Connected Society

Mobile Internet Skills Training Toolkit

A guide for training people in basic mobile internet skills



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MODULE 10 - ACCESSIBILITY FEATURES

Module 10
Accessibility Features

Bitesize Training

Accessibility features for people with little or no vision

What is it?

Explain:
"Some people with low or no vision may find it difficult to see what is on the screen. There are features on the phone that can help them. We need to show a variety of options relevant to their needs. Often people use a combination of features."

Materials you will need

Android Phone



Accessibility Features Posters

What can you use it for?

Explain: "Your mobile phone can help you if you cannot see it. Three of these ways are:"

- **Magnification (making things bigger on the screen):** "Magnification is a function that makes everything on your phone look larger. Many people use magnification to help them view small things. For people with low vision it makes it possible for them to see whats on the screen."

"Michael uses magnification to read the news each day, he finds it easier to read stories with lots of text if the text is 3x normal size"



- **Making the phone speak aloud:** "'TalkBack' is when you can listen to your phone without needing to see the screen. When you do something on your phone it will speak to you and tell you what is happening, it will also vibrate to let you know what is happening."

"Ayesha has always used magnification (making the screen appear larger) on her phone but has found that recently this makes her eyes sore after a few hours and she uses TalkBack when this happens"



- **Changing colours and contrasts:** "Some people find it difficult to see some colours and contrasts making it difficult to read what is on the screen. You can change the way the colour on the phones look to make it easier to use."

"Susan uses high contrast display settings to easily read what she is writing, when using WhatsApp or email. She finds that she makes fewer mistakes when everything is clearer"

How does it work?

- **Ask** the person what they would like to do with their phone
- **Trainer** to check whether the trainee's phone has the accessibility features set up

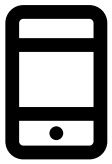
Accessibility features for people who are hard of hearing or deaf

What is it?

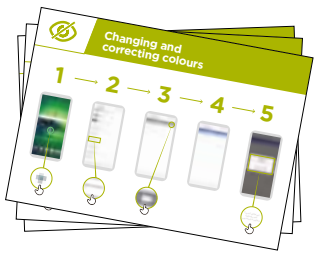


Explain:
"People who are hard of hearing or deaf can use phones like anybody else as mobile phones have features that can help."

Materials you will need



Android Phone



Accessibility Features Posters

What can you use it for?

Explain: "Your mobile phone can help you if you cannot hear it. Three of these ways are:"



- **Amplification:** "If you find it hard to hear what people are saying around you, your Android phone can help. There is something called 'Sound Amplifier' that will make sounds clearer for you to hear."

"Andrew uses 'Sound Amplifier' when he is talking to people in the cafe, he finds this allows him to hear what someone is saying much more clearly as it reduces the background noise"

- **Captions:** "When your phone is playing a video or audio, you can turn on 'captions'. This means you can see the words on the screen of what is being said. It is very helpful when people find it difficult to hear a song or a video."

"Sandra uses captions in video calls. She often finds that the captions help her to pay attention to the call when the words become difficult for her to hear"



- **Transcription:** "'Live Transcribe' is similar to captions. It means that when people are talking you can see text on the screen of what they are saying. For people with a little hearing or no hearing, 'Live Transcribe' can be very useful."

"Sahid connects his hearing aid to his phone which makes speech much clearer and easier for him to understand when talking to his brother and sister through WhatsApp"

Make it relevant to the trainee: discuss how these features could be beneficial in the trainee's own life.

How does it work?

- **Ask** the person what they would like to do with their phone
- **Trainer** to check whether the trainee's phone has the accessibility features set up

MOBILE INTERNET SKILLS TRAINING TOOLKIT (MISTT)

In Depth Training

Working with people with disabilities

Around 15 per cent of people in the world have some form of disability. For many people with disabilities, life can be challenging because they face barriers to access services such as education and healthcare, that other people don't face. However, mobile phones can help remove some of these barriers and allow people with disabilities to do everyday things that they would otherwise find difficult to do.

There are many benefits that mobile can bring to the lives of people with disabilities. Mobile can be used to **connect people with their friends and relatives** using WhatsApp, calls or SMS. Mobile also makes it easier to access **mobile money**, **entertainment**, **news** and **online information.** Also, for many people with disabilities, mobile is the gateway to transportation, education, healthcare services and community groups.

Maybe you are wondering how someone who cannot see or hear can use a mobile phone? There are a set of functions known as **accessibility features** that can help people to improve the user experience of mobile phones. These features can help someone with low vision to make things larger on the screen, for instance, or help someone who cannot hear to read what is being said in a video. However, many people are not aware that these accessibility features exist, or they do not know how to use them.

People with vision and/or hearing impairments may need support to use a mobile in two ways. Firstly, the same as with other customers, they may need to learn how to use WhatsApp, internet, You Tube etc. Secondly, they will need to learn how to use accessibility features to use their phone and apps. Throughout the modules you will see call out boxes that suggest accessibility tips for each of the main services, this is followed by two modules looking in depth at the different types of accessibility features that people with low/no vision or hard of hearing/ deaf may find useful.

By teaching your customers both elements, you will contribute to empower them to live more independently and participate more fully in society.

Communicating with customers with a disability – Getting started

"Ask before..." is important in any situation and the same applies when interacting with a person with a disability. We should always ask the person before offering assistance or support and making assumptions.

You might be nervous when meeting a person with a disability and feel afraid of using the wrong words or saying something offensive. Make sure that you respect the person as you would with anyone else.

Top tips for communicating with customers with a disability



Speak directly rather than through a companion or any sign language interpreter who may be present.

If you offer help, wait until it is accepted. **Then listen or ask for instructions.**

Treat adults as adults. Address people with disabilities by their first names only when extending that same familiarity to all others.

Do not lean against or hang on someone's wheelchair or scooter or play with a guide dog.

Listen carefully to those who have difficulty speaking, give them time to finish. If necessary, ask questions that require short answers.

Never pretend to understand; check with the person if you are unclear.

Relax. Don't be embarrassed if you happen to use common expressions such as "See you later" or "Did you hear about this?" that seem to relate to a person's disability.



