APPENDICES

APPENDIX A: Instructions and description of action and adjective indicators in English and Northern Sotho

Today we are going to teach you some new ways to read words. We are going to show you some pictures. Each picture has a meaning, just like a word we write down has a meaning. When we show you this picture ______, what does it mean? Yes, it is a house! Some of these pictures will be easy to understand and some will be difficult. We will explain and teach you to understand these pictures. Before we start, there are two important things you have to know first. There are two signs that you have to look out for in the pictures. The first sign is this one: ^ This sign means that the picture means a word for something we can actually do. Can you think of things we can do? (Wait for response & acknowledge or correct). Good. When you see this sign in one of the pictures, remember the word is a doing word.

The second sign you have to remember looks a lot like the first one, so don't get mixed up! This one looks like this (v). When you see this sign, it means that the word tells us more about something - how something looks or what it feels like. These are words like: ugly, or beautiful (because these words tell us how something looks, doesn't it?) or words like hard or soft (because they tell us what something feels like, doesn't it?). Can you think of more words? (wait for response & acknowledge or correct). Good. We will start now. We will show you the pictures while we explain them. Please listen very well and do not talk to your friends while we are explaining the pictures.

Leswao la bobedi le nyakile go swana le la pele, bjale o se ke wa kopanya. Le le bjalo (v) ge o bona leswao le, tseba gore lentsu le re botsa ka sengwe gore se bjang. Mantsu a go swana le gobefa bo botse mantsu a re botsa gore sengwe se bjang. Ga go bjalo? Bothata le boleta a re botsa gore se kwagala bja? A o ka gopola mantsu a mangwe? (emela phetolo goba swaya). Gabotse. Re a thoma bjalo. Re tla le bontsha seswantsha ge re ntse re hlalosa. Theeletsa gabotse o se bolele le mogwera ge re ntse re hlalosa diswantsho.

APPENDIX B:

Description and translation of Blissymbols used during training in English and Northern Sotho

1. This picture means "spring". This big circle is the sun. The number 1 means that spring is the first season. The flower and the arrow pointing up, means that the flowers grow in this season. When you see this picture, remember that it is the season when the flowers starts to grow - "spring". What is this? (wait for response). Yes it means "spring"

Seswantsho se se ra seruthwana. Nkgokolo e kgolo e ke letsatsi. Nomoro ya pele e ra gore seruthwana ke sehla sa pele. Letsoba le ntlhana e lebeletsego godimo di ra gore matsoba a mela setlheng se. Ge o bona maswao a gopola gore mo setlheng se matshoba a thoma go mela seruthwana. Ke eng se? (Ema) E ke seruthwana.

2. This pictures means "beautiful". This is an eye that sees the beauty. This is the heart that is happy. The eye sees the beauty and happiness of the heart. Do you see this sign (v)? This sign means that the picture tells us something more about the word, what it looks like, what it feels like. When you see this remember it means that it is something pretty to the eye - "beautiful". What is this? (wait). Yes, it means "beautiful".

Seswanso se se ra gore botse. Le ke leihlo le bona go botse. Ye ke pelo e thabilego. Leihlo le bona botse le lethabo la pelo. A o bona leswao le (v)? Seswantsho se re botsa sengwe ka lentsu le, le bjang? Ke le kwa bjang. Ge o bona leswao le gopola gore le ra gore selo ke se sebotse ge o se lebelela. Ke eng se? (Ema) E le ra gore botse.

- 3. This picture means "flower". This is the face of the flower and this is the stem. When you see this picture, remember it means "flower". What is this? (wait). Yes, it is a "flower".
- Seswantsho se ke matsoba. Se ke sefahlego sa letsoba gape se ke kutu ya letsoba. Ge o bona seswantsho se ke matsoba. Ke eng se? (Ema) E, ke matsoba.
- 4. This picture means "summer". The big circle is the sun, and the number two means that summer is the second season. This sign means that it is hot. Can you see how the steam rises because of the heat? When you see this picture, remember that it is the season when it is hot- "summer". What is this? (wait). Yes, it means "summer".

Seswantsho se ke selemo. Nkgokolo e kgolo ke letsatsi, pedi e emetse gore selemo ke setlha sa bobedi. Leswao le le ra gore go a fisa. A o bona ka moo stim se yago godimo ka baka la go fisa? Ge o bona leswao le gopola gore go a fisa. Ke selemo.

Ke eng se? (Ema) Ke selemo.

5. This picture means "plant". This is the flower, the stem and the leave of the plant. When you see this picture, remember it means "plant". What is this? (wait for response). Yes, it is a "plant".

Seswantsho se ke se dimela. Se ke letsoba, kutu le lehlare tsa dimela. Ge o bona seswantsho se gopola gore ke dimela. Ke eng se? (Ema) Ke dimela.

- 6. This means "grow". This is a flower and the arrow shows that the flower is going up. Can you see this sign (^)? When you see this sign, it means that the word is a doing word. It means that the word means something we can do like run, walk, sleep. When you see this picture, remember that is means to "grow". What is this? (wait). Yes, it is "to grow".
- Se se ra gola. Se ke letsoba, lerumo le bontsha letsoba le ya godimo. A o bona leswao le (^)? Ga o bona leswao le , le ra gore lentswe le dira lentswe. Ke gore le emetse se sengwe seo re ka se dirago bjalo ka sepela, kitima, robala. Ge o bona seswansho se gopola gore se emetse go gola. Ke eng se? (Ema) E, ke go gola.
- 7. This means "mother". This is a woman because it is a person wearing a dress. This is the roof of the house, showing us that she protects us. When you see this, remember it means the woman who protects us "mother". What is this? (wait). Yes, it means "mother".

Se ke gore mma. Se ke mosadi ka gobane ke motho o aperego roko. SE ke marulelo a ntlo, go bontsha gore o a re sireletsa. Ga o bona se gopola gore ke mosadi yo a re sireletsago mma. Ke eng se? (Ema) E, ke mma.

8. This picture means "in". Can you see that the little dot is inside the box? When you see this picture, remember that it means "in". What is this? (wait). Yes, it means "in".

Seswantsho se se re ka gare. A o bona nkgokolo ye ka gare ga lepokisi? Ga o bona seswantsho se, gopola gore ke ka gare. Ke eng se? (Ema) E, ke ka gare.

- 9. This picture means "green". This is an eye and this is a piece of grass. The eye sees the colour of the grass and grass is green. When you see this picture of the eye looking at the grass, remember it means the colour "green". What is this? (wait). Yes, it means "green".
- Seswantsho se ke botalamorogo. Se ke leihlo, le bjang. Leihlo le bona mebala ya bjang. Bjang ke bjo botala. Ga o bona seswantsho se lebeletsego bjang, gopola ke gore boralamorogo. Ke eng se? (Ema) E, ke botalamorogo.
- 10. This picture means "blue". This the eye again that sees the colour. Can you see this stripe? It is the stripe that shows us the sky because it is high up. What colour is the sky? Yes, it is blue. When you see this picture of the eye looking at the sky, remember it means "blue". What is this? (wait). Yes, it means "blue".

Seswantsho se ke botalalerata. Se ke leihlo le bonago mmala. A o bona mothalo o?

Ke mothalo o bonshago maru ka gobane le godimo. Mmala wa leratadima o bjang? E, o botalalerata. Ga o bona seswantsho se sa leihlo se lebeletse leratadima, gopola le ra gore botalalerata. Ke eng se? (Ema) E, ke botalalerata.

11. This picture means "in front of". The little dot is in front of the line. Can you see that? When you see this picture, remember it means "in front of". What is this? (wait). Yes, it means "in front of".

Se ke seswantsho sa mo pele ga. Nkgokolwana e mo pele ga mothalo. A o a e bona? Ga o bona seswantsho se, gopola gore le re mo pele ga. Ke eng se? (Ema) E, ke pele ga.

12. This picture means "out". Can you see the dot that was inside the box, is now on the outside? When you see this picture, remember it means "out". What is this? (wait). Yes, it means "out".

Seswantsho se ke ntle. A o bona kgokolo e ebego e lego ka gare ga lepokisi, bjalo e ka ntle? Ga o bona seswantsho se, gopola gore le ra gore ntle. Ke eng se? (Ema) E, ke gore ntle.

13. This picture means "teacher". This is a person. This sign is a hand. Can you see it holding something? There is a arrow going up from the hand. It means the hand is giving something. This sign means all the things you know. This is your head full of the things you learn in school. When you see this picture, remember it means the person who gives you all these things you know from school. That person is your "teacher". What is this? (wait). Yes, it means "teacher".

Seswantsho se ke gore morutisi. Se ke motho. Leswao le ke seatla. A o bona le swere sengwe? Go na le lerumo le yago godimo go tswa leswaong la seatla. Ke gore seatla sefa sengwe. Leswao le ra dilo ka moka tseo o di tsebago. Ye ke hlogo ya gago e tletsego dilo tseo o ithutago tsona sekolong. Ga o bona seswantsho, gopola ke motho yo a go fago dilo ka moka o di tsebago sekolong. Motho yoo ke morutisi. Ke eng se? (Ema) E, ke morutisi.

14. This picture means "sick". This is the sign again that tells us more about how something feels, or looks like, remember? This is a person lying on his back, curling his legs up because of pain. When you are sick, you usually have pain, don't you? When you see this picture, remember it means "sick". What is this? (wait). Yes, it means "sick".

Se ke seswantsho sa go babja. Se ke leswao le le re botsago ka moo maikutlo a motho a lego ka gona, gopola? Se ke motho e robetse ka mokokotlo o hlabile mankokwana ka baka la bohloko. Go a bona seswantsho se, gopola gore le ra gore babja. Ke eng se? (Ema) E, ke babja.

15. This picture means "ambulance". This is the sign for a car. Can you see the wheels of the car and the steering wheel? This is the medical sign again. Remember when you see this, that it is the medical car - an "ambulance". What is this? (wait) Yes, it is an "ambulance".

Seswantsho se se ra ampulanse. Leswao le ke la koloi. A o bona mastwana a koloi le seferebelo. Le ke leswao la ngaka. Gopola ga o bona se ke koloi ya balwetse ampulanse. Ke eng se? (Ema) E, ke ampulanse.

16. This picture means "doctor". This is a person standing. This is the sign for something medical. It is the snake curling around the staff of Moses in the desert when all the people were healed, remember? When you see this, remember it is the person that gives you medicine - the "doctor". What is this? (wait). Yes, it means "doctor".

Seswanthso se ke sa ngaka. Yo ke motho o emeng. Se ke leswao la sengwe sa kalafo. Ke noga ye e menaganego. Ge o bona seswantsho se, gopola ke ngaka. Ke eng se? (Ema) E, ke ngaka.

17. This picture means to "cough". This is the sign that means that this is a doing word, it is something we can do. This is a mouth. This sign means wind blowing hard. When you see this sign, remember it means wind that is coming from the mouth quickly - it means that you "cough". What is this? (wait). Yes, it means to "cough".

Se ke seswantsho sa go gohlola. Se ke leswao le bontshago gore lentsu le le a dira. Ke sengwe seo re ka se dirago. Se ke molomo. Leswao le ke moya o fokago kudu. Ge o bona leswao le, gopola gore ke moya o tswago molomong ka pela. Ke gore o a gohlola. Ke eng se? (Ema) E, ke gohlola.

18. This means to "lie down". This is the sign that means that it is something we can do - a doing word. This is the persons legs and feet lying on the bed. When you see this sign, remember it means to "lie down". What is this? (wait). Yes, it means to "lie down".

Se se ra gore go robala. Se ke leswao le rego sengwe re ka se dirago. Lentsu le dirago. Se ke maoto a motho o rebotsego malaong. Ge o bona leswao le, gopola le ra gore robala. Ke eng se? (Ema) E, ke robala.

19. This means "white". This is the eye seeing the colour. This is the picture for water and this is the sign for a snowflake falling from the sky. Together it is the sign for snow. The colour of snow is white. When you see this picture, remember it means "white" - the colour of snow. What is this? (wait). Yes, it means "white".

Se se ra tshweu. Se ke leihlo le bonago mmala. Se ke seswantsho sa meetsi le leswao la e wa go tswa marung. Ka moka ke maswao a kapoko. Mmala wa kapoko ke o mosweu. Ge o bona seswantsho se, gopola ke tshweu - Mmala wa. Ke eng se? (Ema) E, ke tshweu.

20. This means "healthy". This is the sign that tells us that this picture tells us more about what this thing feels like. This is a person standing up and holding his arm up, making his muscles. This means that he is strong and healthy. When you see this, remember that it means "healthy". What is this? (wait). Yes, it means "healthy".

Se ke ka fola. Leswao le re botsa gore seswantsho se se re botsa gore selo se ikutlwa bjang. Se ke motho o eme a emesitse diatla a itshudula. Se se ra gore o na le maatla o phetse gabotse. Be o bona leswao le, gopola le ka fola. Ke eng se? (Ema) E, ke ka fola.

Paragraph 2

- 1. This means "brother". This is the legs of a boy. He is under the roof of the house that protects him. Can you see there is a number 2 next to him? This means he is the number 2 child of the family, not as important as you are (you are number 1). When you see this, remember it means the boy in your house your "brother". What is this? (wait). Yes, it means "brother".
- Se se bolela gore buti. A ke maoto a mosemane. O ka tlase ga marulelo a ntlo a o a mo sireleditsego. Na o a bona go na le nomoro 2 kgauswi le yena? Se se ra gore ke ngwana wa bobedi ka lapeng empa yo a sego bohlokwa bjalo ka wena (wena o wa pele). Ge o bona se gopola gore se bolela mosimane wa geno but wa gago. Ke eng se? (Ema). Eng ke buti.
- 2. This means "bus". Can you see that it has 3 wheels. When you look at a bus from the side, it has more wheels than a car, right? When you see this, remember it means "bus". What is this? (wait). Yes, it means "bus". Se ke bese. Na o a bona gore e na le maotwana a mararo? Ge o lebelela ka thoko, e na le maotwana ao a fetago a koloi ke nnete? Ge o bona se gopola se ra gore bese. Ke eng se? (Ema) Eng se ra gore bese.
- 3. This picture means "laugh". Here is the sign again that means that it is something we can do. This is a heart and a arrow that goes up. It means that your heart is happy. This is a mouth. What do we do with our mouths when we are happy? We laugh. When you see this picture, remember it means to "laugh". What is this? (wait). Yes, it means to "laugh".
- Seswantsho se se ra sega. Ke leswao gape leo le re botsago gore ke sengwe sereka sedirago. Se ke pelo ke leswao lerumo le supilego godimo. Go ra gore pelo ya gago e thabile. Se ke molomo. Re dira eng ka melomo ya rena ge re thabile? We a sega. Ge o bona seswantsho se, gopola gore se ra go sega. Ke eng se? (Ema) Eng se re go sega.
- 4. This picture means to "sing". Here is the sign again meaning that it is something we do. This is a mouth and this is a music note the notes we write music with. When you see this picture, remember it means the mouth is giving us music it "sings". What is this? (wait). Yes, it means "sing".
- Seswantsho se se ra go opela. Se ke leswao gape le le reng ke selo seo re se dirago. Se ke molomo gomme se ke noto yammino yeo re ngwalago mmino ka yona. Ge o bona seswantsho se, gopola se re molomo o refa mmino o a opela. Ke eng se? (Ema) Eng, se re opela.

