

	Hausa	Gwandara	Angas	Sura	Cip	Goimai	Fyer	Bokos	Daffo	Sha	Kulere	Karekare	Gera	Bole	Ngamo	Pero	Tangale	Dera	Miya	Wangday	Kir	Geji	Buli	Zul	Guruntum	Jimi	Tala	Boghum	Mangas	Sayanci	Zaar	Dwot	Palci	Ngizim	Bade				
MEAT	HH	HH	HH	II	II	II	II	II	II	II	O ₂	II	II	II	II	II	II	II	II	II	II	II	II	II	HH	II	II	II	II	II	II	II	II	II	II	JJ			
MOON	V	V	W	W	W	W	W	W	X	Y	Y	W	W	W	W	W	W	W	W	W	W	Y	Z	W	W	W	Z	AA	AA	Y	AA	AA	W	W	W	W			
MOUNTAIN	AB	AC	AD	AE	AF	AF	AG		AH	AI	AJ	AK	—	AK	AK	AL	AM	AN	AO	AP	AQ	AR	AR	AP	AS	AT	BS	AU	AQ	AV	T ₂	AO	AR	AW	AX				
MOUTH	G	G	G	G	G	P	G	G	G	Q		G	G	R	G	G	G	G	R	P	P	P	P	P	P	P	S	G	G	R	P	P	P	H	H				
NAIL	HH	II	JJ	JJ		JJ	KK	LL	LL	MM	MM	NN	OO	PP	QQ		RR	SS	II	TT	RR	UU	UU	UU	UU	MM	UU	VV	WW	VV	VV			PP	XX				
NAME	A	A	A	A	A	A	A		A	A	A	A	A	A	M	A	A	N	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	O	P			
NECK	GG	GG	ZZ	ZZ	ZZ	ZZ	AB	GG	GG	GG	GG	GG	AC	AD	AE	AF	AG	AD	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	AH	AH	GG	GG	GG	GG	GG	GG			
NEW	JJ	JJ	KK	KK	KK	KK	LL					MM		KK	KK	KK	NN	OO		OO	OO	OO	OO	OO	OO	OO	OO	OO	OO	OO	OO	OO	OO	LL	LL	LL	KK	PP	PP
NIGHT	PP	PP	O ₃	O ₃	QQ	RR	SS	TT	TT	TT	TT	TT	UU	TT	TT	VV	WW	TT	XX	YY	ZZ	YY	YY	YY	YY	TT	ZZ	AB	TT	AC	AD	AD	AD	TT	TT	TT	TT		
NOSE	T	T	U	U	V	V	T	T	T	T	T	W	V	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T		
ONE	W	W	X	Y	Z	Z	AA	BB	CC	DD	DD	EE	Z	FF	FF	GG	GG	HH	EE	II	II	II	II	II	JJ	II	II	II	II	II	II		II	II	AA	EE			
RAIN	HH	HH	II	II	II	II	JJ		II		II	KK	JJ	JJ			KK		JJ	II	II		II	II	II	II	II	HH	II	II	II				KK	LL			
RED	NN	NN	OO	OO	OO	PP	QQ	RR	SS	TT	UU	VV	VV	VV	VV	WW	VV	VV	XX	YY	PP	YY	YY	YY	YY	ZZ	YY	AB	PP	YY	YY	YY	YY	VV	WW	WW	WW		
ROAD/PATH	AI	AJ	AK	AK	AK	AL	AM	AN	AO		AK	AP	AQ	U	AR	U	U	U	AS	AT	AU	AV	AW	AX	AY	AT	AZ	BA	AU	AT	AT	AT	AT	AT	AT	AT			
ROOT	FF	FF		GG		GG			FF	HH		FF		FF	FF		FF	II	FF	FF	FF	FF	FF	FF	FF	FF	JJ	KK	FF	FF	FF				LL	LL			