Supporting customers with a hearing loss

- **Get the person's attention before speaking.** There are many ways of attracting attention – like a gentle touch on the arm. Ask the person for suggestions.
- **Speak clearly and at a moderate pace.** Raising your voice volume excessively, and shouting is not helpful.
- **Look directly at the person** while speaking and be at the same eye level if possible.
- When giving information, **ask the person if they have understood**, (e.g. "Did that make sense?").
- Feel comfortable to **show facial and body expressions**, smiling, pointing etc. all help to communicate.
- **Be aware that your face may be in shadow**, and that light behind you might make it harder for the person to learn from your expression.
- **Reduce background noises** where possible, background noises can make listening very difficult.
- **Use pencil and paper to supplement your communication** if necessary. In a noisy environment, writing down keywords may assist those who are hard of hearing.
- When in doubt, ask the person with a hearing loss for **suggestions to improve your communication.**
- Many people with a hearing impairment use **hearing aids**. Find out if the person is using an aid and ask how you can help them in using it.
- **Be patient, confident and relaxed.**

Supporting customers with vision loss

Introduce yourself. Not everyone recognises voices or remembers them.

Don't shout. Being visually impaired or blind does not mean you can't hear clearly.

Let people know when you are moving. Don't leave a person who is blind talking to themselves.

Avoid hand signals as it can be hard to understand directions and gestures if you cannot see them well.

Don't worry about words such as, "See" or "Look". People with visual impairments understand that these words are part of regular conversations.

Don't push, pull or grab a person who is blind.

Do offer your arm for assistance. Ask how someone prefers to be guided.

If the person has a guide dog, **avoid talking or playing with the dog**. Never stroke, feed, or direct a service dog whilst they are wearing a harness or vest: they are there to help and are not a pet.

Introduction to training

Note to trainer

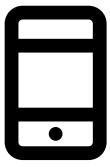
Using a mobile phone with little or no vision, or little or no hearing, is not complex. All Android phones can help people to use the phone when they cannot easily see the screen or hear sounds. These are called accessibility features. Most customers will have some vision or hearing, and they will need to make the phone easier to see and hear. Some customers will have very little sight or hearing and they will need help to use the phone in a different way.

For each of the activities below, there is a simple activity, but there is also a more detailed activity if you have the time to complete it.

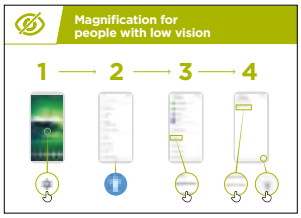
Tip: The accessibility features that help a person use a phone can be used across many apps, but may not work in some apps.

Google Assistant can be very useful – particularly for people with little or no vision (more information can be found on page 140).

Materials you will need:



Android Phone



Accessibility Features Posters

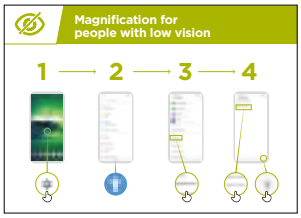
Customers with little or no vision

Activity: Changing display settings (for low vision)

Explain: "You can change the way the screen looks on the 'general settings' menu"

Ask what trainees are interested in: Changing and correcting colours; changing fonts and display size; increasing the contrast and reducing white light.

Demonstrate how to change settings for people with low vision using one of the **'How to change display settings'** posters:



- Changing and correcting colours;
- Changing fonts;
- Changing display size;
- Increasing the contrast and reducing white light.

Trainer: If you know someone who uses these settings, bring the benefits to life by telling their story.



Explain: "We are going to practice this using WhatsApp to send a message"

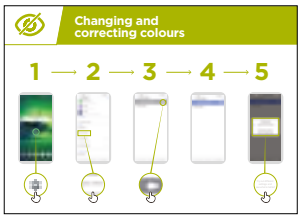
Demonstrate using the **'How to send a message on WhatsApp'** poster

1. Help the group find the WhatsApp icon
2. Check that everyone knows about WhatsApp and how to use it
3. Demonstrate sending a message
4. Increase the font size and send a WhatsApp message to someone else in the group

Activity: Changing and correcting colours

Explain: "Some people find it difficult to see some colours and they might not be able to see the phone screen properly. You can change the way the colour on your phone looks, to make it easier for people to use."

Tip: These settings may not be on all phones. Try to help trainees to set it up.



Demonstrate using the **'Changing and correcting colours'** poster

1. Follow the instructions to adjust the settings for colour correction
2. Open a picture that you have taken – it could be of the trainer if they agree!
3. Look at the photo before you set up the correction and after

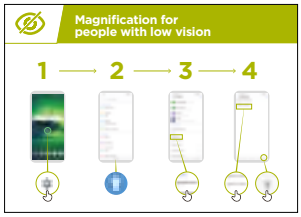
Practice: Try using colour correction with a variety of different apps, include a local website, a social media app such as Facebook and a messaging app such as WhatsApp.

Trainer to make it relevant by telling a story of colour blindness or if you know someone who is colour blind, tell a story about your or their use of mobile.

Activity: Magnification for people with low vision (making things look larger on screen)

Explain: "Magnification is a function that makes everything on your phone look larger. Many people use magnification to help them view small things. For people with low vision it is makes it possible for them to use a screen."

"Magnification works like a magnifying glass but it is part of the phone. You can use it for a short time (e.g. to look at a picture) or whenever you use your phone."



Demonstrate using the '**magnification**' poster we are going to see how to use magnification.

Explain: "We will use the magnification to send messages and read them. We are going to practice this by sending a message with WhatsApp."

1. Increase the magnification for continual use on the phone
2. Send a WhatsApp message to someone else in the group

Activity: Magnification

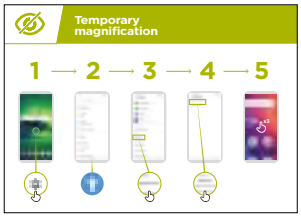
Explain: "Magnification is a function that makes everything on your phone look larger. Many people use magnification to help them view small things. For people with low vision it is makes it possible for them to use a screen."

"Magnification works like a magnifying glass but it is part of the phone. You can use it for a short time (e.g. to look at a picture) or whenever you use your phone."

Activity: Magnification

Explain: "Magnification can also be a temporary function and is similar to when you "zoom" in. You may have used "zoom" to make something bigger – e.g. on a photo."