- 5. This picture means to "kiss". This is the sign that means this is a doing word. This is a mouth and this is a mouth. When we put two mouths together, we kiss. When you see this, remember that it means to "kiss". What is this? (wait). Yes, it means to "kiss".
- Seswantsho se se ra suna. Le ke leswao leole rego ke lediri. Se ke molomo le se ke molomo. Ge re kgomaganya melomo re a suna. Ge o bona se gopola gore se ra suna. Ke eng se? (Ema) Eng se re suna.
- 6. This picture means to "give". This is the sign that means we are doing something. This is a hand holding something. This is a arrow going up from the hand, which means something is going away from the hand. When you see this, remember that it means to "give' something. What is this? (wait). Yes, it means to "give".
- Seswantsho se se ra mofa. Le ke leswao leo le rego re dira selo. Se ke letsogo le swerego selo. Le ke lerumo le suilego godimo go tswa letsogong, seo se ra gore selo se a tswa letsogong. Ge o bona se gopola gore se ra gofa selo. Ke eng se? (Ema) Eng se re mofa.
- 7. This means "big". This is the sign that tells us more about what something looks like, remember? This is a big, tall stripe. When you see this, remember it means "big". What is this? (wait). Yes, it means "big". Se ke gore kgolo. Le ke leswao leo le re botsago gore selo be bjang gopola? Se ke mothaladi o mogolo o motelele. Ge o bona se gopola gore ke gore kgolo. Ke eng se? (Ema) Eng ke gore kgolo.
- 8. This picture means "it". "It" is a very short word and the picture that means "it" is also a very short stripe. When you see the short little stripe, remember it means "it". What is this? (wait). Yes, it means "it". Seswantsho se se re e. Ke lentsu le le kopana gomme seswantsho se ra gore e. Ke mothaladi o mokopana. Ge o bona mothaladi yo o monyenyane o mokopana gopola o ra gore e. Ke eng se? (Ema) Eng ke gore e.
- 9. This means "us". This is a person. The most important person is yourself, that is why there is a number 1 next to the person. Can you see the "X" sign on top of the person? It means that there is more than one. That means that the picture means that it is us. When you see this, remember that it means that there is more than one person with you it is "us". What is this? (wait). Yes, it means "us".
- Se ke gore re. Yo ke motho. Motho yo bohlokwa ke wena ke ka lebake leo go nago le nomoro 1 kgauswi le motho. Na o bona leswao le 'x' godimo ga motho? Se se na gore go na le batho ba bansi. Seswanthso se se ra gore re. Ge o bona se gopola gore se ra gore yo na le batho ba bantsi bao ba nago le wena. Ke re. Ke eng se? (Ema) Eng ke gore re.
- 10. This picture means "like". This is the sign that means that this picture is something we can do. This is a heart. We feel with our hearts, don't we? This is a

"+" sign which means that it is a good feeling. This sign means that it is very good. When you see this picture, remember that it means to have a very good feeling about something, it means that you "like" it. What is this? (wait). Yes, it means to "like".

Seswantsho se se re rata. Le ke leswao leo le tiisago gore ke selo seo re ka kgonago go se dira. Ye ke pela. Re kwa ka pelo, na ga go bjalo? Leswao la '+' leo le rego ke maikutlo a mabotse. Leswao le le re go botse kudu. Ge o bona seswantsho se, gopola gore se re o na le maikutlo a mabostse ka selo, gape o a se rata. Ke eng se? (Ema) Eng ke gore rata.

11. This picture means "you". This is a person and this is number 2. When you talk to somebody, you are not talking to yourself, but saying "you are nice, or you are bad". This means that that person is not yourself (which will be number 1), but he is person number 2. When you see this picture of a person with the number 2, remember that it means "you".

Seswantsho se ke gore o. Yo ke motho wa bobedi. Ge o bolela le motho ga o ipoledise ge o re o a kgahlisa goba ga o a loka. Se se ra gore motho yo a se wena (yo e ka bago nomoro 1) empa ke motho wa bobedi. Ge o bona seswantsho sa motho le nomoro 2, gopola gore ke o. Ke eng se? (Ema) Eng ke gore o.

- 12. This means "sit". This is the sign that means that it is a doing word. Can you see that this looks like a persons' body sitting on a chair? When you see this, remember that it means "sit". What is this? (wait). Yes, it means to "sit". Se ke gore dutse. Le ke leswao leo e lego lediri. Na o a bona gore se se swana le mmele wa motho o dutse setulong? Ge o bona se gopola gore se re dutse. Ke eng se? (Ema) Eng ke gore dutse.
- 13. This picture means the "right" side. This is the sign that means that the picture is a word that tells us more about what something looks like, remember? This arm of this line is pointing to the right side, can you see that? When you see this line with the little arm pointing to the right side, remember it means your "right" side. What is this? (wait). Yes, it means "right".

Seswantsho se se re letsogong la go ja. Le ke leswao leo le re botsago gore seswantsho se re botsa gore selo se bjang, gopola? Letsogo la mothaladi o le sapile ka letsogong lago ja na o bona seo? Ge o bona mothaladi le letsogwana le supilego letsogong la go ja gopola gore ke gore letsogaong la go ja. Ke eng se? (Ema) Eng ke gore letsogong la go ja.

14. This picture means "left" side. It is almost the same as the on before, but look, the little arm of the stripe is pointing to the left side. When you see this, look carefully to which side the little arm is pointing. Remember it means "left" side. What is this? (wait). Yes, it means "left" side.

Seswantsho se se re letsogong la nngele. Se swana le se sa pele feela lebelela letsogwana la mothaladi le supile ka letsogong la nngele. Ge o boan seo lebelela ka hlokomelo gore letsogwana le supile ka letsogong lefe. Gopola se ra gore letsogong la nngele. Ke eng se? (Ema) Eng se ra gore letsogong la nngele.

15. This picture means "small". Can you see the sign that means that this picture is a word that tells us more about what another thing looks like? This is a small stripe. When you see this little stripe, together with this sign, it means "small". What is this? (wait). Yes, it means "small".

Seswanthso se re monyenyane. Na o bona leswao leo le re botsago gore seswantsho se ke lentsu leo le re hlathallelago ka botalo sebopego sa dilo? Yo ke mothaladi o monyenyane. Ge o bona mothaladi o monenyane, go tee le leswao le dira gore monyenyane. Ke eng se? (Ema) Eng ke gore monyenyane.

16. This picture means "angry". Here is the sign that means that this picture tells us more about how something or somebody feels. This is the heart that means a feeling again. This sign (X) means that there is a lot of feelings. But look at this (<<). This means that it is going against something and that it is not very good. When you see this picture, remember that it means to have a lot of bad feelings against somebody - it means "angry". What is this? (wait). Yes, it means to be "angry".

Seswantsho se se re befelwa. Le ke leswao leo le re botsago go fetisa ka maikutlo a selo goba a motho. Ye ke pelo yeo e rego maikutlo. Leswao la 'x' le re botsa gore go na le maikutlo a mantsi. Empa lebelela se . Se se bolela gore selo se kgahlono le se sengwe gomme ga go a loka. Ge o bona seswantsho se gopola gore go bale maikutlo a mabe ka yo mongwe - ke gore befelwa. Ke eng se? (Ema) Eng ke gore befelwa.

17. This means to "run". This is the sign that means this is a doing word. These are legs. This arrow shows that the legs are going forward. This (!) sign means that it is going forward very fast. When you see this, remember that is means legs that are going forward very fast - it means "run". What is this? (wait). Yes, it means to "run".

Se ke gore kitima. Le ke leswao le le re botsago gore ke lediri. A ke maoto. Lerumo le le laetsa gore maoto a ya pele. Leswao le 1 le ra gore leoto le ya pele ka lebelo le legolo. Ge o bona se, gopola gore maoto a ya pele ka lebelo - ke gore kitima. Ke eng se? (Ema) Eng ke gore kitima.

18. This means to "catch". This is the sign that means it is a doing word. This is a hand waiting to catch something. The arrow points into this hand which means that this person is getting something. When you see this, remember it means to get something in your hand - to "catch" something. What is this? (wait). Yes, it means to "catch".

Se se ra gore swara. Le ke leswao le re botsago gore ke lediri. Letsogo le le letetse go swara selo. Lerumo le supile seatleng seo se se bolelago gore motho yo o hwetsa selo. Ge o bona se gopola gore ke gore go amogele sengwe letsogong la gago - go swara selo. Ke eng se? (Ema) Eng ke gore go swara.

19. This means "good". This is a heart that means it is about a feeling. This is the sign that means it is a very good feeling (+!). When you see this, remember it

means "good". What is this? (wait). Yes, it means "good".

Se ke gore go loka. Ye ke pelo eyo e re botsago ka maikutlo. Le ke leo le re botsago gore ke maikutlo a go loka (+!). Ge o bona se gopola gore ke gore go loka. Ke eng se? (Ema) Eng ke gore loka.

20. This means "aeroplane". This is a wheel and this is a bird - so it is some kind of transport that can fly. When you see this, remember it means "aeroplane". What is this? (wait). Yes, it means "aeroplane".

Se ke gore sefofane. Se ke lwotwana gomme se ke nonyane ke mohutu o mongwe wa dinamelwa wo o ka fofago. Ge o bona se, gopola gore ke gore sefofane. Ke eng se? (Ema) Eng ke gore sefofane.

Paragraph 3

1. This means "student". This is a person. This sign looks like a hand, can you see it holding something? There is an arrow that shows down, like something going into the hand. It means that the person is getting something. This sign means all the things you know. This is your head full of the things you learn in school. When you see this picture, remember it means a person who gets all these things you know from school. That person is "student". What is this? (wait). Yes, it means "student".

Se ke gore moithuti. Yo ke motho. Leswao le le swana le letsogo na o a bona le swere selo? Go na le lerumo leo le lebeletsego fase, bjalo ka selo seo se tsenago letsogong. Ke gore motho o amogela se sengwe. Leswao le le ra dilo tse o di tsebago. Ye hlogo ya gago ye e tletsego dilo tseo o ithutago sekolong. Ge o bona seswantsho se gopola gore se ra motho yo a hwetsago dilo tse o di tsebago go tswa sekolong. Motho yoo ke moithuti. Ke eng se? (Ema) Eng ke moithuti.

- 2. This means "nurse". This is a person. This is the sign for protection and this is the medical sign. When you see this, remember it is the person who protects us with medical care a "nurse". What is this? (wait). Yes, it is a "nurse". Se ke gore mooki. Yo ke motho. Le ke leswao la tshireletso gomme le ke leswao la kalafo. Ge o bona se, gopola gore ke motho yo a re sireletsago ka hlokomelo ya kalafo ke mooki. Ke eng se? (Ema) Eng ke mooki.
- 3. This means "hospital". This is building and this is the medical sign. When you see this, remember it is the place where you go to get medical attention the "hospital". What is this? (wait). Yes, it means "hospital". Se ke gore bookelong. Se ke moago gomme se ke leswao la kalafo. Ge o bona se, gopola gore ke lefelo leo o hwetsago hlokomelo ya kalafo ke bookelong. Ke eng se? (Ema) Eng ke gore bookelong.
- 4. This picture means "I". Can you see that this is a person. There is a number 1 next to the person. That is because when you talk about yourself, you

are the number 1 person, the most important person. When you see this, remember that it means "I". What is this? (wait). Yes, it means "I".

Seswantsho se ke gore ke. Na o a bona gore ke motho? Go na le nomoro 1 kgauswi le motho. Ke ka lebaka la gore ge o ipolela o wa pele - motho yo bohlokwa. Ge o bona se, gopola gore ke gore ke. Ke eng se? (Ema) Eng ke gore ke.

- 5. This means "happy". Here is the sign that shows us that this word tells us more about what someone or something is feeling, remember? This is a heart. We feel with our hearts, don't we? There is an arrow next to the heart going up. When we feel "up" we feel happy. When you see this, remember that it means to be "happy". What is this? (wait). Yes, it means "happy".
- Se ke gore thaba. Le ke leswao leo le re botsago ka tao motho kapuselo se ikwang. O a gopola? Ye ke pelo. Re ntsha maikutlo ka pelong, ga gobjalo? Go na le lerumo le le supilego godimo kgauswi lepelo. Ge maikutlo a le godimo re a thaba. Ge o bona se, gopola gore ke gore go thaba. Ke eng se? (Ema) Eng ke gore go thaba.
- 6. This means "car". This is a car when you look at it from the side with the 2 wheels that you can see. When you see this, remember it means "car". What is this? (wait). Yes, it is a "car".

Se ke gore koloi. Ye ke koloi yeo e nago le maotwana a mabedi ge o e lebelela go tswa ka leglakoreng. Ge o bona se gopola ke gore koloi. Ke eng se? (Ema) Eng ke gore koloi.

- 7. This means "winter". This big circle is the sun, and the number 4 means that winter is the fourth season after spring, summer, and autumn. This is the sign for snow. This is frozen water coming down from the sky. When you see this, remember it means the season when it is cold "winter". What is this? (wait). Yes, it means "winter".
- Se ke gore marega. Nkgokolo ye ke letsatsi gomme nomoro 4 e re botsa gore marega ke sehla sa bone se latelago lehlabula, selemo le seruthwana. Le ke leswao la kapoko. A ke meetse a kgahlilego a nago a e tswa godimo. Ge o bona gopola gore ke sehla sa go tonya marega. Ke eng se? (Ema) Eng ke gore marega.
- 8. This means "cold". This sign means that it tells us about what something feels like. This is water that has frozen it is ice. Ice is something that is cold. When you see this block of ice and this sign, remember that it means "cold". What is this? (wait). Yes, it means "cold".

Se ke gore tonya. Leswao le le re botsa fao selo se ikwang ka gona. A ke meetse a kgahlilego - ke aese. Aese ke selo se se tonyago. Ge o bona setena sa gese le leswao le - gopola gore ke tonya. Ke eng se? (Ema) Eng ke gore tonya.

9. This means "hot". This looks like steam rising from something hot, like hot "pap". Can you see how the steam rises because of the heat? When you see this picture, remember that it is the steam rising from something that is hot. It means "hot". What is this? (wait). Yes, it means "hot".