SAND	A	A	QQ	RR	A	A	A		SS		SS	A	TT	UU	A	VV	VV	WW	VV	XX	YY	YY	XX	XX	A	A	A	A	YY	YY	YY	YY	YY	YY	YY	A	A		
SAY	JJ	JJ	KK	LL	LL	NN	C ₂	C ₂	C ₂	OO	PP	QQ	RR	SS	TT	UU	VV	A ₂	WW	M ₂	C ₂	XX	M ₂	YY	ZZ	AB	YY	AC	M ₂	NN	YY	YY	YY	YY	AD	AE			
SEE	RR	RR	PP	PP	PP	PP	SS	TT	UU	E ₂	A ₂	PP	PP	E ₂ /VV	E ₂	AA ₂	E ₂	AR	PP	I ₂	WW	AR	I ₂	I ₂	I ₂	I ₂	XX	YY	YY	L	L	ZZ	L	AB	AC				
SEED	HH	HH	B	II	II	JJ	KK	LL	LL		MM	II	NN	HH	II	II	JJ	OO	D	D	D	PP	D	D	PP	QQ	D	II	D	II	PP	PP	D	RR	SS				
SIT	TT	UU	VV	VV	VV	VV	NN ₂	NN ₂	WW	XX	XX	VV	YY	BB	BB	BB	BB	BB	ZZ	YY	YY	YY	V ₃	YY	NN ₂	YY		YY	YY	ZZ	ZZ	ZZ	AB	AB	AC	AD			
SKIN (human)	HH ₂	HH ₂	SS	TT	TT	TT			UU	UU	UU	VV	WW	XX	WW	C ₂	YY	ZZ	AB	C ₂	C ₂	C ₂	C ₂	C ₂	—	C ₂	C ₂	C ₂	C ₂	C ₂	C ₂	C ₂	AC	AC	C ₂	C ₂	AD	AD	
SLEEP	AH	AI	AJ	AJ	AJ	AK	AL	AL	AM	AM	AM	AN	AO	AJ	AM	AP	AQ	AR	AP	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AT	AT	AT	AT	AP	AP	
SMALL	H	AI	AI	H	H	AJ	XX ₂		AK		AL	AM	H	AN	AO	XX ₂	XX ₂	XX ₂	AL	H	AP	DD	AK	H	AF	AR	AS	AT	AU	AV	AV	AL	AL	AW	AX				
SMOKE	KK	KK	LL	MM	MM	MM			LL			NN	OO	NN	NN	PP	NN	NN	NN	QQ	QQ	QQ	QQ	QQ	QQ	QQ	QQ	QQ	QQ	QQ	QQ	QQ	KK	KK	OO	RR	SS	SS	

	Tera-Pidh.	Hwona	Ga'anda	Boka	Bura	Cibak	Kilba	Margi	Higi Nkafa	Higi Baza	Kapsiki	Fali Kiria	Fali Gili	Fali Jilbu	Fali Muc.	Fali Bwag.	Gude	Njanye	B-Mwui.	Bacama	Gudu	Lamang	Wandala	Glavda	Dghwede	Guduf 2	Sukur	Mafa	Gisiga	Daba	Gidar	Kotoko	Musgum	
MEAT	II	II	II	II	KK	KK	KK	KK	II	II	II	II	II	II	II	II	II	II	II	LL	LL	II	MM	II	II	II	II	II	NN	OO	II	II	PP	
MOON	BB	BB	BB	BB	JJ	JJ	JJ	JJ	W	W	W	W	W	CC	CC	CC	CC	CC	CC	CC	CC	W	W	DD	W	DD	W/DD	DD	DD	W	W	W	W	
MOUNTAIN	AY	AZ	BA	AR	AR	AR	BC	BC	BC	AZ	AZ	AZ	BD	BE	BE	BD	BF	BG	BH	BE	BE	AW	BI	AW	AW	Z ₂	BE	BJ	BE	BK		BL	BL	
MOUTH	H	H	H	H	H	H	H	H	H	H	H/R	H	H	H	H	H	H	T	H	W	U	V	V	W	V	W	R	H	H	H	H	X	H	
NAIL	YY	ZZ	ZZ				MM	MM	MM		MM	AB		AB		AB	AC	AB		AD		AE	XX	AF			MM	YY	YY	AG	MM	AD	LL/AH	