Explain: "You are now going to "zoom" using the magnification"



Demonstrate how to zoom on a picture using the **'Setting up temporary magnification'** poster

Reading WhatsApp message using temporary magnification

Explain: "We are going to practice using magnification this by sending a message with WhatsApp"

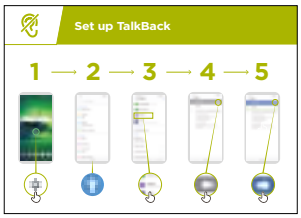
1. Help the group find the WhatsApp icon
2. Check that everyone knows about WhatsApp and how to use it
3. Demonstrate sending a message
4. Increase the magnification for temporary use on the phone
5. Send a WhatsApp message to someone else in the group

Practice: Try using magnification with a variety of different apps, include a local website, a social media app such as Facebook and a messaging app such as WhatsApp.

Activity: Text to Speech – Getting the phone to speak out what is on screen

Explain: "'TalkBack' is when you can listen to your phone without needing to see the screen. When you do something on your phone it will speak to you and tell you what is happening, it will also vibrate to let you know what is happening."

"TalkBack or text-to-speech can really change the life of people with no vision. It means they can use their phone without someone having to read for them."



Demonstrate how to set up 'TalkBack' using the '**Setting up TalkBack'** poster.

1. Open the Google App on your phone
2. Practice starting TalkBack and switching it off – do this several times
3. Now learn the gestures to navigate with TalkBack
4. Navigate to the search box
5. Search for 'cafes near me'
6. Listen to the results and double tap on one cafe to find out more about it
7. Try searching for other things

Practice: Try using the speech settings with a variety of different apps, include a local website, a social media app such as Facebook and a messaging app such as WhatsApp.

Recap

Explain: "All Android phones are able to help people to use the phone when they cannot easily see the screen. Even when you have little or no vision - using a mobile phone is not complex."

"For those with some sight, we can make the phone easier to see, for those with little or no sight we can help to present the information on the screen in a different way. There is a solution to help most people with vison loss."

"The features in this module can help a person use a phone across many apps, but some may not work if they have been designed not to use the phone settings."

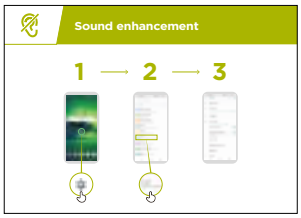
"Most apps have special 'shortcuts'. These can help you use many of the things explained in this module, in an even easier way!".

Customers who are hard of hearing or deaf

Activity: Sound enhancement

Explain: "On your phone you can change it so that different sounds are quieter or louder. For example you can change it so that music and video are a different volume from phone calls or alarms."

"You can also use something called BesLoudness to make the sounds as clear as possible."



Discuss the benefits of sound enhancement with trainees. Trainer to give own examples of how increasing the volume and clarity could change their experience. For example how it could help a person who struggles to hear clearly when they are listening to their phone.

Demonstrate how to change sound settings using the 'Sound enhancement' step-by-step poster.

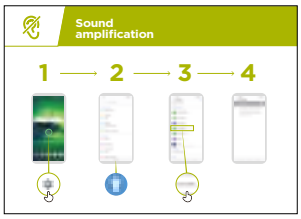
Tip: It is really important to use a (good quality) wired or wireless headset.

Activity: Sound amplification

Explain: "If you find it hard to hear what people are saying around your Android phone can help. There is something called 'Sound Amplifier' that will make sounds clearer for you to hear."

Tip: Some phones may not have this function. You may need to help trainees download 'Sound Amplifier' if their phone does not have it.

Discuss situations where it is more difficult to understand what is being said. Bring the benefits of 'Sound Amplifier' to life using trainers' own experience. For example, when someone is in a very loud place or they are an older person who struggles to hear properly.



Demonstrate using the **'Sound amplification' poster** show trainees can they can change these settings step-by-step.

Activity: Captions

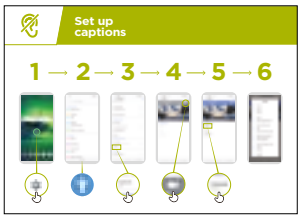
Explain: "When your phone is playing a video or audio, you can turn on 'captions'. They mean you can see the words on the screen of what is being said. It is very helpful when people find it difficult to hear a song or a video."

"Captions can help everyone. They help people understand what is being said when the audio is in another language or the sound is poor quality. It also useful for people who have problems hearing."

Demonstrate how trainees set up captions using the **'Setting up 'captions' poster'**

Explain: "Now that we have set up captions, we can try watching a video on YouTube with captions on."

Tip: Captions work best when the person who has made the video has added captions. Some apps - such as YouTube - automatically caption videos if none are available but these don't work as well.



Demonstrate how trainees can watch a video in YouTube with captions using the poster.

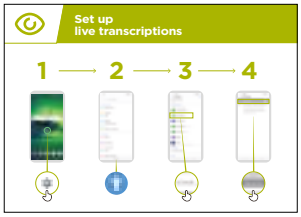
1. Using the instructions in the poster switch on captions
2. Using the YouTube App or website navigate to search for a favourite video
3. If the author has created captions these will autoplay

Activity: Live transcriptions

Explain: "'Live Transcribe' is similar to captions. It means that when people are talking you can see text on the screen of what they are saying. For people with little hearing or no hearing, 'Live Transcribe' can be very useful."

"On some Android phones 'Live Transcribe' will already be on your phone, if not you might need to download it from the Google Play store."

Trainer: may need to help the trainee download 'Live Transcribe' if their phone doesn't have it.



Demonstrate using the **'Set up live transcriptions'** poster show trainees can they can change these settings step-by-step.

1. Open Live Transcribe following the instructions in the step-by-step guide
2. Make a phone call to a friend
3. Put the phone on speaker
4. Watch the transcription as they speak

Trainer to explain that when speaking (or writing) on the phone all the information is saved somewhere (more information can be found in the Online Safety section on page 110).

Tip: 'Live Transcribe' works best in face to face conversations in a room. Now apps – for example Skype or Zoom – are also adding transcriptions to their apps for free.