Se ke gore fisa. Se se swana le setimo se se tswago go selo se fisago bjalo ka bogobe

bja go fisa. Na o bona ka fao setimo se namelelogo ka bu ka la phiso. Ge o bona seswantsho se, gopola gore ke setimo se namelelago go tswa selong sa go fisa. Ke gore fisa? Ke eng se? (Ema) Eng ke gore fisa.

10. This means "**fruit**". This is the piece of fruit and this is the stem. It is hanging from a tree. When you see this, remember it means "fruit". What is this? (wait). Yes, it is "fruit".

Se ke gore dienywa. Se ke seripa di dienywa gomme se ke kala. Se swareletse sehlareng. Ge o bona se, gopola gore ke gore dienywa. Ke eng se? (Ema) Eng ke dienywa.

11. This means "vegetable". This is the vegetable and this is the ground with the root going into the ground. When you see this, remember it means "vegetable". What is this? (wait). Yes, it is "vegetable".

Se ke gore merogo. Se ke merogo o lego mobung le medu e tsenego mobung. Ge o bona se, gopola ke gore merogo. Ke eng se? (Ema) Eng ke gore merogo.

12. This means "autumn". This is the sun and the number 3 means that autumn is the third season after spring and summer. This is a leave coming down-like leaves falling from a tree. When you see this, remember it is the season when the leaves fall from the trees - "autumn". What is this? (wait). Yes, this means "autumn".

Se ke gore lehlabula. Le ke letsatsi gomme nomoro 3 e bolela gore lehlabula ke sehla sa boraro se latego seruthwane le selemo. A ke matlakala a tswago godimo bjalo ka ge e ke a wa mohloreng. Ge o bona se, gopola gore ke sehla seo matlakala a wago - lehlabula. Ke eng se? (Ema) Eng se se ra gore lehlabula.

13. This means to "kneel" down. Here is the sign that means that it is something we do. Can you see this looks like a persons' knees kneeling down on the floor? When you see this, remember that it means to "kneel". What is this? (wait). Yes, it means to "kneel".

Se ke gore khuname. Le ke leswao le glalosago gore ke selo seo re ka se dirago. Na o a bona gore se se lebelelga bjalo ka motho a khuname lebatong? Ge o bona se, gopola gore ke gore khuname. Ke eng se? (Ema) Eng ke gore khuname.

14. This means "yellow". This is an eye that looks at the colour. This is the sign for the sun and the colour of the sun is yellow. When you see this, remember that it is the eye that sees the colour of the sun and that it means "yellow". What is this? (wait). Yes, it means "yellow".

Se se bolela gore serulwane. Le ke leihlo le lebeletsego mmala. Le ke leswao la letsatsi gomme mmala wa letsatsi ke serolwane. Ge o bona se, gopola gore se ke leilo le bonago mmala wa letsatsi gape se ra gore serolwane. Ke eng se? (Ema) Eng ke gore serolwane.

15. This means "brown". This is the eye that sees the colour. This stripe at the bottom means that it is the ground. What colour is the ground outside? Yes.

When you see this, remember that it is the eye that sees the colour of the groundit means brown". What is this? (wait). Yes, it means "brown".

Se ke gore mosotho. Le ke leihlo le bonago mmala. Mothaladi o lego ka fase o bolela gore ke lebato. Mmala wa lebato ke o mo bjang? Eng Ge o bona se, gopola gore leihlo le bona mmala wa lebato - ke gore mosotho. Ke eng se? (Ema) Eng se ra gore masotho.

16. This means the "bottom". Here is a box with an arrow pointing to the bottom of the box. When you see this picture, remember that it means the place where the arrow is pointing - the "bottom". What is this? (wait). Yes, it means the "bottom".

Se ke gore fase. Le ke lepokisi le nago le lerumo le le supilego ka fase ga lepokisi. Ge o bona seswantsho se, gopola gore se re lefelo leo lerumo le supilego ke fase. Ke eng? (Ema) Eng ke gore fase.

17. This means the "top". Here is the same box with the arrow pointing to the top of the box. When you see this, remember that it means "top". What is this? (wait). Yes, it means "top".

Se se ra gore godimo. Mo e sale lona lepokisi le la le lerumo leo le supilego ka godimo ga lepokisi. Ge o bona se, gopola gore se ra gore godimo. Ke eng se? (Ema) Eng ke gore godimo.

18. This means to "climb". Here is the sign again that shows that it is something that we can do. There are the legs of a person. Here is an arrow that is pointing up. When you see this, remember that it means that the legs are going up, they are "climbing". What is this? (wait). Yes, it is to "climb".

Se ke gore namela. Le ke leswao gape leo le re laetsago gore ke seo re ka se dirago. Maoto a motho ke ale. Se ke lerumo le le supilego godimo. Ge o bona se, gopola gore ke gore maoto a ya godimo a namela. Ke eng se? (Ema) Eng se ra gore namela.

- 19. This means "we". This is a person. It is not as important as "I" that was number 1. This is number 2. Can you see the sign on the person (X). This means that there is more than one person. When you see this, remember that it means more than one person, it means "we". What is this? (wait). Yes, it means "we". Se se ra gore re. Yo ke motho. Ke yo bohlokwa bjalo ka ke yoo e lego nomoro 1. Na o bona lesao (x) mothong. Se se ra gore gona le batho ba bantsi. Ge o bona se, gopola gore se bolela gore batho ba bantsi e lego gore re. Ke eng se? (Ema) Eng se se bolela gore re.
- 20. This means to "yawn". This is the sign for when you are doing something. This is a mouth. This is your eyes that are closed when you are asleep. When you see this picture, remember that it means something your mouth is doing when you are sleepy or tired. It means to "yawn". What is this? (wait). Yes, it means to "yawn".

Se se re edimola. Le ke leswao la ge o dira selo. O ke molomo. A ke mahlo a gago a

tswaletswego ge o robetse. Ge o bona seswantsho se, gopola gore ke gore seo molomo wa gago o se dirago ge o kgometsa goba o lapile. Se ra gore edimola. Ke eng se? (Ema). Eng ke gore go edimola.

Paragraph 4

- 1. This means "side". This is a box and the little arrow is pointing to on of the walls of the box. When you see this, look at where the arrow is pointing. It is pointing to the side of the box, that is why this picture means the "side" of something. What is this? (wait). Yes, it means the "side".
- Se ke gore thoko. Le ke lepokisi le lerungwana le le supilego go a mangwe a mabotana a lepokisi. Ge o bona se, lebelela gore lerumo le suile kae. Le supile ka thoko ga lepokisi, ke lebaka lea seswantsho se se rego thoko ga selo. Ke eng? (Ema) Eng ke gore thoko.
- 2. This means to "spit". This is the sign that means it is something we can do. This is a mouth. There is an arrow going from the mouth to the ground. When you see this, remember that it means something coming from your mouth and falling to the ground. It means to "spit". What is this? (wait). Yes, it means to "spit".

Se ke gore go tshwa. Le ke leswao le rego ke selo seo re ka se dirago. Se ke molomo. Go na le lerumo le tswago molong go ya fase. Ge o bona se, gopola gore ke gore selo se tswa ka molomong gomme se wela fase. Ke gore tshwa. Ke eng se? (Ema) Eng ke gore tshwa.

3. This means to "throw". This is the sign that means it is something we can do, remember? This is a hand. Can you see that it looks like it is holding something? This also looks like a hand holding something, but there is an arrow going up and away from the hand. It means that the hand is giving something away. This sign (!) means that it is happening quickly. When you see this, remember that is means to give something away quickly - to "throw" it. What is this? (wait). Yes, it means to "throw".

Se ke gore fosa. Ke selo seo re ka se dirago na oa gopola? Le ke letsogo. Le bonala le ke le swere empa go na le lerumo le supilego godimo kgole le letsogo. Letsogo le lahla. Leswao le (!) le re go diragala ka lebelo. Ge o bona se, gopola gore ke gore go fa selo ka lebelo - go se fosa. Ke eng se? (Ema) Eng ke gore fosa.

4. This means to "kick". This is the sign that means that this is something that we can do. This is the legs of a man. Can you see the arrows are pointing to the foot and to the leg of the man. What can we do with our foot and our leg? Yes. When you see this, remember that it means to "kick". What is this? (wait). Yes, it means to "kick".

Se ke gore raga. Leswao le ke gore ke selo seo re ka se dirago. A ke maoto a

monna. Na o bona lerumo leo le supilego maotong a monna? Na re dirang ka maoto le dinao tsa reng? Eng ge o bona se gopola ke gore raga. Ke eng se? (Ema) Eng ke gore raga.

- 5. This means to "hate". This is the sign that shows us that the word tells us more about what something looks or feels like, remember? This is a heart that shows us that it is a feeling. Here is a sign (-) that shows that it is not a good feeling, and this (!) sign shows us that there is a lot of bad feelings. When you see this, remember that it means to have a lot of bad feelings for something to "hate" something. What is this? (wait). Yes, it means to "hate".
- Se ke gore ga ke rate. Le ke leswao gapo leo le bolelago gore ke selo seso re ka se dirago. Ye ke pelo yeo e rago gore ke maikuto. Pelo e kgoname, seo se rago gore ga e na malkutlo a mabotse. Ge o bona se, gopola gore ke gore ga ke rate. Ke eng se? (Ema) Eng ga ke rate.
- 6. This means "sad". This is the sign that shows us that the word tells us more about what something feels like. This is the heart that shows us that it is a feeling. The arrow next to the heart is pointing down. That means that it is a sad feeling. When you see the heart with the arrow pointing down, remember that it means "sad". What is this? (wait). Yes, it means "sad".

Se ke gore bohloko. Le ke leswao leo le re laetsago ka kudu ka foo selo se ikwago ka gona. Ye ke pelo geo e laetsago maikuthlo. Lerumo le lego kgauswi le pele le supile fase. Seo se re gore ke maikutlo a bohloko. Ke eng se? (Ema) Eng ke gore bohloko.

- 7. This means "sister". This is the dress of a girl. She is under the roof of the house that protects her. Can you see there is a number 2 next to her? This means she is the number 2 child of the family. When you see his, remember it is a girl in your house your "sister". What is this? (wait). Yes, it means "sister". Se ke gore sesi. Ye ke roko ya mosetsana. O ka tlase ga marulelo a ntlo a o a mo sireleditsego. Mao o bona nomoro 2 kgauswi le yena? Ke gore ke ngwana wa bo 2 lapeng labo. Ge o bona se, gopola gore ke gore mosetsana ka geno sesi wa gago. Ke eng? (Ema) Eng ke sesi.
- 8. This means "father". This is a man, can you see his legs? This is the roof of the house, showing us that he protects us. When you see this, remember it means the man who protects us "father". What is this? (wait). Yes, it means "father".

Se ke gore tate. Yo ke monna, na o bona maoto a gagwe? Se ke hlaka ya ntlo, e re laetsago gore o a re sireleltsa. Ge o bona se, gopola gore ke gore monna yo a re sireletsago tate. Ke eng se? (Ema) Eng ke gore tate.

9. This means "play". This is the sign that shows us that it is something we can do. This looks like the little legs of a child. This heart and the arrow showing up means to be happy. When children are happy, they play. When you see this,

19. This means to "stand". Here is the sign again that means it is something we can do. Can you see this looks like a persons' legs who is stand straight up? When you see this, remember it is a person who is "standing". What is this? (wait). Yes, it means to "stand".

Se ke gore ema. Le ke leswao gape leo lewego ke selo se se ka dirwago. Na o a bona se se bopegile bjalo ka maato a motho yo a emego thwii. Ge

o bona se, gopola ke motho yo a emego. Ke eng se? (Ema) Eng ke gore go ema.

20. This means "them". This is a person and this sign (x) means that there are more than one person. The number 3 shows us that we are talking about other people. They are not as important as ourselves (If you talk about yourself, you will be number 1; if you talk about yourself and a friend, it will be number 2). These people are only number 3. When you see the sign for many people and the number 3, remember it means "them". What is this? (wait). Yes, it means "them". Se ke gore bona. Yo ke motho gomme leswao (x) le bolela gore go le batho ba bantsi. Nomoro 3 yona e re botsa gore re boleka ka batho ba bangwe. Ga ba bohlokwa bjalo ka rena. (Ge o polela o tlo ba nomoro 1) Ge o bolela ka wena le mogwera e tlo ba nomoro 2. Batho ba ke nomoro ya 3. Ge o bona leswao le emela batho ba bantsi le nomoro 3, gopola gore ke bona. Ke eng se? (Ema) Eng ke gore bona.

Description and translation of Blissymbols used during training in English and Northern Sotho

The description of each word is presented below. The NS translation is given after the English version.

Paragraph 1

- 1. This picture means "spring". There are 4 seasons and the first season is spring. Do you see the four blocks, each for one season? The first block of the four has a mark in it. When you see the four blocks and the first block marked, remember that it means "spring". What is this? (wait). Yes, it means "spring". Seswansho se ra gore "seruthwane". Go na le dihla tse 4 gomme sehla sa mathomo ke seruthwane. Na o bona diripa tse nne tseo se tee se a emetsego sehla? Seripa sa pele sa tse nne se na le leswao ka gare. Go o bona diripana tse nne le seripa sa pele se swailwe, gopela gore ke gore seruthane. Ke eng se? (Ema) Eng ke gore seruthwane.
- 2. This means "beautiful". This is the world, and a beautiful thing in the world is a flower. When you see this flower growing on the earth, remember that it means "beautiful". What is this? (wait). Yes, it means "beautiful". Se se ra gore "botse". Le ke lefase gomme selo se se botse lefaseng le letsoba. Ge o bona letsoba le mela lefaseng, gopola gore ke gore "botse". Ke eng se? (Ema). Eng ke gore botse.
- 3. This means "flower". You can see that this looks like a flower. Here is the petals and here is the stem. When you see this, remember it means "flower". What is this? (wait). Yes, it means "flower". Se ke gore "matsoba". O ka bona se se swana le letsoba. Se ke letsoba gomme se ke thabe. Ge o bona se, gopola gore ke gore matsoba. Ke eng se? (Ema) Eng ke gore matsoba.
- 4. This means "summer". Summer comes after spring. If spring is the first season, and summer comes after spring, summer is the second season. Can you see the second block of the four blocks is marked. When you see this, remember that is means "summer". What is this? (wait). Yes, it means "summer". Se se ra gore "selemo". Selemo se latela seruthwane. Ge seruthwane e le sehla sa pele gwa latela selemo se se ra gore selemo ke sehla sa bobedi. Ma o bo seripana sa bobedi seo se swailwego go tse tse nne. Ge o bona se, gopola gore ke gore selemo.

Ke eng se? (Ema). Eng ke gore selemo.