NAME	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	Q	A	R	A	S	A	T	T	U	V	U	W	A	A	A	A	A	V	
NECK	R	R	AI	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	AK	AL	AL	AL	GG	AM	AL	GG	GG	AM	GG
NEW	QQ	QQ	QQ	MM	MM	MM	MM	MM	RR	RR	SS	TT	MM	RR	UU	UU	UU	VV	WW	XX	YY	XX	YY	ZZ	XX	ZZ		AB	AC	PP	AD	AE	AF	
NIGHT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	AE	TT		TT	TT	TT	TT	TT	TT	TT	AF	TT	AG	SS	AG
NOSE	X	T	T	T	T	T	T	T	T	T	T	T	T	T	T	Y	T	T	T	T	T	T	T	T	T	Z	AA	T	T	T	T	T	BB	
ONE	KK	LL	KK	MM	MM	MM/NN	OO	MM	NN	AA	NN	AA	MM	AA	MM	MM	MM	AA	AA	AA	OO	LL/K/	MM	NN	NN/X	K	NN	AA	PP	NN	K	K	K	AA
RAIN	MM	L	L				JJ	KK		II	II	II				II	II	II		NN		OO	KK				KK		II	II	II	PP	II	
RED	PP	AE	AF	AE	AE	AE	AG	AG	AH	AG	AH	AG	AH	AG	AG	AH	AG	AH	AH	AI	PP		VV	AJ	AK	P ₃		AK	AM	AN	AN	VV	AO	
ROAD	BC	BD	BE	LL ₂	LL ₂	BF	LL ₂	LL ₂	BF	BG	BG	BH	BH	BJ	AT	AT	BJ	BJ	AT	AT	AT	AT	BG	BK	BK	BK	AT	AT	AT	AX	AT	BL	BL	
ROOT						LL		MM								FF	OO	OO	PP				FF	FF	FF		QQ	AA	FF	AA	RR	SS	FF	
SAND	VV	VV	ZZ	VV	VV	VV	AD	AE	AE	AE	AF	AG	AF	AG	AG	AH	AI	AJ	V ₂	V ₂	AK	AL	AM	AM		AM	AN	VV	AO	AL	VV	AN	AP	
SAY	A ₂	AF	AG	AH	AH	AI	C ₂	C ₂	NN	NN	AK	C ₂	AK		C ₂		O ₂	NN	YY	O ₂	AL	AM	AM	AN	AO	AP		FF	O ₂	AQ	C ₂	AR	AS	
SEE	PP	PP	PP	VV	VV	VV	O ₂	AD	PP	PP	AE	AE	AF	AG	AH	AH	PP	AF	AF	AF	AI	AE	AF	AE	AE	AE	AJ	T ₂	AI	AK	AL	AH	KK	
SEED	TT	PP	PP	TT	TT	TT	II	TT	II	II	TT	UU	TT	VV	VV	VV	VV	VV	WW	WW	XX		TT	TT	TT	NN	II	II		YY	ZZ	AB		
SIT	AE	XX	AB	XX	XX	XX	XX	AF	AG	AG	AG	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	AB	XX	XX	AH	XX	XX	XX	AI	XX	AB	AJ	AK
SKIN (human)	AE	AF	AG	AE	AE	AH	AI	AI	HH ₂	HH ₂	KK ₂	AJ	AJ	AJ	AJ	AJ	AJ	AK	AK	AL	AM	KK ₂	D ₂	AN	AO	AN	AJ	KK ₂	AP	AQ	AR	AS	AE	
SLEEP	AU	AV	AI	AI	AI	AI	AI	AI	AI	AI	AI	AI	AI	AW	AX	AX	AX	AY	AP	AP	AP	AI	AX	AX	AX	AX	AZ	BA	BC	AP	AP	AP	AP	