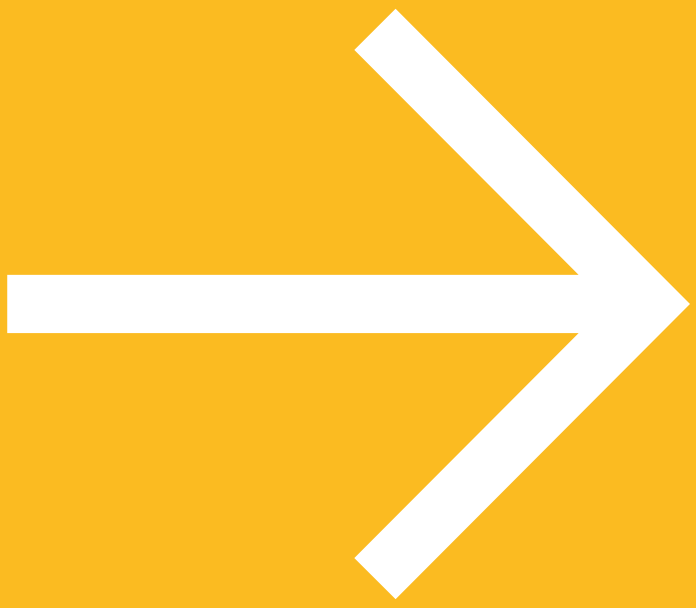
Recap

Explain: "All Android phones are able to help people to use the phone when they cannot hear sounds coming from the phone. Even when you can only hear a little bit - using a mobile phone is not complex."

"For those with some hearing, we can make the phone easier to hear, for those with little or no hearing we can help to present the audio information in a different way, for example, as text."

Trainer to explain: "The features in this module can help a person use a phone across many apps, but some may not work if they have been designed not to use the phone settings."

"Most apps have special 'shortcuts'. These can help you use many of the things explained in this module, in an even easier way!".