- 5. This means "plant". This is the stem of the plant and these are the leaves of the plant. When you see this, remember that it means "plant". What is this? (wait). Yes, it means "plant".
- Se se bolela gore semela. Se ke thabe ga semela gomme tse ke mathakala a semela. Ge o bona se, gopola gore ke gore semela. Ke eng se? (Ema). Eng ke gore semela.
- 6. This means "grow". This sign means that the word is something that we can do. This is a flower, and this is an arrow pointing up, which means the flower is going up. When you see this, remember that it means that the plant is "growing". What is this? (wait). Yes, it means to "grow". Se se bolela gore go "mela". Seswao leo le hlalosa gore lentsu le ke selo seo re ka se dirago. Le ke letsobu, gomme se ke lerumo le supilego godimo le bolelago gore letsoba le golela godimo. Ge o bona se gopola gore se ra gore semela se a mela? Ke eng se? (Ema) Eng ke gore go mela.
- 7. This means "mother". This is a person that you love. Can you see the head looks like a heart? That means that you love that person. Can you see that it looks like the heart has long hair? That means it is a woman. A woman that you love very much is your mother. When you see this, remember that it means "mother". What is this? (wait). Yes, it means "mother". Se ke gore "mma". Yo ke motho yo o mo ratago. Ma o bona hlogo e bopegile bjalo ka pelo? Seo se bolela gore o rata motho yoo. Ma o a bona gore e bonala e ke pelo e na meriri o motelele? Seo se ra gore ke mosadi. Mosadi you o mo ratago kudu ke mma wa gago. Ge o bona se gopola gore ke gore "mma". Ke eng se? (Ema). Eng ke gore Mma.
- 8. This means "in". Here is a box with a little mark inside the box. When you see this, remember that it means "in". What is this? (wait). Yes, it means "in". Se se ra ka. Se ke lepokisi le nago le leswaenyana ka gare. Ge o bona se gopola se sa gore ka. Ke eng se? (Ema). Eng se ra "ka".
- 9. This means "green". This diamond means that it is a colour. Think of it as the earth. The bottom half of the earth is full of grass and grass is green. Can you see that the bottom half of the diamond is coloured in? When you see the diamond with the bottom half coloured, think of it as the "green" grass. What is this? (wait). Yes, it means "green".

 Se ke botalamorogo. Taemono e ra gore ke mmala. Be ke bjang ka gare ga
- Se ke botalamorogo. Taemono e ra gore ke mmala. Be ke bjang ka gare ga taemane. Bjang ke bjo botala. Ge o bona taemane e nago le bjang ka gare, enagane bjalo ka bjang bjo botala. Ke eng se? (Ema). Eng, ke botalamorogo.
- 10. This means "blue". This diamond means that it is a colour again. The top half of the earth is blue because the sky is the top half of the earth, right? Can you see the top half of the diamond is coloured. When you see this diamond with the top half coloured in, remember that it means the top half of the earth "blue".

What is this? (wait). Yes, it means "blue".

Se ke botalalerata. Taemane e e ra gore ke mmala gape. Seripagodimo sa lefase ke se setalamorogo kagobane la leratadima ke seripagodimo sa lefase nnete? Na o a bona seripagodimo sa taemane se fifaditswe. Ge o bona taemane e fifaditswe serpagodimo gopola se ra seripagodimosa lefase botalamorogo. Ke eng se? (Ema) Eng se ra botalamorogo.

11. This means "in front of". Can you see there is a little arrow before the stripe. When you see this, remember that is means "in front of". What is this? (wait). Yes, it means "in front of".

Se se ra ka pele ga. Na o a bona gona le sefapano pele ga mothalo. Ge o bona se gopola gore ke kapele ga. Ke eng se? (Ema). Eng se re ka pele ga.

12. This means "out". Here is a box and the little arrow is outside the box. When you see this, remember that it means "out". What is this? (wait). Yes, it means "out".

Se se re kantle. Se ke lepokisi le leswaonyana ka ntle ga lepokisi. Ge o bona se gopola gore le re ka ntle. Ke eng se? (Ema). Eng se re ka ntle.

13. This means "**teacher**". Here is a person standing and one sitting. The teacher usually stands in front of the board, while the students sit on their chairs, right? When you see this, remember that it means "teacher". What is this? (wait). Yes, it means "teacher".

Se se re morutisi. Mo ke motho o eme gomme yo mongwe o dutse. Morutisi ka tlwaelo o ema letlapeng mola barutwana ba dula ditulong tsa bona, go bjalo? Ge o bona se gopola gore se ra morutisi. Ke eng se? (Ema) Eng se ra morutisi.

14. This means "sick". This is a bed and this is a person lying in the bed. When you see this, remember that it is a person lying in the bed because he is "sick". What is this? (wait). Yes, it means "sick".

Se se re babja. Se ke mpete gomme yo ke motho o robetse mpeteng. Ge o bona se gopola gore ke motho o robetse mpeteng ka gobane o a babja. Ke eng se? (Ema) Eng se re babja.

15. This means "ambulance". Here is a car with a siren that makes the noise of the ambulance. When you see this, remember that it is an "ambulance". What is this? (wait). Yes, it means "ambulance".

Se ke ampulanse. Ye ke koloi ya seletso se dirago lesata la ampulanse. Ge o bona se gopola gore ke ampulanse. Ke eng? (Ema) Eng ke ampulanse.

16. This means "doctor". Here is a person with a stethoscope that he uses to listen to your heart when you are sick. When you see this, remember that it is a "doctor". What is this? (wait). Yes, it is a "doctor".

Se ke ngaka. Mo ke motho yo a swerego tshitswana ye a e somisago o kwa pelo ya gago ge o babja. Ge o bona se gopola gore ke ngaka. Ke eng? (Ema). Eng ke ngaka.

17. This means to "cough". This is a mouth. This is the wind. Can you see the arrows shows the direction in which the wind is blowing. When you see this, remember that it is the wind that is coming from your mouth - a "cough". What is this? (wait). Yes, it means to "cough".

Se se ra go gohlola. Se ke molomo. Ye ke phefo. Nao bona maswao ao a laetsago fao phefo e fokelago? Ge o bona se gopola gore phefo yeo e tswago molomong wa gago segohlola. Ke eng? (Ema) Eng se ra gore gfohlola.

- 18. This means to "lie down". Here is the sign that means it is something we can do. Can you see this is a person lying on its' side? When you see this, remember it means to "lie down". What is this? (wait). Yes, it means to "lie down". Se se re robala. Le ke leswao le le rego ke selo seo re ka se dira go. Na o bona motho yo a robetsego ka lehlakore. Ge o bona se gopola gore ke robala. Ke eng? (Ema) Eng se ke robala.
- 19. This means "white". This is the diamond that means it is a colour. The little diamond inside has no colour in it. When you see this, remember that it means "white". What is this? (wait). Yes, it means "white".

 Se se ra tshweu. Ye ke taemane e ra gore ke mma. Taemane ye nyane ka gare ga e na mmala. Ge o bona se gopola gore ke tshweu. Ke eng? (Ema). Eng se ra
- 20. This means "healthy". This is a person holding his strong arms up. When you see this, think of a strong person that is "healthy". What is this? (wait). Yes, it means "healthy".

Se se ra go fola. Yo ke motho yo a emisitsego letsogo le tiilego. Ge o bona se gopola motho yo a bilego wa go fola. Ke eng se? (Ema) Eng ke fola.

Paragraph 2

tshweu.

1. This means "brother". You can see that this looks like a person. He is a boy because he is not wearing a dress. His head is in the shape of a heart, which means he is someone that you love. When you see this boy with the heart for a head, remember that it means "brother". What is this? (wait). Yes, it means "brother".

Se ke buti. O ka bona se se swana le motho. Yena ke mosimane ka gobane ga a apara roko. Hlogo ya gagwe e ka sebopego sa pelo, seo se rago gore motho yo o mo ratago. Ge o bona mosimane wa hlogo ya pelo, gopola gore e ra buti. Ke eng se? (Ema) Eng e ra gore buti.

2. This means "bus". This is a big car and you can see 3 wheels. When you see this, remember that it means "bus". What is this? (wait). Yes, it means "bus". Se ke bese. Ye ke koloi e kgolo gape o ka bona maotwana a 3. Ge o bona se gopola gore e ra bese. Ke eng se? (Ema). Eng ke bese.

3. This means to "laugh". This is the sign that means that it is a something we can do. This is a mouth. Can you see the big smile on the mouth. When you see this, remember that is means to "laugh". What is this? (wait). Yes, it means to "laugh".

Se se ra sega. Le ke leswao le rego ke seo re ke se dirago. Se ke molomo. Na o bona go myemuela molomong. Ge o bona se gopola go sega. Ke eng se? (Ema). Eng ke sega.

4. This means to "sing". This is the sign that means it is something we can do. This is a mouth and these are music notes. When you see this, remember that it is a mouth that makes music - it "sings". What is this? (wait). Yes, it means to "sing".

Se se ra go opela. Le ke leswao le supago seo re ka se dirago. Se ke molomo gomme tse ke dinoto tsa mmino. Ge o bona se gopola gore ke molomo o dirago mmino o a opela. Ke eng se? (Ema) Eng ke opela.

- 5. This means to "kiss". This is the sign that means it is something that we do. This is a mouth. If you look carefully, you will see another mouth behind this one. When you see this, think of it as two mouths on top of each other. When two mouths touch like this, they "kiss". What is this? (wait). Yes, it means to "kiss". Se se ra go suna. Le ke leswao le le supago se re ka se dirago. Se ke molomo. Ge o ka lebelela ka sedi, o tla bona molomo o mongwe ka morago ga o. Ge o bona se, nagana e ke ke melome e mebedi e kgomanego. Ge o bona melomo e mebedi e kgomane bjalo. Ba a suna. Ke eng? (Ema) Eng e ra gore suna.
- 6. This means to "give". This is the sign that means we are doing something. This is a man. Can you see that this looks like he is giving something away, because his hand is pointing down. When you see this, remember that it means to "give" something. What is this? (wait). Yes, it means to "give". Se se re go fa. Le ke leswao leo le supago gore re dira se sengwe. Yo ke monna. Na o a bona go bonata e ke o fa mongwe selo ka gobane letsogo la gagwe le supile fase. Ge o bona se gopola gore ke go fa. Ke eng? (Ema). Eng se ra gore fa.
- 7. This means "big". Here is a small box and a big box. Can you see that there is a mark in the big box? When you see this, remember that it means "big" because the big box was marked. What is this? (wait). Yes, it means "big". Se se ra kgolo. Mo ke lepokisi le lenyane le le leholo. Na o a bona go na le leswao ka lepokising le legolo? Ge o bona se gopola gore e ra kgolo ka gobana lepokisi le legola le swailwe. Ke eng se? (Ema) Eng se ra gore kgolo.
- 8. This means "it". This looks almost like the picture for person, but look, the head is not round, it is square. When you see this, remember that it means "it". What is this? (wait). Yes, it means "it".

Se se re "e". Se se swana le seswantsho sa motho feela bona hlogo ga se nkgokolo, ke khutlonne. Ge o bona se gopola gore e ra "e". Ke eng se? (Ema) Eng e ra gore e.

9. This means "us". Can you see that is looks like the picture for a person. But look, the head is devided into 4 different parts, which means there is more than one person. When you see this, remember that is means "us". What is this? (wait). Yes, it means "us".

Se se re rena. Na o a bona gore e swana le seswantsho sa motho. Fela lebelela, hlogo e arotswe ka diripana tse nne tsa go fapana, seo se ra gore go na le batho ba bantsi. Ge o bona se gopola gore e ra rena. Ke eng se? (Ema). Eng e ra gore rena.

10. This means to "like". This is the sign that means it is something that we do. This is a heart, that means it is something that we feel. When you see this heart, remember that it means that we "like" something. What is this? (wait). Yes, it means to "like".

Se se ra go rata. Leswao le le ra gore ke seo re ka se dirago. Se ke pelo, se se ra gore ke seo re ka se kwago. Ge o bona pelo ya gopola gore re rata selo. Ke eng se? (Ema) Eng e ra gore rata.

11. This means "you". This is the picture that looks like a person. But look, the head looks like a Y. In English, we write "you" with a Y. When you see this person with the triangle or Y for a head, remember that it means "you". What is this? (wait). Yes, it means "you".

Se ke o. Se ke seswantshe se swanago le motho. Empa bona hlogo e swana le Y. Ka sekhowa re ngwala o ka Y. Ge o bona motho wa hlogo ya khutlotharo kapa Y. gopola gore e ra o. Ke eng se? (Ema). Eng se re dula.

12. This means to "sit". This is the sign that means it is something that we do. This is a chair. What do we do with a chair? When you see this, remember that it means to "sit". What is this? (wait). Yes, it means to "sit Se se ra dula. Le ke leswao leo le rego ke selo seo re ka se dirago. Se ke setulo. Re dira eng ka setulo? Motho so o dutse godimo ga sona. Ge o bona se, gopola gore se

re go dula. Ke eng? (Ema) Eng se re dula.

13. This means the "right" side. Can you see that this arrow is pointing to your right side? When you see this arrow, remember that it means "right". What is this? (wait). Yes, it means your "right" side.

Se se re letsogo la go ja. Na o bona gore lerumo le lesupile ka letsogong la gago la go ja? Ge o bona lerumo le, gopola gore le re letsogo la go ja. Ke eng se? (Ema) Eng e ra gore letsogong la go ja.

14. This means the "left" side. Can you see that this arrow is pointing to your left side? When you see this arrow, remember that it means "left". What is this? (wait). Yes, it means your "left" side.

Se se re letsogong a nngele. Na o bona gore lerumo le le supile ka letsogong la gago la nngele? Ge o bona lerumo le, gopola le ra gore letsogong la nngele. Ke eng se? (Ema) Eng se re letsogong la nngele.

remember that it means to "play". What is this? (wait). Yes, it means "play". Se ke gore raloka. Le ke leswao le rego ke selo seo re ka se dirago. A o lebelelga bjalo ka maotwana a ngwana. Lerumo le supilego godimo le pelo ke gore lethaba. Ge bana ba thabile ba a raloka. Ge o bona se, gopola gore ke gore go raloka. Ke eng se? (Ema) Eng ke gore go raloka.

10. This means "new". This is the sign that shows us that the word tells us more about what something looks like or feels like. Think of this circle as a big watch. The arrow is showing forward. It means that the time starts here. When time starts for something, it means that it is new. When you see the clock with the arrow going forward, remember it means "new". What it this? (wait). Yes, it means "new".

Se ke gore dimpsha. Le ke leswao le re laetsago gore lentsu le re hlalosetsa ka botlalo ka fao selo se lego ka gona. Gopola kgokolo ye bjalo ka sesupanako. Lerumo le supile pele. Ke gore nako e thomamo se le lerumo le supulego pele, gopola gore ke gore mpsha. Ke eng se? (Ema) Eng ke gore mpsha.

