ikintu
stomach	inda
storms	inkubi y'umuyaga
stopwatch	koronometere
strategy	ingamba
strato	igicu
stratus cloud	ibicu
streak	umurongo
structural adaptation	ibyo umubiri wikorera ngo ubeho
structure	imiterere
subsoil	ikuzimu
substance	ikintu

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
summarize	kuvuga muri make
sun	izuba
sunny	hari izuba ryinshi
support	gushyigikira
surface	ubuso
survive, survival	kubaho, ukubaho
surviving	ukubaho
sweat	icyuya
switch	ihindura
system	sisitemu
T	
tadpole	agakeri
tape measure	imetero
teeth	iryinyo
temperate	ikirere cy'ubushyuhe buringaniye
temperature	ubushyuhe
temporary magnet	rukuruzi idahoraho
theory	inyigisho
thermometer	igipimo cy'ubushyuhe
thrive	guharanira
thunderstorm	inkuba
tissue	tisi
tongue	ururimi
tool	igikoresho
topsoil	ubutaka
tornado	serwakira
trachea	umuhogo
trait	ingeso
transfer	kwohereza
transport	gutwara
trial	igerageza
tropical	ikirere gikikije ekwateri
troposphere	ikirere
trough	ikibumbiro
trunks	umutonzi
turbine	tiribine
type	ubwoko
U	
unbalanced forces	imbaraga zitangana
unequal	bitangana
under	munsi
universe	isanzure

SCIENCE GLOSSARY - ELEMENTARY SCHOOL LEVEL

ENGLISH	KINYARWANDA
V	
vacuole	akenge ko mu ngirauzima
variable	gihinduka
vegetable	imboga
vein	umutsi
vertebrate	ibinyangoro
visible	kigaragara
volcano	ikirunga
voltmeter	icyuma gipim volute
volume	ubwirangire
W	
waste	umwanda
water	amazi
water cycle	umwikubo w'amazi
water vapor	umwuka w'amazi
wavelength	intera hagati ya onde
weather	ikirere
weathering	ihinduka ry'urutare bitewe n'ikirere
wedge	igihato
week	icyumweru
weight	uburemere
wheel and axle	ipine n'umutambiko
width	ubugari
wind	umuyaga
wind vane	jiruweti
wings	amababa