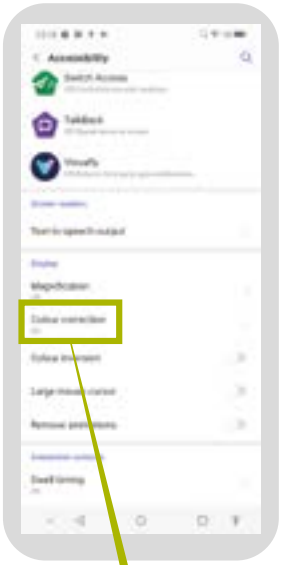


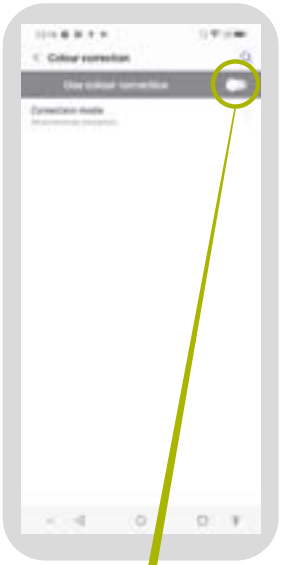
Posters Cut-outs And Info-sheets

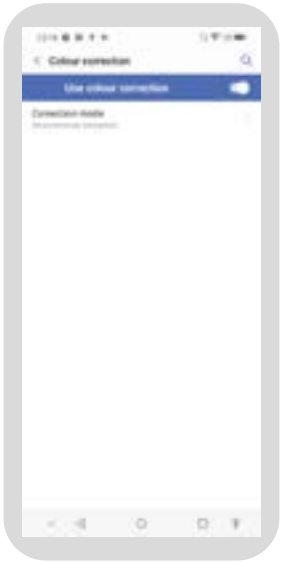
Changing and correcting colours

1 → 2 → 3 → 4 → 5





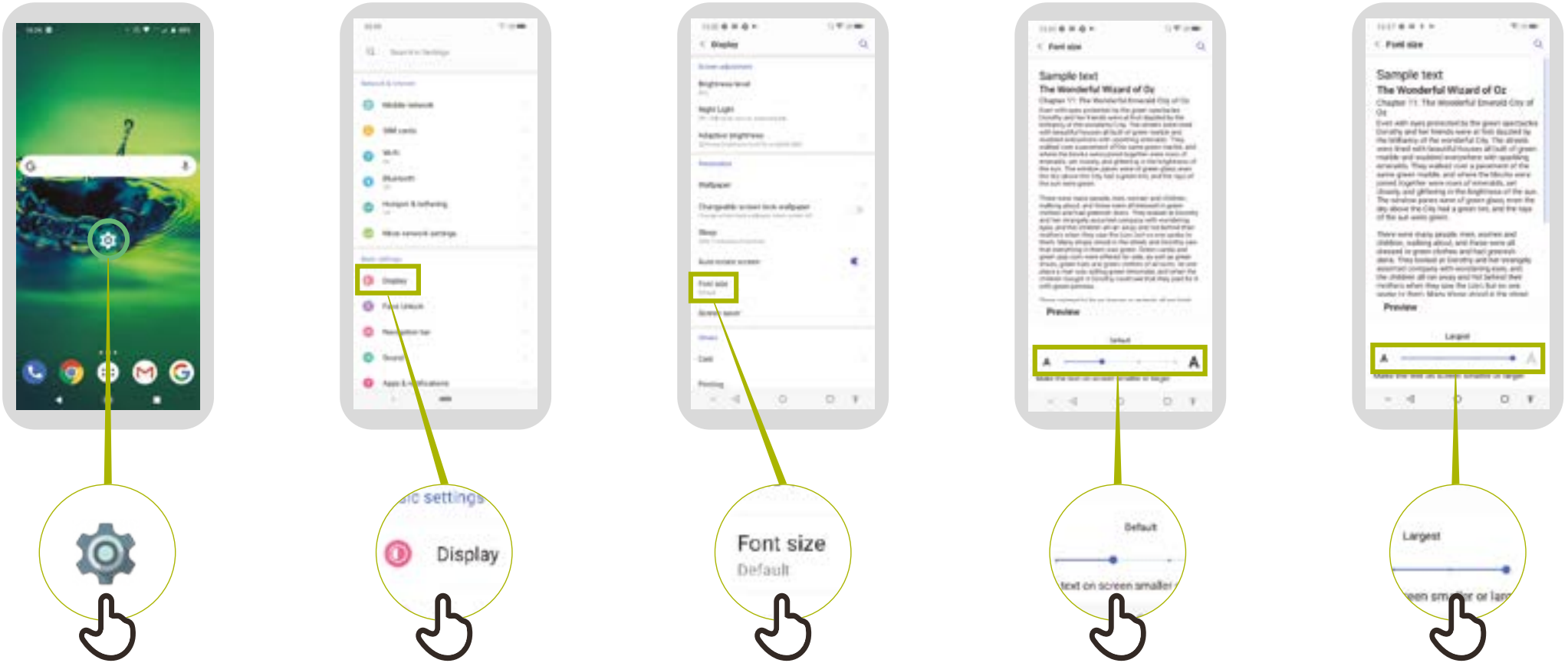






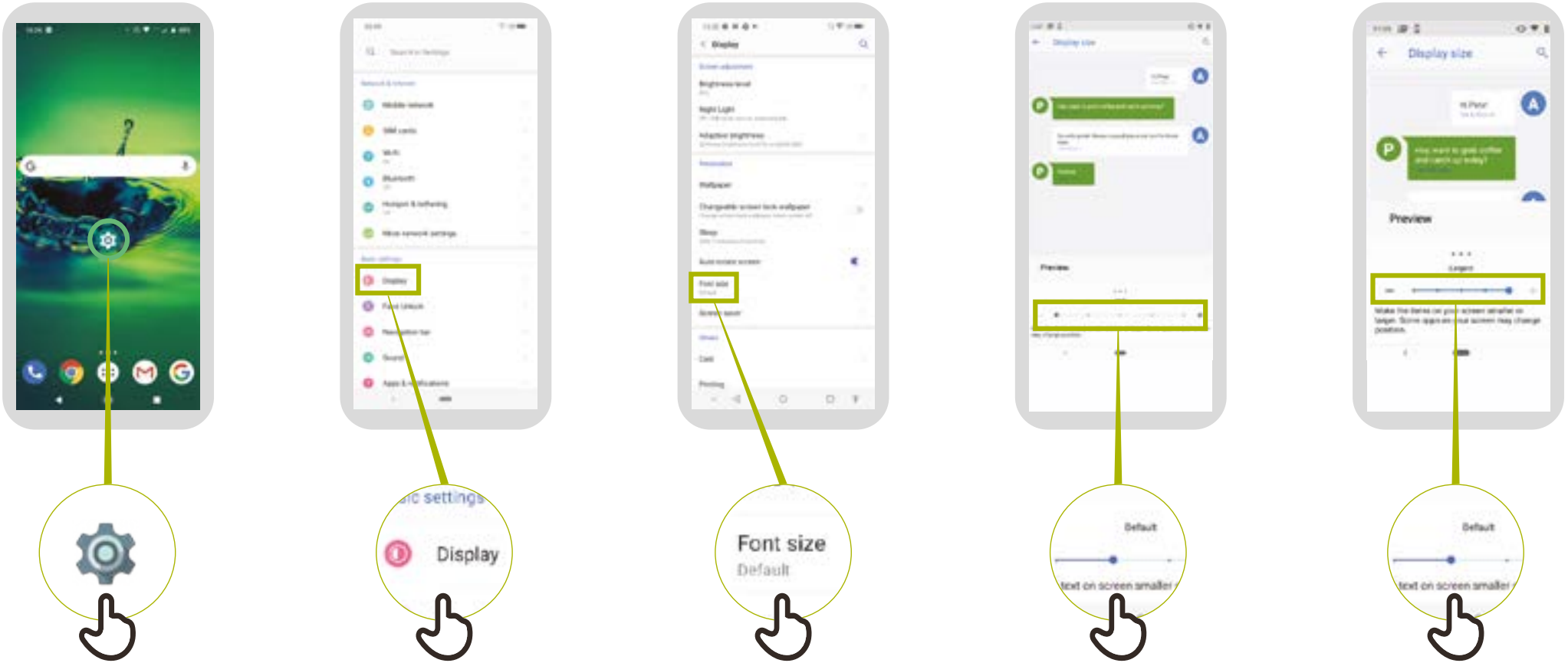
Changing font sizes

1 → 2 → 3 → 4 → 5



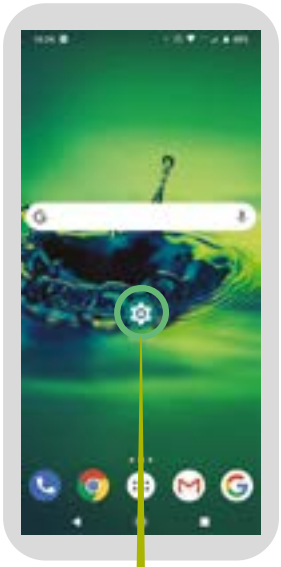
Changing display

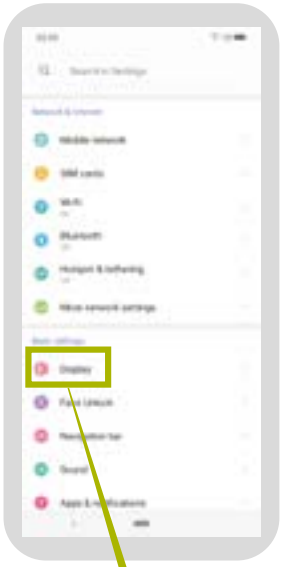
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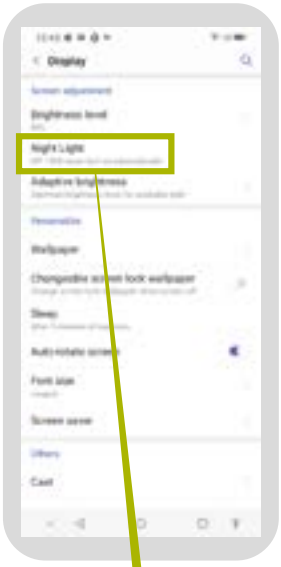


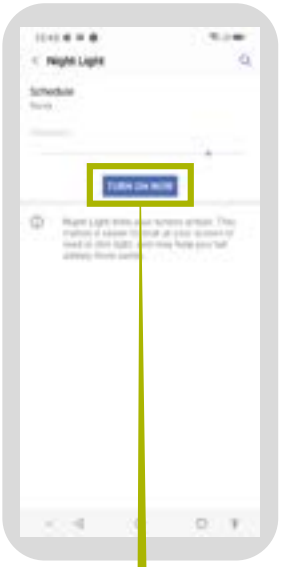
Turning on ‘Night Light’