11. This means to "receive". This is the sign that shows us that it is something we can do. This is a hand. It looks like it is holding something. The arrow is pointing down into the hand as if the hand is getting something. When you see this, remember that it means to "receive" something. What is this? (wait). Yes, it means to "receive".

Se ke gore humanego. Leswao le le re botsa gore ke selo seo re ka se dirago. Le ke letsoga le bonala e ke le swere sengwe. Lerumo le supile fase letsogong eke letsogo le a amogela. Ge o bona se, gopola gore ke gore humanego sengwe. Ke eng? (Ema) Eng ke gore humanego.

This means "old". This is the sign that shows us that the word tells us more about what something looks like or feels like. The watch and the arrow means that it is new, but look at the sign in front of the watch. This means that the picture means the opposite of new, which is old. When you see the clock and arrow with this sign in front, remember that it means "old". What is this? (wait). Yes, it means "old".

Se ke gore kgale. Le ke leswao le le re laetsago ka fao lentsu le re botsago ka fao selo se lebelegago le ka fao se ikwago ka gone. Sesupanaka le lerumo di ra gore e sa le tse mpsha empa lebelela leswao le lego ka pele ga sesupanako. Se ke gore seswantsho se re leatse leganetsi la ntshwa e lego kgale. Ge o bona sesupanako seo se nago le lerumo ka pele, gopola ke gore kgale. Ke eng se? (Ema) Eng ke gore kgale.

13. This means "ugly". This is the sign that shows us that the word tells us more about what something looks like. This is an eye that sees. The heart and the arrow pointing down, means sad, remember? When you see this, remember that when the eye sees something that makes it sad, it is something ugly. What is this? (wait). Yes, it means "ugly".

Se ke gore befile. Le ke leswao le re hlolosetsago gore lentsu le re botsa ka fao selo

se lebelegago ka gona. Le ke leihlo le bonang. Pelo le leruom leo lesupilego fase dira gore befa, hopola ge o bona se, gopola gore leihlo le bona selo seo se le nyamisago, ke selo se befilego. Ke eng? (Ema) Eng ke gore befile.

14. This means "black". This is the eye that sees the colour. This is the moon that comes out at night. The night is black. When you see the eye that looks at the night, remember that it means "black". What is this? (wait). Yes, it means "black".

Se ke gore ntsho. Le ke leihlo leo le bonang o mmala. Se ke ngwedi o bonalago bosego. Bosego ke bo boso. Ge o bona leihlo le lebelelago bosego, gopola gore ke gore ntso. Ke eng se? (Ema) Eng ke gore ntsho.

15. This means "between". Can you see that the little dot is between the two lines? When you see the little dot between the lines, remember that it means "between", because that is where the dot is. What is this? (wait). Yes, it means "between".

Se ke gore mokgahlong. Na o bona khutlo e lego gare ga methaladi e mebedi? Ge o bona khutlawana ye gare go methaladi, gopola gore ke gore mokgahlong. Ka gobane ke fao khutlwana e le go ntshe. Ke eng se? (Ema) Eng ke gore makgahlong.

16. This means "behind". Can you see that the little dot comes after the stripe? When you see this, remember that it means that the little dot is "behind" the line. What is this? (wait). Yes, it means "behind".

Se ke gore morago. Na o bona gore khutwana e ka morago go mothaladi. Ge o bona so gopola gore ke gore khutlwana e ka morago ga mothaladi. Ke eng se? (Ema) Eng ke gore morago.

17. This means "bicycle". There is a wheel and a number 2. The wheel means it is something we can ride, and the number 2 means that the thing we are riding has 2 wheels. When you see this, remember it means "bicycle". What is this? (wait). Yes, it means "bicycle".

Se ke gore baesekele. Go na le leotwana le nomoro 2. Leotwana le bolela gore ke selo seo re ka se namelago, gomme nomoro 2 e ra gore seo re se nametsego se na maoto a 2. Ge o bona se, gopola gore ke baesekele. Ke eng se? (Ema) Eng ke gore baesekele.

18. This means to "dance". This is the sign that means it is something we can do. These are legs and this is a music note - the way we write music down on paper. When you see this, remember that it means we are doing something with our legs and with music - it means to "dance". What is this? (wait). Yes, it is to "dance".

Se ke gore go bina. Le ke leswao le re botsago gore ke sela se re ka se dirago. A ke maato gomme se ke noto ya mmino - ka fao re ngwalago mmino pampiring. Ge o bona se, gopola gore re dira se sengwe ka maoto le ka mmino - ke gore go bina. Ke eng se? (Ema) Eng ke go bina.

- 15. This means "small". Here is a small box and a big box. Can you see that the small box is marked? When you see these boxes with the small one marked, remember that it means "small". What is this? (wait). Yes, it means "small". Se se re monyenyane. Le ke lepokisi le lenyane le le legolo. Na o bona gore lepokisis le lenyane le swailwe? Ge o bona mapokisi a le lelenyane le swailwe, gopola gore a ra go nnyane. Ke eng se? (Ema) Eng e ra gore monyenyane.
- 16. This means "angry". This is a heart that shows that it is something that we feel. Can you see the heart is broken? When you see this cracked heart, remember that it means "angry". What is this? (wait). Yes, it means "angry". Se se re befelwa. Ye ke pelo e laetsago gore ke selo seo re se kwago. Na o a bona pelo e robegile? Ge o bona pelo e nago le lerwa, gopola gore e ra befelwa. Ke eng se? (Ema).Eng e ra gore befelwa.
- 17. This means to "run". This is the sign that means it is something we can do. This is a person. Can you see it looks like he is running? When you see this, remember that it means to "run". What is this? (wait). Yes, it means to "run". Se se re kitima. Le ke leswao leo le rego ke selo se re ka se dirago. Yo ke motho. Na o a bona se gopola gore se ra kitima. Ke eng se? (Ema). Eng se ra kitima.
- 18. This means to "catch". This is the sign that means it is something we can do. This is a man with his arms up. Can you see it looks like he is catching this ball? When you see this, remember it means to "catch". What is this? (wait). Yes, it means to "catch".

Se se re swara. Le ke leswao le rego ke selo seo re ka se dirago. Yo ke monna yo a emisitsego letsogo. Na o a bona e ke o swara bolo ye? Ge o bona se gopola gore se ra go swara. Ke eng se? (Ema) Eng se ra go swara.

- 19. This means "good". This looks like the earth. This looks like a mark that your teacher would make in your books if you have an answer right it means your answers are good. When you see this earth, with the correct mark in it, remember that it means "good". What is this? (wait). Yes, it means "good". Se se ra go loka. Se se swana le lefase. Se se swana le leswao leo morutisi wa gago a swayane pukung ge o nepile karabo. Se ra gore dikarabo tsa gago di lokile. Ge o bona lefase le le leswao la nepu ka gare gopola gore se ra loka. Ke eng se? (Ema) Eng se ra sefofane.
- 20. This means "aeroplane". Can you see that this looks like an aeroplane? When you see this, remember that it means "aeroplane". What is this? (wait). Yes, it is an aeroplane.

Se se ra sefofane. Na o a bona se se swana le sefofane? Ge o bona se gopola gore se ra sefofane. Ke eng se? (Ema) Eng se ra sefofane.

Paragraph 3

- 1. This means "student". Here is the student sitting on the chair, listening to the teacher who is standing up. When you see this, remember that it means "student". What is this? (wait). Yes, it means "student". Se ke gore moithuti. Yo ke moithuti o dutse setulong, o theeleditse morutisi yo a emego. Ge o bona se gopa gore se ra gore moithuti. Ke eng se? (Ema) Eng se ra gore moithuti.
- 2. This means "nurse". Can you see that this is a person. The person is holding an injection needle. A nurse is the person who injects us at the clinic. When you see this, remember that it means "nurse". What is this? (wait). Yes, it means "nurse".

 Se ke gore mooki. Na o bona motho yo> Motho yo o swere lemao la kalafo. Mooki

Se ke gore mooki. Na o bona motho yo > Motho yo o swere lemao la kalafo. Mooki ke motho yo a rehlagabo kua kliniking. Ge o bona se gopola gore ke gore mooki. Ke eng se? (Ema). Eng ke gore mooki.

3. This means "hospital". This is a bed with a person lying in the bed. When you are sick you lie in your bed. This is a roof. The roof means the place where people stay who are sick. When you see this, remember that it means the place where sick people lie in bed - the "hospital". What is this? (wait). Yes, it means "hospital".

Se ke gore bookelong. Se ke mpete gomme motho o robetse godimo ga wona. Ge o babja o robala mpeteng. Se ke marulelo. Hlaka ke gore lefelo leo batho ba go babja ba dulago gona. Ge o bona re gopola fore ke fore lefelo leo balwetsi ba robalago mpeteng bookelong. Ke eng se? (Ema) Eng ke gore bookelong.

4. This means "I". This looks like the head of a person, with the body. When you see this, remember that it means "I". What is this? (wait). Yes, it means "I".

Se ke gore ke. Se se swana le hlogo ya motho le mmele. Ge o bona se gopola gore se ra gore ke. Ke eng se? (Ema) Eng ke gore ke.

5. This means "happy". This is a heart, that means it is a feeling. Can you see the sign in the heart looks like a smile. When you are happy your heart smiles. When you see the heart with the smile, remember it means "happy". What is this? (wait) Yes, it means "happy".

Se se ra gore thaba. Se ke pelo, ke gore ke maikutlo. Na o bona leswao le lego ka pelong le swana le sesego. Ge o thabile pelo ya gago ya sega. Ge o bona pelo le sesego, gopola gore ke thaba. Ke eng se? (Ema). Eng ke gore thaba.

6. This means "car". This is a car when you look at it from the side. It has two wheels when you look at it from the side. When you see this, remember that it means "car". What is this? (wait). Yes, it means "car". Se ke gore koloi. Se ke koloi ge o se lebelela go tswa ka thoko. E na le maotwana a

mabedi ge o e lebelela go tswaka thoko. Ge o bona se, gopola gore ke gore koloi. Ke eng se? (Ema) Eng ke gore koloi.

- 7. This means "winter". Winter is the fourth season of the year. First comes spring, summer is second, autumn is third and winter is fourth. Can you see that each block is for a season? The fourth block is marked. When you see the fourth block marked, remember that means that it is "winter" the fourth season. What is this? (wait). Yes, it means "winter".
- Se ke gore marega. Marega ke sehla sa bone sa ngwaga. Seruthwane se tla pele, selemo ke sa bobedi, lehlabula ke sa boraro gomme marega ke sa bone. Na o a bona gore seripana sengwe le sengwe se emetse sehla? Seripana sa bone se swailwe. Ge o bona seripang sa bone se swailwe, gopola ke gore ke marega sehla sabone. Ke eng? (Ema) Eng ke gore marega.
- 8. This means "cold". This is the meter that we measure how hot or how cold something is. When it is a low measurement, it is cold. Can you see that there is a stripe and an arrow that is pointing down? This means that the meter shows that it is cold. When you see this picture with the arrow pointing down, remember that it means "cold". What is this? (wait). Yes, it means "cold".
- Se ke gore tonya. Wo ke metara o re elago go phisa le go tonya ga selo. Ge metara o le fase go a tonya. Na o bona mothaladi le lerumo le o le supilego fase? Ke gore metara o laetsa gore go a tonya. Ge o bona swantsho se le lerumo le supilego fase, gopola gore ke gore go a tonya. Ke eng se? (Ema) Eng ke gore go a tonya.
- 9. This means "hot". Here is the meter again that measures how hot or cold something is. When it is a high measurement, it is hot. Can you see that there is a stripe and an arrow pointing up? This means that the meter shows that it is hot. When you see this picture with the arrow pointing up, remember that it means "hot". What is this? (wait). Yes, it means "hot".
- Se ke gore fisa. Se ke metara o elago phiso le go tonya ga selo. Ge o le godimo ke gore go a fisa. Na o bona mothalo le lerumo le o le supilego godimo? Se se ra gore metara o re go a fisa. Ge o bona seswantsho se le lerumo le supilego godimo, gopola gore ke gore go a fisa. Ke eng se? (Ema) Eng ke gore go a fisa.
- 10. This means "fruit". Can you see that there is an apple, a pear and grapes. There is a stripe underneath, which means that is is one thing we are talking about. When you see this, remember that it means "fruit". What is this? (wait). Yes, it means "fruit".
- Se ke gore dienywa. Na o a bona gore gona le apolo, pêre le diterebe. Go na mothalo ka tlase wo o bolelago gore re bolela ka selo se tee. Ge o bona se, gopola gore ke gore dienywa. Ke eng se? (Ema) Eng ke dienywa.
- 11. This means "vegetables". Here is a carrot and peas. There is a stripe underneath which means it is one thing. When you see this, remember that it means "vegetables". What is this? (wait). Yes, it means "vegetables".

 So ke gore merogo. The ke dicarrot le dipeas. Go na le mothaladi ka tla ga tsona

seo se rago gore ke selo se tee. Ge o bona se gopola gore ke gore merogo. Ke eng se? (Ema) Eng ke gore merogo.

- 12. This means "autumn". There are 4 block, one for each season. Autumn is the third season. Spring is the first season, summer is second and then autumn. When you see these 4 block with the third block marked, remember that it means "autumn". What is this? (wait). Yes, it means "autumn".
- Se ke gore lehlabula. Go na diripana tse nne, se tee se emela sehla sa ngwaga. Lehlabula ke sehla sa boraro. Seruthwane ke sa mathomo, selemo ke sabobedi gomme gwa tla lehlabula. Ge o bona diripana tse 4 gomme seripana sa boraro se swailwe, gopola gore ke gore lehlabula. Ke eng se? (Ema) Eng ke gore lehlabula.
- 13. This means to "kneel" down. Here is the sign that means that it is something we can do. Can you see this is a man and he is standing on his knees? When you see this, remember that it means to "kneel" down. What is this? (wait). Yes, it means to "kneel".

Se ke gore khuname fase. Le ke leswao leo le rego ke selo seo re le se dirago. Na o bona monna go a emego ka matolo? Ge o bona se gopola gore ke gore khuname gase. Ke eng se? (Ema) Eng ke gore go khuname.