SMALL	H	AY	AZ	XX ₂	XX ₂	BA	BC	BC	BD	BE	BF	BF	BF	BG	BH	BI	BF	BJ	BK	BD	BL		BM	BN	BN	BN	AF	BO	BH	BD	BP	BL	—	
SMOKE	TT	UU	UU	KK	KK	KK	KK	KK	VV	VV	VV	WW	WW	XX	XX	XX	XX	YY	UU	ZZ	AB	AC	AD	AE	AF	AE	UU	AG	AH	AI	UU	AJ	AK	

	Masa	Banana	Lame	Peve	Zime-D		Kera	Kabalay	Lele	Tumak	Sokoro	Ubi	Mokilko	Bidiya	Dangla	Birgit	Migama	Mabire	Zirenkel	Mubi	Kajakse
MEAT	II	II	II	II	II		QQ	RR	VV	SS	TT		VV		KK	UU	UU	UU	KK	KK	KK
MOON	W	W	W	W	W		EE	EE	EE	EE	FF	GG	W	HH	HH	W	HH	W	II	W	W
MOUNTAIN	BM	BM	AW	AW	AW		BN	BO		AP	AW		BP		—	BQ	BQ	BQ	AW	AW	BR
MOUTH	Q	Q	Q	Q	Q		Y		Y	G	P	Z	G	P	P	P	P	P	P	P	P
NAIL	KK	C ₃					AH	AI	AB	MM	AJ	AK	AL	O	O	AM	MM	AL	AN	AN	AC
NAME	A	A	A	A	A		A	X	Y	A	A	A	A	A	A	Z	A	AA	A	A	A
NECK	AO	AO	AP	AP	AM		R	AQ	R	AR	AR	AR	AS	AT	AU	AV	GG	GG	GG	GG	GG
NEW	XX	XX	AG	AG	AG		AH	OO	OO	OO	AI	AJ	YY	AJ	AK	AJ	AL	AM	AN	AO	—
NIGHT	AH	AI	AI	AI	AI		AJ	AK	AL	AM	TT	AN	AO	AP	AQ	—	AQ	AQ	AR	AO	AS
NOSE	T	T	T	T	T		T	T	T	T	CC	CC	DD	T	T	T	T	CC	T	T	T
ONE	MM	K	QQ	QQ	QQ		Y	RR	RR	Y	AA	RR	SS	TT	UU	AA	TT	TT	RR	RR	RR
RAIN	HH	HH	QQ		II		RR		SS	TT			U				II				
RED	AP	AP	AP	AP	AP		AO	AQ	AQ	AR	AS	AT	PP	P ₃	AU	AV	PP	P ₃		AV	AV
ROAD	BM	BL	BN	BO	BO		U	BP	BP	BQ	BR	N	BS	N	BT	BU	BT	N	BT	BT	BP
ROOT	TT						UU	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	VV	FF	FF	FF
SAND	YY	YY	AQ	YY	YY		AR	AS	AT	AU	AV	AW	AX		AY	AZ	AY	AZ	BA	AZ	BC
SAY	AT	AT	C ₂	C ₂	C ₂		AP	AR	AR	AR	C ₂	O ₃	AU	AV	C ₂	AV	AW	AX	AY	AY	AZ
SEE	AM	AN	AA ₂	AA ₂	AA ₂		AO	CC ₂	CC ₂	AG	RR	PP	AL	AP	AP	AR	AR	AP	AQ	AQ	AQ
SEED	YY	AC	AD	AE	AC			AF	AF		AG	AH		AI	AI	AJ		AI	AI	AK	AI
SIT	AL	AM	AB	AB	AB		AN	XX	XX	AO	AP	AQ	AR	M	M	AS	AT	AT	BB	AU	AV
SKIN (human)	UU	UU	AT	AT	AT		AU	AV	AW	AX	AY	AU	AY	AZ	BA	BC	BD	BA	BD	BD	BE
SLEEP	AP	AP	AP	AP	AP		AI	AI	AI	BD	BE	BE	BF	BE	BE	BE		BE	BE	BE	BE
SMALL	BM		BN	—	—		BO	BQ	BR	—		BS	BT	BU	BS	BV	XX ₂	XX ₂	BS	BW	BV
SMOKE	AL	AL	AM	AM	AM		AN	AN		AO		AP	AO	AP	AQ	AR	AQ	AP	AS	AS	AS