1 → 2 → 3 → 4



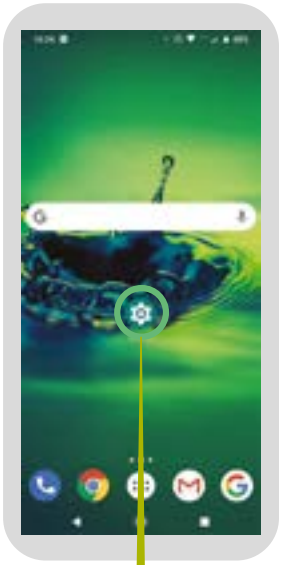


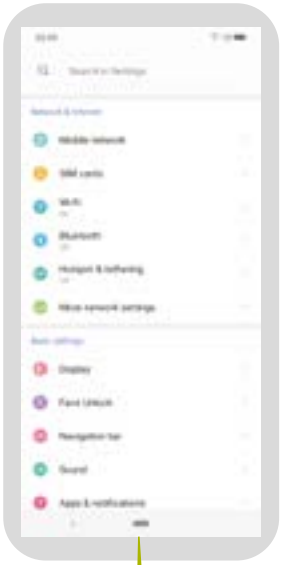


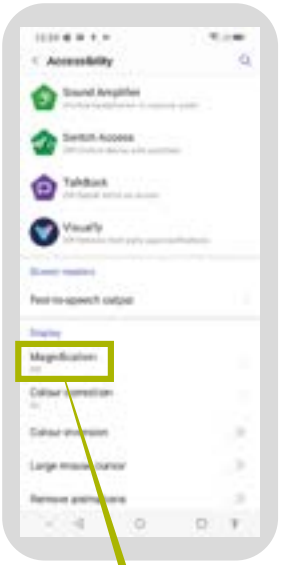


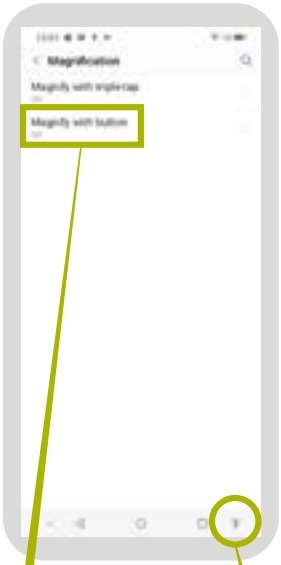
Magnification for people with low vision