- 14. This means "yellow". This is a diamond which means it is a colour. There is a little sun in the middle of the diamond. This colour of the sun is yellow. When you see the diamond with the sun in the middle, remember that it means "yellow". What is this? (wait). Yes, it means "yellow".
- Se ke gore serolwane. Ye ke taomane yeo e rego ke mmala. Go na letsatsona ka gare ga taomane. Mmala wa letsatsi ke serolwane. Ge o bona taamane le letsatsi ka gare, gopola gore ke gore serolwane. Ke eng se? (Ema) Eng ke gore serolwane.
- 15. This means "brown". Here is the diamond that means colour. Think of the diamond as the earth. The line that devides the diamond in two is deviding it into the sky and the ground. The bottom half is the ground and the bottom half of the diamond is coloured. When you see this, remember that it means "brown" because the ground is brown. What is this? (wait). Yes, it means "brown".
- Se ke gore mosotho. Ye ke taomane ye e rego ke mmala. Gopola taamane bjalo ka lefase. Mothaladi o ripaganyago taamane ka bogare o e ripaganyatsa go leratadima le lebato. Seripa sa ka fase ke lebato gomme sa ka fase se fifaditswe. Ge o bona se gopola gore ke gore mosotho ka gobane lebato ke le mosotho. Ke eng se? (Ema) Eng ke gore mosotho.
- 16. This means the "bottom". Here are 3 blocks on top of each other. Can you see the bottom one is marked with an X? When you see this, remember that it means "bottom". What is this? (wait). Yes, it means "bottom".
- Se ke gore fase. Tse ke diripana tse tharo seo di hlatlaganego. Na o bona gore seripana sa ka tlase se swailwe ka X? Ge o bona se gopola gore ke gore fase. Ke eng se? (Ema) Eng ke gore fase.

17. This means "top". Here are the 3 blocks again, but this time the top block is marked with and X. When you see this, remember that it means "top". What is this? (wait). Yes, it means "top".

Se ke gore godimo. Tse ke diboloko tse tharo gape empa go na bjalo go swailwe boloko ya ka godimo ka X. Ge o bona se, gopola gore ke gare godimo. Ke eng se? (Ema) Eng ke gore godimo.

18. This means to "climb". This is the sign that means it is something we can do. This is a man and you can see that he is climbing stairs. When you see this, remember that is means to "climb". What is this? (wait). Yes, it means to "climb".

Se ke gore namela. Le ke leswao leo le rego ke selo seo re ka kgonago go se dira. Yo ke monna gomme o ka bona gore o namela manamelo. Ge o bona se, gopola gore le gore namela. Ke eng? (Ema) Eng ke gore namela.

- 19. This means "we". Here is the sign for a person. Can you see the head is devided into two parts. This means that there is more than one person. When you see this, remember that it means "we". What is this? (wait). Yes, it means "we". Se ke gore re. Le ke leswao la motho. Na o bona gore hlogo e arotswe ka diripa tse pedi. Se se ra gore gona le batho ba bantsi. Ge o bona se, gopola gore ke gore re. Ke eng se? (Ema) Eng ke gore re.
- 20. This means to "yawn". This is the sign that means it is something we do. This is a mouth and this is a bed. There is a line under the mouth and the bed, which means that it means one thing. What does your mouth do when you want to go to bed or when you are tired? When you see this, remember that it means to "yawn". What is this? (wait). Yes, it means to "yawn".

Se ke gore edimola. Le ke leswao le rego ke selo seo re ka se dirago. Mo rebona molomo le mpete. Go na le mothalo ka tlase ga molomo le mpete e leo gore ke selo se tee. O dira eng ka molomo wa gago ge nyaka go yo robala goba ge o lapile? Ge o bona se, goola gore ke gore edimola. Ke eng se? (Ema) Eng ke gore edimola.

Paragraph 4

- 1. This means the "**side**" of something. This is a box and there is an arrow pointing to the side of the box. When you see this, remember that it means "side". What is this? (wait). Yes, it means the "side".
- Se ke gore ka thoko go selo. Le ke lepokisi ko le nago le lerumo le supilego ka thoko ga lepokisi. Ge o bona se, gopola gore ke gore thoko. Ke eng se? (Ema) Eng ke gore thoko.
- 2. This means to "spit". This is the sign that means it is something we can do. This is a mouth. There is an arrow pointing from the mouth to the ground. It means that there is something coming from the mouth. When you see this,

remember that it means to "spit". What is this? (wait). Yes, it means to "spit". Se ko gore tshwa. Le ke leswao le re botsago gore ke selo seo re ka se dirago. O ke molomo. Go na le lerumo le supilego go tswa molomong go ya fase. Seo se ra gore go na le selo se setswago ka molong go ya fase. Ge o bona sa, gopola gore ke gore tshwa. Ke eng se? (Ema) Eng ke gore tshwa.

- 3. This means to "throw". This is the sign that means it is something we can do. This is a man. There is an arrow coming from his hands and pointing away from his hands. When you see this, remember that it means that he is "throwing" something. What is this? (wait). Yes, it means to "throw". Se ke gore fosa. Ke leswao le rago gore ke selo seo re ka se dirago. Yo ke monna. Go na le lerumo le tswago letsogang le supile ka ntle ga letsogo. Ge o bona se, gopola gore ke gore o a fosa. Ke eng se? (Ema) Eng ke gore fosa.
- 4. This means to "kick". There is the sign that means it is something we can do. Here is a person and look what he is doing with his foot. He is kicking a ball. When you see this, remember that it means to "kick". What is this? (wait). Yes, it means to "kick".

 Se ke gore raga. Go na le leswao leo le rego ke selo seo re ka se dirago. Yo ke motho gomme lebelela gore o dira eng ka leoto la gago. O raga kgwele. Ge o bona se, gopola gore ke gore go raga. Ke eng se? (Ema) Eng ke gore go raga.
- 5. This means to "hate". This is the sign that means it is something that we can do. This is a heart that means it is a feeling. The heart is upside down, which means that it is not a good feeling. When you see this, remember that it means to "hate". What is this? (wait). Yes, it means to "hate". Se se ra gore ga ke rate. Le ke leswao gapo leo le bolelago gore ke selo seso re ka se dirago. Ye ke pelo yeo e rago gore ke maikuto. Pelo e kgoname, seo se rago gore ga e na malkutlo a mabotse. Ge o bona se, gopola gore ke gore ga ke rate. Ke eng se? (Ema) Eng ga ke rate.
- 6. This means "sad". This is a heart that means it is a feeling. Can you see there is something that looks like a sad mouth in the middle of the heart. When you see this, remember that it means to be "sad". What is this? (wait). Yes, it means to be "sad".

Se ke gore bohloko. Ye ke pelo e lego maikutlo. Na o a bona go na le se selo se e kagu ke molomo o swabilego ka gare ga pelo. Ge o bona se, gopola gore ke gore bohloko. Ke eng se? (Ema) Eng ke gore bohloko.

7. This means "sister". You can see that this looks like a person. She is a girl because she has long hair. Her head is in the shape of a heart, which means she is someone that you love. When you see this girl with the heart for a head, remember that it means "sister". What is this? (wait). Yes, it means "sister". Se ke gore sesi. O ka bona gore se se lebelega e ka ke motho. Ke mosetsana ka ba la meriri e metelele. Hlogo ya gagwe e ka sebopego sa pelo, seo se bolelago gore ke motho yo o mo ratago. Ge o bona mosetsana yo ka hlogo e kego ke pelo, gopola

gore ke sesi. Ke eng se? (Ema) Eng ke gore sesi.

8. This means "father". This is a person that you love. Can you see the head looks like a heart? That means that you love that person. It is a man because it is not wearing a dress and it does not have long hair. A man that you love very much is your father. When you see this, remember that it means "father". What is this? (wait). Yes, it means "father".

Se ke gore tate. Yo ke motho yo o mo ratago. Na o bona e swana le pelo? Seo se ra gore o rata motho o. Ke monna ka gobane a sa apara roko gape ga a na moriri o motelele. Monna yo o mo ratago kudu ke tate. Ge o bona se gopola gore ke gore tate. Ke eng se? (Ema) Eng ke gore tate.

- 9. This means to "play". This is the sign that means it is something that we can do. This is a person holding a ball. We can play with a ball. When you see this, remember that it means to "play". What is this? (wait). Yes, it means to "play". Se ke gore go raloka. Le ke leswao le bolela gore ke selo seo re ka se dirago. Yo ke motho yo a swerego kgwele. Re ka raloka ka kgwele. Ge o bona se, gopola gore ke gore raloka. Ke eng se? (Ema) Eng ke gore raloka
- 10. This means "new". Can you see that this arrow is pointing forward, to the future. The things that are still coming is new. When you see this, remember that it means "new". What is this? (wait). Yes, it means "new".

Se se ra gore pmsha. Na o bona lerumo le supilego pele go bokamoso bilo tseo di sa tlago ke tse mpsha. Ge o bona se, gopola gore se ke gore mpsha. Ke eng se? (Ema) Eng ke gore mpsha.

11. This means to "receive". This is the sign that means it is something we can do. This is a person and he is holding his hands out as if he is getting something. When you see this, remember that it means to "receive". What is this? (wait). Yes, it means to "receive".

Se ke gore amogela (humanego). Se ke leswao le bolelago gore ke selo seo se ka dirwago. Yo ke motho yo a ntshitsego matsogo e ke o amogela selo. Ge o bona se, gopola gore ke gore humanego. Ke eng se? (Ema) Eng ke gore humanego.

12. This means "old". Can you see the arrow is pointing backwards now? The things that are in the past is old. When you see this, remember that it means "old". What is this? (wait). Yes, it means "old".

Se ke gore kgale. Na o bona lerumo le supilego morago bjale? Dilo tse di lego lebakeng le fetilego (di tsofetse). Ke tsa kgale. Ge o bona ke gopola gore ke gore kgale. Ke eng se? (Ema) Ke gore kgale.

13. This means "ugly". This is the world with a beautiful flower in it. There is a big cross over the beautiful flower. This means that the picture means the opposite of beautiful - it means ugly. When you see this, remember that it means "ugly". What is this? (wait). Yes, it means "ugly".

Se ke gore befa. Le ke lefase le nago le letsoba lelebotsa. Go na le sefapano mo

letsobeng le lebotse - ke gore befa. Ge o bona se, gopola gore ke gore se befile. Ke eng se? (Ema) Ke gore se befile.

- 14. This means "black". This is a diamond that means it is a colour. Can you see that the whole diamond is coloured black. When you see this, remember that it means "black". What is this? (wait). Yes, it means "black". Se ke gore ntsho. Ye ke taamane yoo e rego ke mmala. Na o a bona gore taamane
- Se ke gore ntsho. Ye ke taamane yeo e rego ke mmala. Na o a bona gore taamane e ntshofaditswe kamoka ka boso. Ge o bona se gopola gore ke gore ntsho. Ke eng se? (Ema) Eng ke gore ntsho.
- 15. This means "between". Here are two blocks apart from each other. There is a cross between the two blocks. When you see this, remember that it means "between". What is this? (wait). Yes, it means "between".

Se ke gore mokgahlong. Tse ke diboloko tseo di aroganego. Go na le sefapano magareng ga tsona. Ge o bona se, gopola gore ke gore mokgahlong. Ke eng se? (Ema) Eng ke gore mokgahlong.

16. This means "behind". Can you see there is a little arrow after the stripe. When you see this, remember that is means "behind". What is this? (wait). Yes, it means "behind".

Se ke gore morago. Na o a bona gore go na le sefapano go latela mothalo. Ge o bona se, gopola gore ke gore morago. Ke eng se? (Ema) Ke gore morago.

17. This means "bicycle". You can see that this picture looks like a bicycle. When you see this, remember it means "bicycle". What is this? (wait). Yes, it means "bicycle".

Se se ra baesekele. O ka bona gore seswantsho se se swana le baesekele. Ge o bona se gopola gore se ra baesekele. Ke eng se? (Ema) Eng se ra baesekele.

18. This means to "dance". This is the sign that means it is something we can do. This is a person. Can you see his body is moving as if he is dancing? When you see this, remember it means to "dance". What is this? (wait). Yes, it means to "dance".

Se se ra go bina. Le ke leswao leo le rego ke selo se re ka se dirago. Yo ke motho. Na o bona mmele wa gagwe o sisinyega e ka o a bina? Ge o bona se gopola se ra bina. Ke eng se? (Ema) Eng se ra bina.

19. This means to "stand". This is the sign that means it is something we can do. This is a person. Can you see that he is standing on a line? When you see this person on the line, remember that it means to "stand". What is this? (wait). Yes, it means to "stand".

Se se ra go ema. Le ke leswao le rago seo re ka se dirago. Yo ke motho. Na o a bona gore o eme mothalading? Ge o bona motho ya mothalading gopola gore go ra gore ema. Ke eng se? (Ema) Eng se ra gore ema.

20. This means "them". This is the sign for other people. It it was a sign for

yourself, it would have been a sircle. This triangle means it is other people. Can you see it is devided into 4 parts? This means that there are more than one person. When you see this, remember that it means "them". What is this? (wait). Yes, it means "them".

Se se ra bona. Le ke leswao la batho ba bangwe. Ge e ka be e le leswao la gago, e ka be e le sediko. Khutlotharo ye era batho ba bangwe. Na o a bona e arotswe ka diripa tse nne? Se se ra gore go na le batho ba bantsi. Ge o bona se gopola gore ke bona. Ke eng? (Ema) Eng ke bona.

APPENDIX C: Instructions before testing

Now you know all the pictures. We have put them into sentences so that you can read our little stories. Let me read the story to you once and then you can read it to us. (Teacher reads the story). Now you read the story to us. (Children read the story). Very good. Now, tell us what each of the pictures means again.

Bjalo o tseba diswantsho kamoka. Re di somisitse mafakong gore o kgone go bala kanegelo ya rena e kopana. E re ko go balele nonwane ye gatee gomme wena o tla re balela yona. (Morutisi o bala nonwane). Bja re balele nonwane. (Bana ba bala nonwane). Gabotse. Bjale re botseng gape gore seswnatsho se sengwe le se sengwe se ra goreng.

You have listened and learned very well. Thank you very much. Now we want to see how much of this you can remember. I want each of you to sit at one of the seats where we tell you to sit. Start putting the little pictures that we gave you on the word that fits with it. If the word is "house", you have to find the picture for house and put it on the word with a little prestic. If the word is "tree" we have to find the picture that means "tree" and put it on the word. Look carefully, because you will not use all the pictures. Some of the pictures we did not teach you. Look at the board to make sure that you have the picture the right way up. Can you do that? Do you understand? Please do not look at your friends' work. When you have finished, give your paper to Henriette. You can stand outside, but do not leave, we are not finished yet. You can start now.

Le be le theeleditse gape le ithutile gabotse. Ke leboga kudu. Bjalo re nyaka go bona gore le tla gopola tseo le didirilego. Ke hyaka mongwele mongwe a dule go se tee sa ditulo fao re tlo go mo laetsa. Kgomaretsang diswantsho go mantsu a swanelago. Ge lentsu e le ntlo nyaka seswantso sa yo na gomme o se bee godimo ga lentsu ka go somisa mmotu wa go kgomaretsa. Ge lentsu e le sehlare re swanetse go nyaka seswantsho se se gore sehlare gore re se kgomaretso. Hlokomela ka gore diswantsho tseo di ka se some kamoka. Tee dingwe diswantsho ga re a le ruta tsona. Lebelela letlapeng gore o kgore go be diswantsho ka tshwanela. Na o ka dira seo? Le a kwisisa? O seke wa lebelela mosomo wa mogwera wa gago hle. Ge o feditse neela Henriette mosomo wa gago. O ka ema ka ntle fela se sepele.

APPENDIX D: Instructions for the Withdrawal 1 and Withdrawal 2 stages

Today we are going to see how much of all the pictures you can remember. We will not teach you the pictures again, but we are sure you can remember some of them. Just think carefully of what the picture looks like and what it means. Please do not look at your friends' work. Just put the little picture on the word like put the picture that means "dog" on the word "dog". Are you ready? You may start.

Lehono re a gona gore le ka gopola diswantsho tse kae. Ga ye sa le ruta diswantsho empa re holofela gore tse dingwe tsa tsona le tla di gopola. Gopola ka pela gore diswnatsho tsela di bjang gape le gore di ra goreng. Ka knopelo se leblele mosomo wa mogwera wa gago. Kgomaretsa seswantshwana godimo ga lentsu bjalo ka ge o bea seswantsha seo se gore mpsa godimo lensu le mpsa. Na le lokile? Le ka thoma.

APPENDIX E: Paragraphs 1 - 4 (English and Northern Sotho versions)

The paragraphs used in the study are presented here with the concepts in red which were replaced by symbols by the subjects.

Paragraph 1 (Containing Blissymbols A and Glyphs A)

English version

In the <u>spring</u> mother likes to plant <u>beautiful</u> plants and <u>flowers</u>. In the <u>summer</u> the <u>plants grow</u> very big. I like flowers very much and my <u>mother</u> lets me put flowers <u>in</u> my room. The <u>green</u> leaves of the plants and the <u>blue</u> flowers look nice in my room. When I stand <u>in front of</u> the flowers, it smells very nice. I throw the flowers <u>out</u> when they are dead. My sister takes some flowers to her <u>teacher</u>. Her teacher is <u>sick</u> and is in the hospital. The <u>ambulance</u> took the teacher to the hospital and the <u>doctor</u> gave her some medicine. The teacher <u>coughs</u> and coughs and she has to <u>lie down</u> in bed all day. The walls of the hospital is painted <u>white</u>. My sister sits at her bed and wishes that she is <u>healthy</u> again.

Northern Sotho version

Ka <u>seruthwana</u> mma o rata go bjala <u>matsoba</u> a <u>mabotse</u>. <u>Selemo dimela</u> di <u>gola</u> kudu. Ke rata matsoba kudu <u>mma</u> a re ke beye matsoba <u>ka</u> phaphusing yaka. <u>Botalamorogo</u> bja dimela le <u>botalalerata</u> bja matsoba ke bjo bo botse ka phaphusing yaka. Ge ke ema <u>pele</u> ga matsoba, a nkga bose. Ke lahlele matsoba <u>ntle</u> ge a hwile. Sesi o isa matsoba go <u>morutisi</u> wa gagwe. Morutisi wa gagwe o a <u>babja</u> o bookelong. <u>Ampulanse</u> e mo isitse bookelong <u>ngaka</u> ya mofa dihlare. Morutisi o a <u>gohlola</u> gape o swantse go <u>robala</u> dikobong mosegare ka moka. Mabota a bookelo a pentilwe ka pente ye <u>tshweu</u>. Sesi o dutse mpetong wa gagwe o duma o kare a ka <u>fola</u>.

Paragraph 2 (Containing the concepts represented by Blissymbols A & Glyphs A)

English version

My brother and I take the bus to school every day. There are many children on the bus who laugh and sing. The one boy tries to kiss my sister. He gives her sweets because he likes her. Another boy brought his big dog with. It jumps on the seats and tries to lick us. I like dogs very much. Do you like dogs? In front of me sits a clever boy. My brother sits on my right side and my cousin sits on my left side. My cousin is a small girl. She gets angry when the dog licks her. The dog can run very fast and he can catch a ball in his mouth. He is a good dog because he listens to his master. I wish I could rather go to school in an aeroplane - it would be much quicker.

Northern Sotho version

Buti waka le nna re namela bese ka mehla ga re ya sekolong. Go na le bana ba bantshi ka gare ga bese ba a sega ba a opela. Mosimane yo mongwe o leka go suna sesi. O mofa maswitsi ka go bane o a mo rata. Mosimane yo mongwe o tlile le mpsa ya gagwe ye kgolo. E tlola godimo ha ditulo ya leka go re latswa. Ke rata dimpsa kudu. A o rata dimpsa? Mo pele ga ka go dutse mosimane wa go hlalefa. Buti o dutse ka letsogong la go ja. Motswala o dutse ka go la nngele. Motswala ke ngwanenyana yo monynyane. O a befelwa ge mpsa e mo latswa. Mpsa e kgona go kitima ka lebelo ya swara kgwele ka molomong wa yona. Ke mpsa ya go loka ka gobane e theeletsa mong wa yona. Ke duma o ka re nka ya sekolong ka sefofane - e ka ba kapejana.

Paragraph 3 (Containing the concepts represented by symbols from Glyphs B and Bliss B)

English version

My sister is a <u>student</u> at the university. She is learning to be a <u>nurse</u> and will work in the <u>hospital</u> one day. I like to spend a day with her. I am <u>happy</u> when she takes me to the shops in her <u>car</u>. In the <u>winter</u> it is too <u>cold</u> to walk to the shops. In the summer, when it is <u>hot</u>, we walk to the shops. We buy <u>fruit</u> for mother and <u>vegetables</u> to make soup with. My sister takes me to pick up leaves that fall from the trees in the <u>autumn</u>. I have to <u>kneel</u> down to choose the beautiful leaves. The leaves are all red and <u>vellow</u> like the sun. Some of the older leaves are <u>brown</u>, but they are not so beautiful. They are lying at the <u>bottom</u> of the tree. Some of the nice leaves are still at the <u>top</u> of the tree. I <u>climb</u> to the top of the tree to get the beautiful leaves. <u>We</u> go home before it gets dark. At the end of the day I am so tired that I <u>yawn</u> before I go to bed.

Northern Sotho version

Sesi waka ke moithuti kua unibesiti. O ithutela go ba mooki gore a tle a some bookelong ka letsatsi le lengwe. Ke nyaka go glwa letsatsi le yena. Ke a thaba ge a nkisa lebenkeleng ka koloi ya gagwe. Marega go a tonya ge o e ya lebenkeleng ka maoto. Selemo ge go fisa re sepela ka maoto go ya lebenkeleng. Re rekela mma dienywa le merogo gomme a apeo sopo ka yona. Sesi o a ntsea gomme ra yo topa matlakala ao a wago mehlareng nakong ya lehlabula. Ke swanetse gore ke khuname gore ke tope matlakala a mabotse. Matlakala ke a mahubedu le mmala o serulwane bjalo ka letsatsi. A mangwe a matlakala a kgale ke a masotho, eupsa ga a botse. A wetse ka fase ga mohlare. A mangwe a matlakala a sa le godimo ga mohlare. Ke namela godimo ga mohlare gore ke kge matlakala a ma botse. Re ya gae pele letsatsi le sobela. Ge letsatsi le sobetse ke a edimola pele ke robala.

Paragraph 4 (Containing symbols from Glyphs B and Bliss B)

English version

There is a naughty boy living at the <u>side</u> of the school. He likes to <u>spit</u> on the ground. He <u>throws</u> people with stones and he likes to <u>kick</u> the dogs in the street. I <u>hate</u> it when people do that to dogs. It makes me very <u>sad</u>. My <u>sister</u> and I are not naughty because my <u>father</u> will give us a hiding. We like to <u>play</u> with our <u>new</u> ball that we <u>received</u> for Christmas. The <u>old</u> ball is <u>ugly</u>. It is <u>black</u> because it is so dirty. We like to kick the ball <u>between</u> two big trees. Sometimes the ball rolls <u>behind</u> the trees and then we can't find it. We also like to ride on a <u>bicycle</u>. I like to <u>dance</u>. I can <u>stand</u> on one leg and hop around the garden. We have many friends and we like to play with <u>them</u>.

Northern Sotho version

Go na le mosimane wa go seleka <u>thoko</u> le sekolo. O rata go <u>tshwa</u> mo fase. O <u>fosa</u> batho ka maswika gape o <u>raga</u> dimpsa mo mmileng. <u>Ga ke rate</u> ge batho ba dira dimpsa bjalo. Ke kwa <u>bohloko</u> kudu. Nna le <u>sesi</u> ga re seleke ka gobane <u>tate</u> o tlo re betha. Re rata ga <u>raloka</u> ka dikgwele tsa rena tse <u>dimpsha</u> tseo re di <u>humanego</u> ka matswalo o morena. Kgwele ya <u>kgale</u> e <u>befile</u>. Ke e <u>ntsho</u> ka baka la ditshila. Re rata go raga kgwele <u>makgahlong</u> ga mehlare e mebedi. Ka nako e ngwe kgwele e kgokologela ka <u>morago</u> ga mehlare, re palelwe ke go e humana. Re rata gape go reila <u>baesekele</u>. Ke rata go <u>bina</u>. Nka <u>ema</u> ka leoto le tee ka tshela-tshela ka serapeng. Re na le bagwera ba bantshi gape re rata go raloka le <u>bona</u>.

APPENDIX F: Explanatory pictures used during symbol training

Blissymbols

brother	bus	laugh	sing	spring	beautiful	flower	summer
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kiss	give ^	big V	it	plants	grow	mother	in
us × 2	like	you 😊	? sit @^	green	blue Co	in front of	out
right v	left ,	small	angry	teacher in	sick	ambulance _O	doctor
→. ®	04	P	x ∰≪		R	●	
run Ĉ →	catch	good	aeroplane	cough	lie down	white	healthy

Blissymbols: Continued

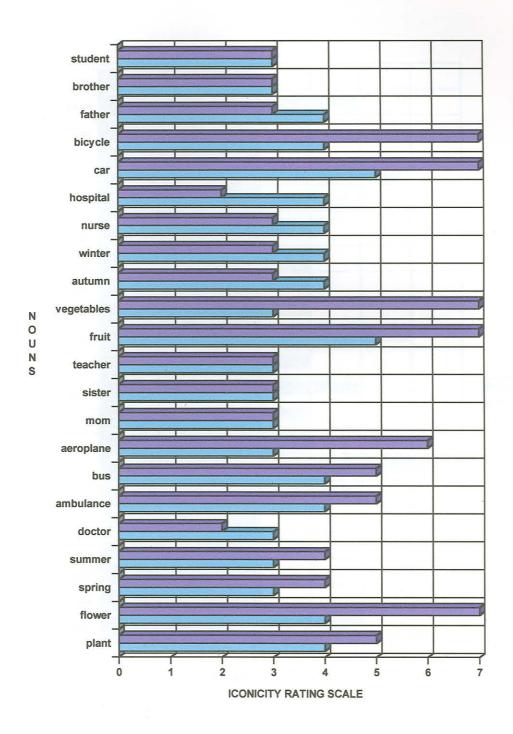
student	nurse	hospital	I	side	spit	throw	kick
			1		0	11!	<u></u>
happy V	car	winter	cold 🗸	hate	sad	sister	father
$\bigcirc \uparrow$	$\otimes \otimes$	0, +	(B)	<u></u>	\bigcirc	\triangle_2	
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kneel	yellow	brown	bottom	ugly	black	between	behind
5	0	<u> </u>		$\circ \circlearrowleft \downarrow$	0 2		
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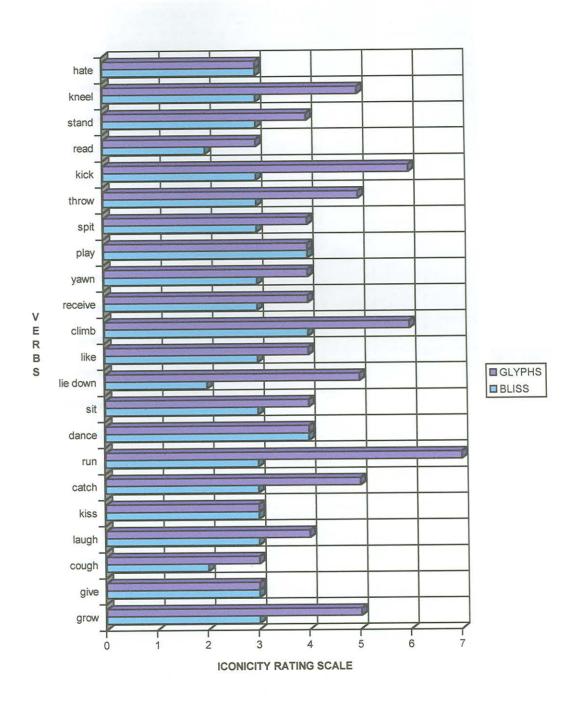
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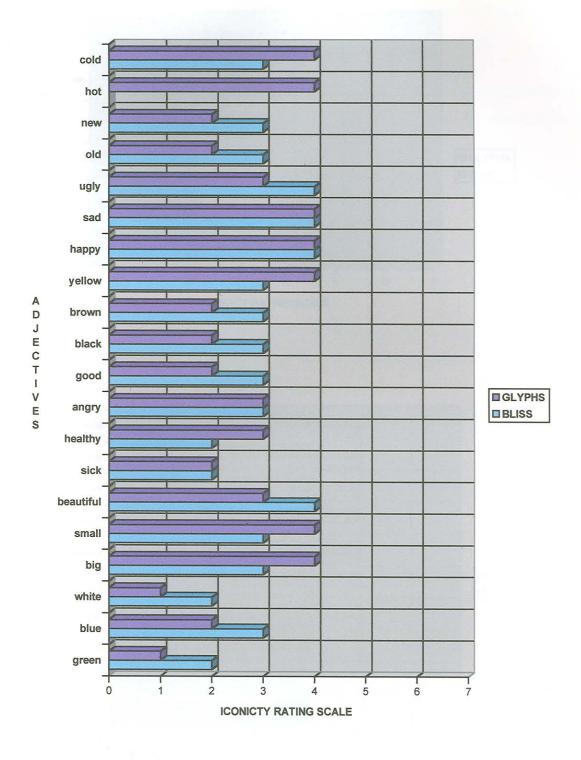
CyberGlyphs: Continued

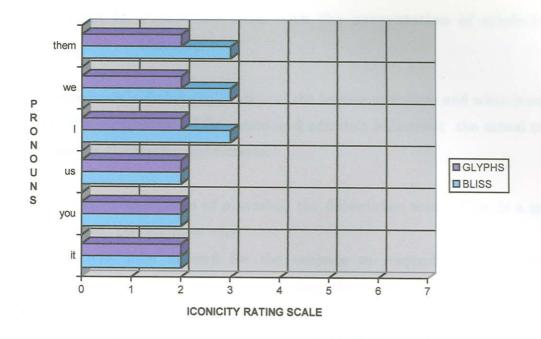
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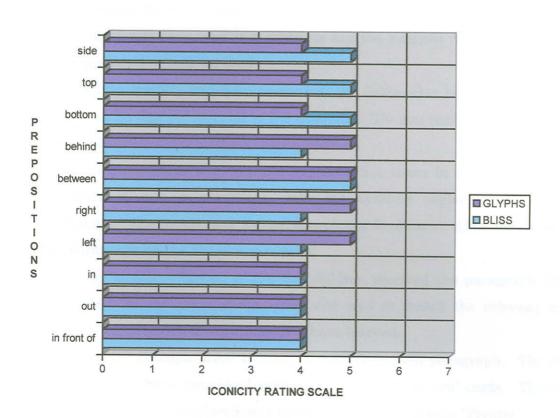
APPENDIX G: Iconicity ratings for individual words











APPENDIX H: Procedure used with the presentation of symbols during training

The procedures included explanation of the testing procedure and what is expected of them; the explanation of the action and adjective indicators; the actual training of the symbols, the testing instructions.