1 → 2 → 3 → 4





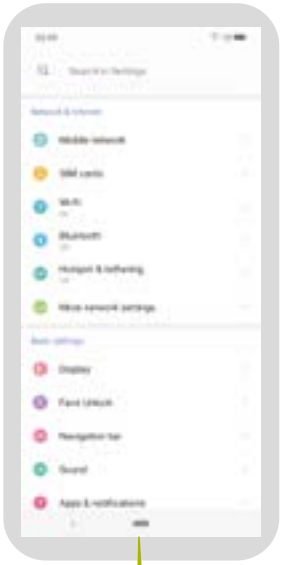


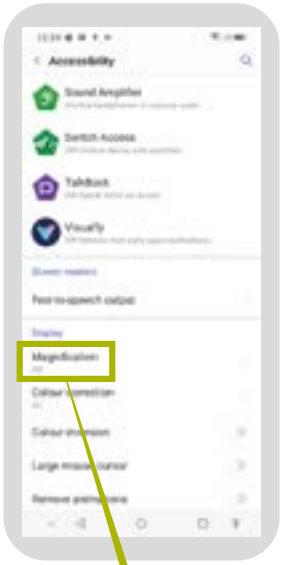


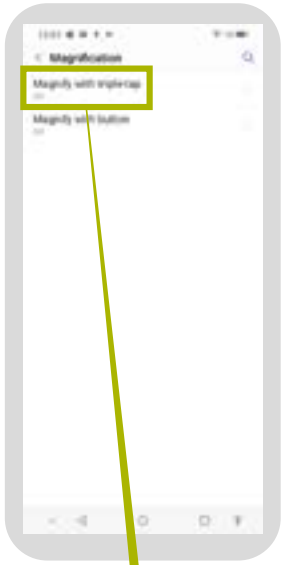
Temporary magnification

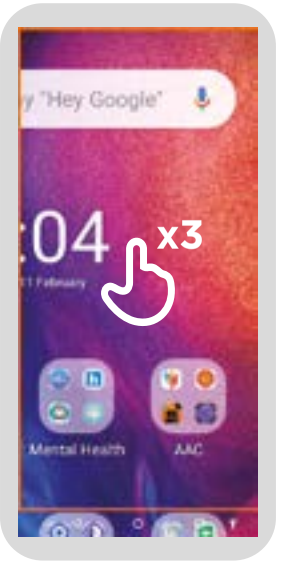
1 → 2 → 3 → 4 → 5

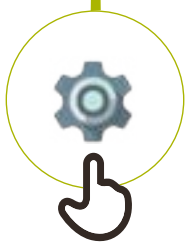












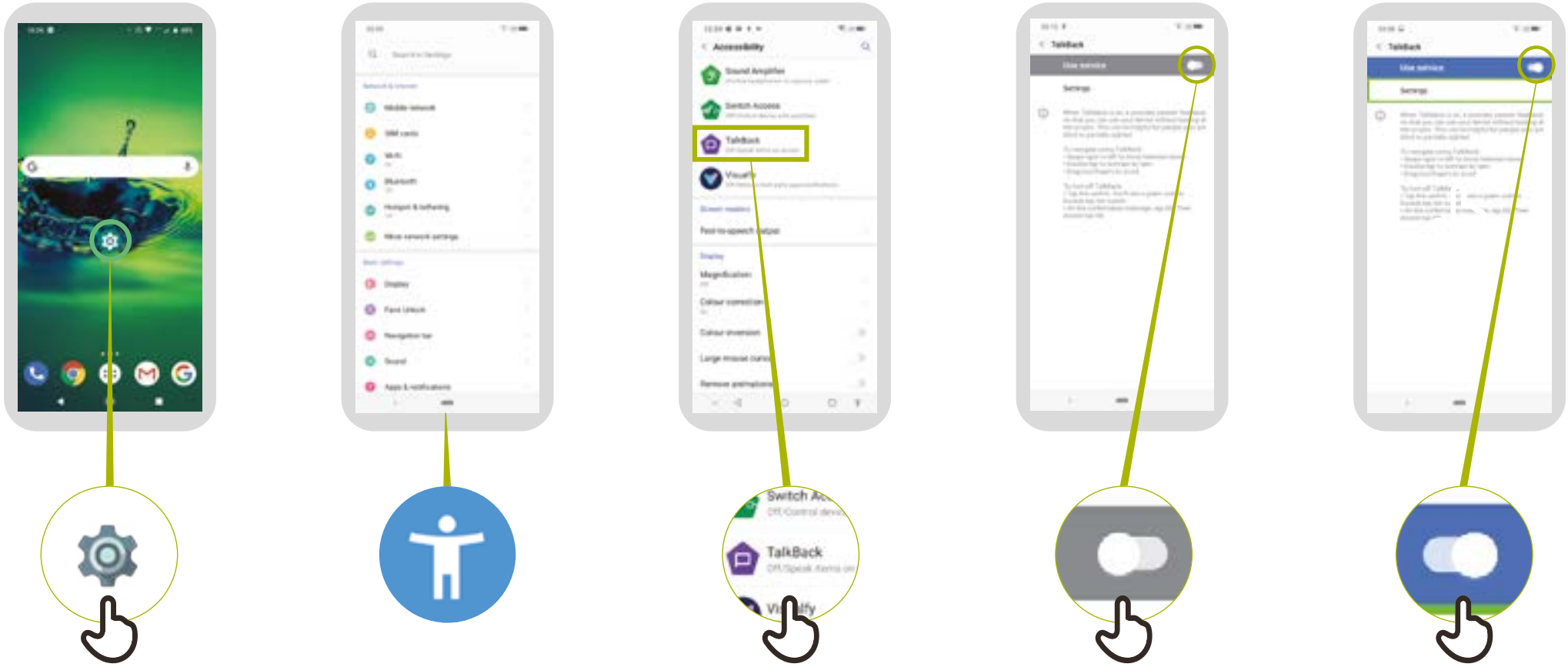






Set up TalkBack

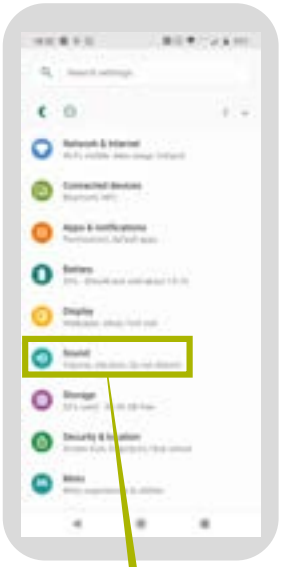
1 → 2 → 3 → 4 → 5

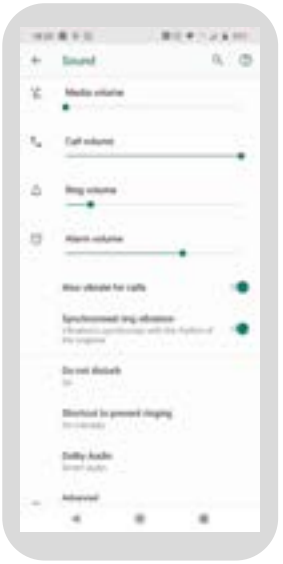


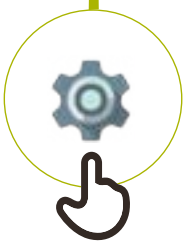
Sound enhancement

1 → 2 → 3





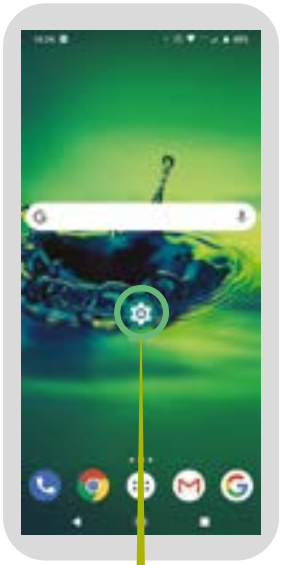


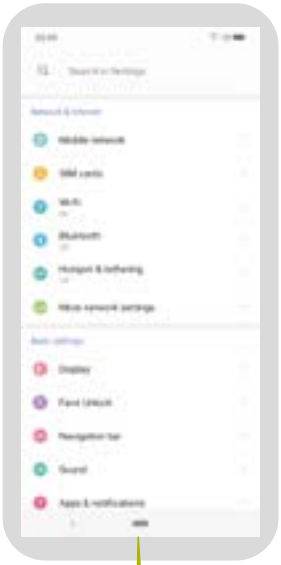


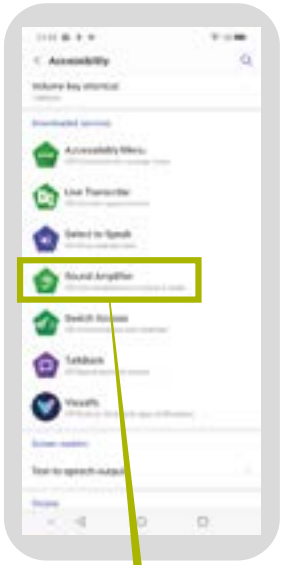


Sound amplification

1 → 2 → 3 → 4



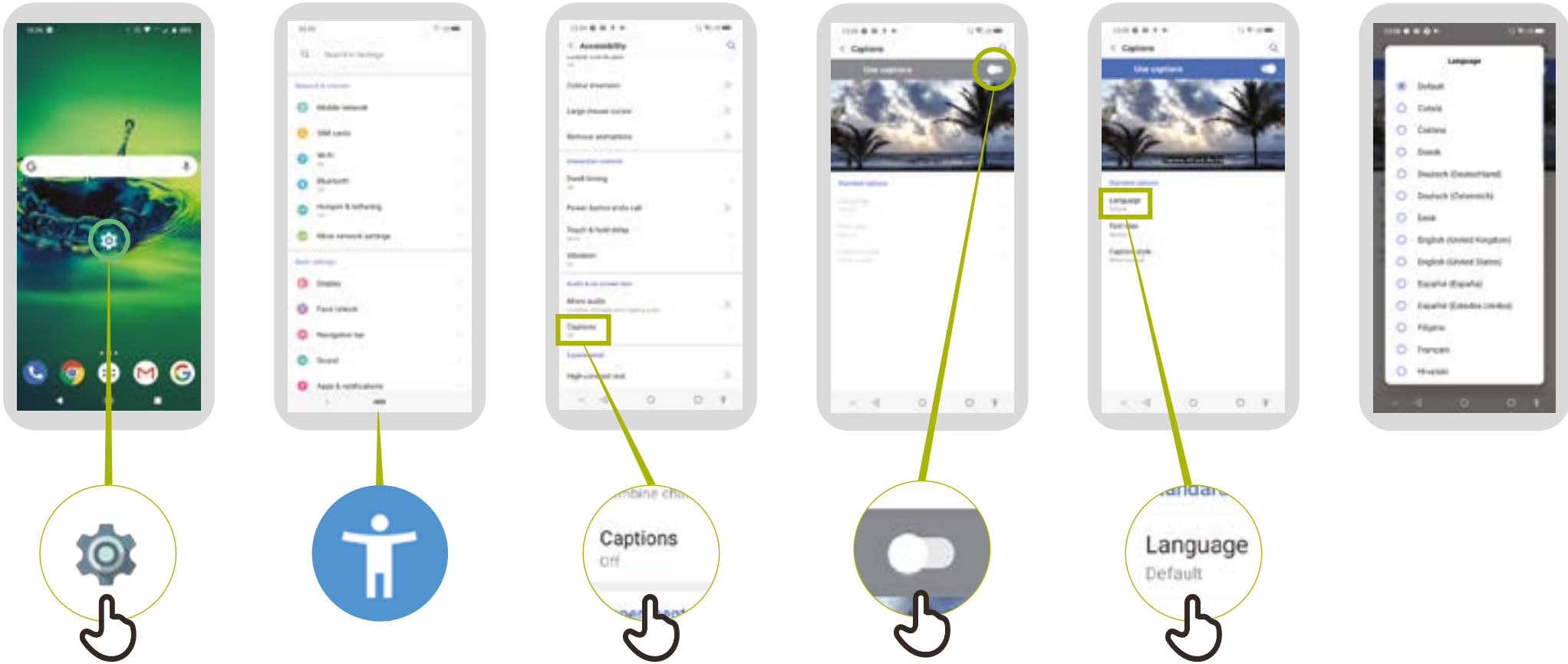






Set up captions

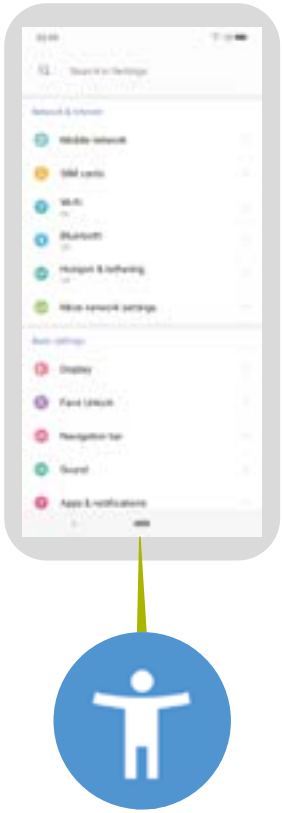
1 → 2 → 3 → 4 → 5 → 6

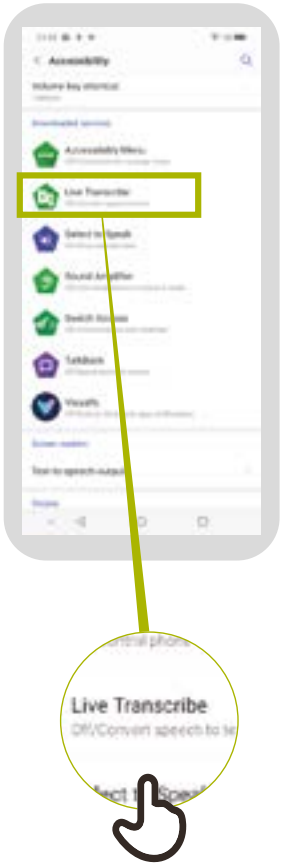


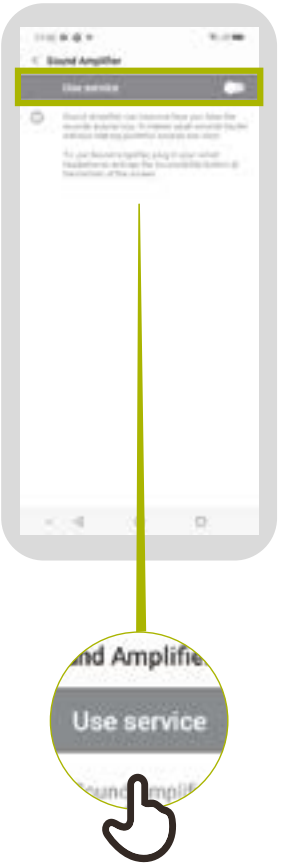
Set up live transcriptions

1 → 2 → 3 → 4









Top tips for communicating with customers with a disability



Speak directly rather than through a companion or any sign language interpreter who may be present.



If you offer help, wait until it is accepted. Then listen or ask for instructions.



Treat adults as adults. Address people with disabilities by their first names only when extending that same familiarity to all others.



Do not lean against or hang on someone's wheelchair or scooter or play with a guide dog.



Listen carefully to those who have difficulty speaking, give them time to finish. If necessary, ask questions that require short answers.



Never pretend to understand; check with the person if you are unclear.



Relax. Don't be embarrassed if you happen to use common expressions such as "See you later" or "Did you hear about this?" that seem to relate to a person's disability.

Supporting customers with a hearing loss

Get the person's attention before speaking. There are many ways of attracting attention – like a gentle touch on the arm. Ask the person for suggestions.