- * With the presentation of a symbol, the fieldworker said: "This is a snake. (for example). Do you know why?"
- * Time was then allowed for the subjects to respond. After response, the fieldworker commenced in explaining the symbol by means of a picture representing the symbol.
- * After the explanation of the symbol, it was again repeated by saying: "This is a snake. Now can you tell me why?" The subjects responded and the fieldworker acknowledged their response.
- * The symbol was then used in a sentence and the subjects were asked to read the sentence together and out loud.
- * After all 20 symbols had been presented, the fieldworker repeated each one with the group having to respond to the question: "Do you remember what this is?". The fieldworker acknowledged their response.
- * After all 20 symbols were trained (repeated five times in all) the symbols were incorporated into a paragraph with the symbols replacing the concept is represents. The group read the paragraph out loud once. After the second time, the paragraph on the board was covered.
- * A testing session followed where the children received the paragraph that was translated for the main study. The aim was to match the relevant concepts (written in red) with the symbols they have learned.
- * The relevant concepts were written in red ink in each paragraph. The subjects were provided with individual symbols represented on 3cm² cards. The symbols on the cards had to be placed over the relevant concepts with "Prestic".

- * The following instructions were given: "You have the paragraph we just did in front of you, as well as the symbols we just did. I want you to read the paragraph carefully and look at your symbols. Decide which symbol means the same as the red words and put the symbol on the word with a little "prestic". Do not speak to each other or look at another persons' work. When you have finished, put up your hand so that we can come and collect your paper".
- * The testing session was over as soon as everybody finished matching the symbols to the concepts.
- * The subjects had a 15 minute break while all the paragraphs were gathered and the next set of symbols were prepared.
- * The process was repeated exactly for the second set of symbols.
- * Only 40 symbols were taught to each group per day. The 40 symbols were from one symbol system
- * After the last groups of symbols were presented to the subjects and the testing was completed, each child had a sweet or juice as a concrete reward. The subjects were also praised and thanked for their co-operation.
- * The following day the whole process was repeated exactly for the second group of subjects.
- * Days 3 and 4 were used to repeat the training.
- * After the two days of training, two days of revision followed.
- * After four days of training a period of seven days withdrawal followed (7 days for group 1 and 7 for group 2).
- * After the seven days of withdrawal, the 80 symbols were tested with the same testing procedure and paragraphs used during training. No training of symbols were done after the withdrawal period to determine how many symbols were retained by the subjects. Breaks of 15 minutes followed each testing of a group of 20 symbols so that the arrangement of the new paragraphs and individual symbols could be organised before the next paragraph was tested.
- * This procedure was repeated again after 30 days of withdrawal.
- * On the final days of testing (after withdrawal) the children were praised verbally for their co-operation and were given ice-cream as a concrete reward.

APPENDIX I: The t-test results for the percentage of errors STATISTICAL ANALYSES

Paired t-tests were done to establish whether there exist statistically significant diffences in average (mean) percentage of errors between the **bliss** and **glyph** methods. These tests were done for

- · Nouns
- Verbs
- Adjectives
- Prepositions
- Pronouns

Note: For prepositions and pronouns the sample sizes are small and the assumption of normality, necessary for the t-test, was not tested. The % errors were measured on the **same** word using the two different methods, therefore the samples are dependent and paired t-tests were used.

The hypotheses tested were that the same average percentage errors occurred for both the bliss and the glyph methods, tested for the **five** different word types and at **four** different times

- Test1
- Test2
- Withdrawal 1
- Withdrawal 2
- 510

All results are discussed at the 5% significance level.

Results of t-tests for Nouns

When comparing the average % of errors for the two methods:

There was a statistically significant difference between the two methods only for the withdrawal 2 test. The average % of errors was significantly lower for the glyph method. The other three tests showed no statistically significant diffences.

Results of t-tests for Verbs

When comparing the average % of errors for the two methods:

There were statistically significant differences between bliss and glyph on all four tests – highly significant on the withdrawal tests. Again the glyph method produced a significantly smaller average % of errors.

Results of t-tests for Adjectives

When comparing the average % of errors for the two methods:

Again there were statistically significant differences between bliss and glyph on all four tests – highly significant on all four tests. Again the glyph method produced a significantly smaller average % of errors.

Results of t-tests for Prepositions .

When comparing the average % of errors for the two methods:

There was a statistically significant difference between the two methods only for test 1 and the

withdrawal test 2. The average % of errors was significantly lower for the glyph method. The other two tests showed no statistically significant diffences in average % of errors.

Results of t-tests for Pronouns

When comparing the average % of errors for the two methods:

Again there were statistically significant differences between bliss and glyph on all four tests – highly significant on all four tests. Again the glyph method produced a significantly smaller average % of errors.

Overall one can thus report that the glyph method tends to have significantly better results than the bliss method. The exact exceedance probabilities ar summarised in the following table:

p-v	alues or exceedan	ce probabilities fo	or each of the 20 t-te	sts
	Test 1	Test 2	Withdrawal 1	Withdrawal 2
Nouns	0.087	0.431	0.079	0.011
Verbs	0.023	0.023	0.006	0.003
Adjectives	0.006	0.001	0.001	0.000
Prepositions	0.267	0.043	0.500	0.022
Pronouns	0.003	0.004	0.002	0.003

Note: If the p-value < 0.05 then there is a significant difference at the 5% level.

t-Test: Paired Two Sample for Means NOUNS : test1

	Variable 1	Variable 2
Mean	8.909091	6.545455
Variance	114.1818	115.1169
Observatio	22	22
Pearson C	0.729805	
Hypothesi	0	
df	21	
t Stat	1.408471	
$P(T \le t)$ on	0.086813	
t Critical o	1.720744	
$P(T \le t)$ tw	0.173626	
t Critical t	2.079614	

t-Test: Paired Two Sample for Means VERBS : test1

	Variable 1	Variable 2
Mean	16.36364	7.090909
Variance	478.3377	120.2771
Observatio	22	22
Pearson C	0.369912	
Hypothesi	0	
df	21	
t Stat	2.119313	
$P(T \le t)$ on	0.023075	
t Critical o	1.720744	
$P(T \le t)$ tw	0.04615	
t Critical t	2.079614	

t-Test: Paired Two Sample for Means ADJECTIVES: test1

	Variable 1	Variable 2
Mean	17.4	6
Variance	322.1474	48
Observatio	20	20
Pearson C	0.071106	
Hypothesi	0	
df	19	
t Stat	2.715582	
$P(T \le t)$ on	0.00686	
t Critical o	1.729131	
$P(T \le t)$ tw	0.01372	
t Critical t	2.093025	

t-Test: Paired Two Sample for Means NOUNS :test2

	Variable 1	Variable 2
Mean	5.090909	4.909091
Variance	42.94372	57.80087
Observatio	22	22
Pearson C	0.774366	
Hypothesi	0	
df	21	
t Stat	0.175605	
$P(T \le t)$ on	0.431143	
t Critical o	1.720744	
$P(T \le t)$ tw	0.862287	
t Critical t	2.079614	

t-Test: Paired Two Sample for Means VERBS: test2

	Variable 1	Variable 2
Mean	12	4.909091
Variance	265.1429	57.80087
Observatio	22	22
Pearson C	0.307726	
Hypothesi	0	
df	21	
t Stat	2.117297	
$P(T \le t)$ on	0.02317	
t Critical o	1.720744	
$P(T \le t) tw$	0.046339	
t Critical t	2.079614	

t-Test: Paired Two Sample for Means ADJECTIVES: test2

	Variable 1	Variable 2
Mean	13	3.8
Variance	156.4211	37.85263
Observatio	20	20
Pearson C	0.429547	
Hypothesi	0	
df	19	
t Stat	3.634229	
$P(T \le t)$ on	0.000883	
t Critical o	1.729131	
$P(T \le t)$ tw	0.001765	
t Critical t	2.093025	

t-Test: Paired Two Sample for Means NOUNS: wd1

	Variable 1	Variable 2
Mean	13.09091	10.36364
Variance	189.2294	229.5758
Observatio	22	22
Pearson C	0.820487	
Hypothesi	0	
df	21	
t Stat	1.459883	
$P(T \le t)$ on	0.079561	
t Critical o	1.720744	
$P(T \le t)$ tw	0.159121	
t Critical t	2.079614	

t-Test: Paired Two Sample for Means VERBS : wd1

	Variable 1	Variable 2
Mean	18	10
Variance	388.1905	206.8571
Observatio	22	22
Pearson C	0.713851	
Hypothesi	0	
df	21	
t Stat	2.718823	
$P(T \le t)$ on	0.006431	
t Critical o	1.720744	
P(T<=t) tw	0.012861	
t Critical t	2.079614	

t-Test: Paired Two Sample for Me ADJECTIVES: wd1

	Variable 1	Variable 2
Mean	22.6	9.4
Variance	389.5158	126.7789
Observatio	20	20
Pearson C	0.498128	
Hypothesi	0	
df	19	
t Stat	3.437539	
$P(T \le t)$ on	0.00138	
t Critical o	1.729131	
P(T<≐t) tw	0.00276	
t Critical t	2.093025	

t-Test: Paired Two Sample for Means NOUNS: wd2

	Variable 1	Variable 2
Mean	19.27273	13.27273
Variance	325.5411	355.6364
Observatio	22	22
Pearson C	0.811204	
Hypothesi	0	
df	21	
t Stat	2.476438	
P(T<=t) on	0.010931	
t Critical o	1.720744	
$P(T \le t)$ tw	0.021861	
t Critical t	2.079614	

t-Test: Paired Two Sample for Means VERBS : wd2

	Variable 1	Variable 2
Mean	23.27273	11.81818
Variance	555.6364	348.1558
Observatio	22	22
Pearson C	0.647558	
Hypothesi	0	
df	21	
t Stat	2.939064	12
$P(T \le t)$ on	0.003919	
t Critical o	1.720744	
$P(T \le t) tw$	0.007838	
t Critical t	2.079614	

t-Test: Paired Two Sample for Me ADJECTIVES: wd2

	Variable 1	Variable 2
Mean	30.4	11.8
Variance	428.4632	191.1158
Observatio	20	20
Pearson C	0.569727	
Hypothesi	0	
df	19	X
t Stat	4.855257	+7
$P(T \le t)$ on	5.5E-05	
t Critical o	1.729131	
$P(T \le t) tw$	0.00011	
t Critical t	2.093025	

t-Test: Paired Two Sample for Means PREPOSITIONS : test1

	Variable 1	Variable 2
Mean	6.4	8
Variance	14.93333	103.1111
Observatio	10	10
Pearson C	0.72488	
Hypothesi	. 0	
df	9	
t Stat	-0.646997	
$P(T \le t)$ on	0.266893	
t Critical o	1.833114	
$P(T \le t) tw$	0.533786	
t Critical t	2.262159	

t-Test: Paired Two Sample for Means PRONOUNS: test1

	Variable 1	Variable 2
Mean	34	7.333333
Variance	184	98.66667
Observatio	6	6
Pearson C	0.320619	
Hypothesi	0	
df	5	
t Stat	4.662524	
$P(T \le t)$ on	0.00276	
t Critical o	2.015049	
$P(T \le t) tw$	0.00552	
t Critical t	2.570578	

t-Test: Paired Two Sample for Means

PREOSITIONS: test2

	Variable 1	Variable 2
Mean	6	2.8
Variance	29.33333	10.84444
Observatio	10	10
Pearson C	0.348868	
Hypothesi	. 0	
df	9	
t Stat	1.921538	
$P(T \le t)$ on	0.043421	
t Critical o	1.833114	
$P(T \le t)$ tw	0.086842	
t Critical t	2.262159	

t-Test: Paired Two Sample for Means PRONOUNS: test2

	Variable 1	Variable 2
Mean	28	4.666667
Variance	153.6	66.66667
Observatio	6	6
Pearson C	0.158114	
Hypothesi	0	
df	5	
t Stat	4.165486	
$P(T \le t)$ on	0.004389	
t Critical o	2.015049	
$P(T \le t)$ tw	0.008777	•
t Critical t	2.570578	

t-Test: Paired Two Sample for Means PREPOSITIONS : wd1

	Variable 1	Variable 2
Mean	11.6	11.6
Variance	44.26667	65.6
Observatio	10	10
Pearson C	0.227634	
Hypothesi	0	
df	9	
t Stat	0	
$P(T \le t)$ on	0.5	
t Critical o	1.833114	
$P(T \le t)$ tw	1	
t Critical t	2.262159	

t-Test: Paired Two Sample for Means

PRONOUNS: wd1

The state of the s	Variable 1	Variable 2
Mean	40.66667	9.333333
Variance	450.6667	209.0667
Observatio	6	6
Pearson C	0.705431	
Hypothesi	0	
df	5	
t Stat	5.097866	
P(T<=t) on	0.001888	
t Critical o	2.015049	
$P(T \le t) tw$	0.003777	
t Critical t	2.570578	

t-Test: Paired Two Sample for Means PREPOSITIONS : wd2

	Variable 1	Variable 2
Mean	16	11.2
Variance	67.55556	52.62222
Observatio	10	10
Pearson C	0.655972	
Hypothesi	0	
df .	9	
t Stat	2.3434	
$P(T \le t)$ on	0.021888	
t Critical o	1.833114	
P(T<=t) tw	0.043776	
t Critical t	2.262159	

t-Test: Paired Two Sample for Means PRONOUNS : wd2

	Variable 1	Variable 2
Mean	46.66667	14
Variance	625.0667	248
Observatio	6	6
Pearson C	0.690844	
Hypothesi	0	
df	5	
t Stat	4.411015	
$P(T \le t)$ on	0.003475	
t Critical o	2.015049	
$P(T \le t)$ tw	0.00695	
t Critical t	2.570578	