Speak clearly and at a moderate pace. Raising your voice volume excessively, and shouting is not helpful.

Look directly at the person while speaking and be at the same eye level if possible.

When giving information, **ask the person if they have understood**, (e.g. "Did that make sense?").

Feel comfortable to **show facial and body expressions**, smiling, pointing etc. all help to communicate.

Be aware that your face may be in shadow, and that light behind you might make it harder for the person to learn from your expression.

Reduce background noises where possible, background noises can make listening very difficult.

Use pencil and paper to supplement your communication if necessary. In a noisy environment, writing down keywords may assist those who are hard of hearing.

When in doubt, ask the person with a hearing loss for **suggestions to improve your communication.**

Many people with a hearing impairment use **hearing aids**. Find out if the person is using an aid and ask how you can help them in using it.

Be patient, confident and relaxed.

Communicating with people with vision loss

Introduce yourself. Not everyone recognises voices or remembers them.

Don't shout. Being visually impaired or blind does not mean you can't hear clearly.

Let people know when you are moving. Don't leave a person who is blind talking to themselves.

Avoid hand signals as it can be hard to understand directions and gestures if you cannot see them well.

Don't worry about words such as, "See" or "Look". People with visual impairments understand that these words are part of regular conversations.

Don't push, pull or grab a person who is blind.

Do offer your arm for assistance. Ask how someone prefers to be guided.

If the person has a guide dog, **avoid talking or playing with the dog**. Never stroke, feed, or direct a service dog whilst they are wearing a harness or vest: they are there to help and are not a pet.