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Digital Literacy for Older Adult English Language Learners

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University of San Francisco

Digital Literacy for Older Adult English Language Learners

A Field Project Presented to

The Faculty of the School of Education

International and Multicultural Education Department

In Partial Fulfillment

Of the Requirements for the Degree

Master of Arts in Teaching English to Speakers of Other Languages

by

Talleyrand May Hsu Caruso

December 2023

Digital Literacy for Older Adult English Language Learners

In Partial Fulfillment of the Requirements for the Degree

MASTER OF ARTS

in

TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES

by

Talleyrand May Hsu Caruso

December 2023

UNIVERSITY OF SAN FRANCISCO

Under the guidance and approval of the committee, and approval by all the members, this field project has been accepted in partial fulfillment of the requirements for the degree.

Approved:

Instructor / Chairperson

Date

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ABSTRACT

During the pandemic, basic services and daily interactions shifted abruptly to accommodate shelter-in-place orders, limiting in-person contact. Paper forms and face-to-face meetings shifted online seemingly overnight, leaving those without digital skills unable to see a doctor, access services, and stay in touch with loved ones. This trend of *going paperless* post-pandemic puts individuals with low digital abilities, immigrant English Language Learners (ELLs), and older adults over the age of 65 in a precarious situation due to diminished access to basic resources. There is an opportunity to increase equity, agency, and belonging by teaching basic digital skills tailored to these communities.

Digital Literacy is the ability to problem-solve using technology such as smartphones, apps, and the internet. As of the date of this publication, courses that teach digital literacy to adults assume the learners primarily use laptop or desktop computers, know how to click around in websites, and are *at least* an intermediate user of English. There is a lack of material tailored to teaching basic digital skills to beginner ELLs.

The *Digital ESL* field project, rooted in Kolb's Experiential Theory, is guided by recommendations made by the U.S. Department of Education on teaching digital literacy. The significance of the project is to teach foundational digital skills to beginner-level English Language Learners through community-based programs, equipping newcomers, immigrants, and refugees with the practical tools they need to succeed.

CHAPTER I
INTRODUCTION

Statement of the Problem

Purpose of the Project

Theoretical Framework

Significance of the Project

Definition of Terms

CHAPTER I INTRODUCTION

Global statistics published in 2023 by the Migration Policy Institute (MPI) reveal that the United States represents five percent of the world population but is home to 20 percent of all global migrants (Ward & Batalova, 2023). However, while America may be seen as a place where the poor and oppressed find opportunity and freedom, two out of every 5 adult immigrants in the U.S. do not possess basic literacy in English, a predictor of economic, health, and social well-being (Batalova & Fix, 2015).

In a recent TED Talk, the founder of Duolingo, the world's most popular educational app, shared his belief that traditional forms of education perpetuate inequality due to issues in access to quality education. The first step in working towards a solution, in his eyes, was to pilot the delivery of language-learning education through smartphone technology, explaining that doing so would allow him to provide consistent, high-quality education to a growing number of people across the world. He went on to report that of the two billion people learning a foreign language, about 80% study English because "English can truly transform your life" (TED, 2023, 2:56).

Using a smartphone to learn English is no longer a novel idea for most, however, that is not an option for those without the digital skills to download the appropriate apps and operate a smartphone. While some English Language Learners (ELLs) may possess digital literacy in another language, Harris (2015, pp. 2–3) that there would still be a need for them "to develop their English language skills to be able to use those digital literacy skills in English," since not all learning resources support the use of multiple languages.

Duolingo is one of hundreds of digitally-enabled tools that provide language-learning opportunities outside of the classroom, giving learners the ability to develop language skills outside the classroom through increased opportunities to practice and gain exposure (Richards,

2015; Hannibal Jensen, 2019). By empowering our immigrant population with digital skills, we can build a more sustainable model of English-language teaching while simultaneously addressing issues of integration, resulting in an improved sense of equity and belonging in our society (McHugh & Doxsee, 2018).

Addressing both digital and language literacy skills simultaneously, in the longer run, could take some of the burden off the states if executed correctly. The recommendation to integrate digital skills building into ESL classes is one of four recommendations made by the Migration Policy Institute (McHugh & Doxsee, 2018), citing a statistic that the U.S. government has only been able to meet 4% of the national demand for ESOL (English to Speakers of Other Languages) classes. Building baseline skills in using technology opens up a realm of free, online resources that would allow learners to engage in self-study.

Since 2011, the Organization for Economic Cooperation and Development (OECD) has been measuring literacy, numeracy, and digital literacy, to determine how the ability to read and interpret written text, and the ability to use math and technology to solve problems, can help countries prosper (Program for the International Assessment of Adult Competencies, n.d.-a). Their 2015 PIAAC study indicated that native-born, native-language adults in the United States possessed higher digital proficiency than foreign-born individuals who spoke a language other than English at home by a factor of three (Cherewka, 2020). Not surprisingly, the study also found that one in 5 U.S. adults who spoke a language other than English in the home had zero computer experience, compared to *one in 20* English speakers. In short, immigrants are more likely to have lower digital literacy rates than their U.S. native counterparts.

Statement of the Problem

Technology is often seen as an enabler. However, those without a firm grasp on how to operate digital tools such as smartphones have limited access to basic resources. The stark reality of the situation was highlighted during the pandemic, putting on display for all to see how low digital literacy impacted the already vulnerable populations the most. Those who could problem-solve using online tools were able to stay up-to-date on the latest discoveries regarding COVID-19 prevention, gain access to food and items in short supply, receive telehealth services, and maintain mental health through continued social connections despite physical social distancing. Meanwhile, those without digital literacy were left without education, healthcare, and household essentials (Cherewka, 2020; Xie et. al, 2020).

A growing number of activities have shifted into the digital world, a trend that began well before the pandemic (Harris, 2015). Smartphone ownership and social media usage have also seen rapid gains in the past decade, with smartphone ownership more than quadrupling its 2012 figures for those over the age of 65 (Pew Research Center, 2022).

In the United States, there is a disproportionate amount of older adult English Language Learners who are unable to access and utilize basic resources due to a lack of digital literacy (Cherewka, 2020), which is especially disappointing when that insight is paired with the high growth rates in smartphone purchases for that age bracket. This signifies a severe underutilization of resources in America today that could be addressed by targeted education on digital skills to the older adult ELL population.

Navigating the digital space has evolved into a necessity with many ordinary tasks, such as withdrawing money and checking in at the doctor's office, now requiring at least some level of proficiency using digital tools (Martínez-Alcalá et al., 2018; Harris, 2020; Milne-Tyte, 2023). As people in the United States continue to live longer than previous generations (United Nations

General Assembly, 2020), the ability to problem solve and keep up with technological advances will impact their quality of life. Whether it is to access English language classes, to apply for a job, to access healthcare or basic resources, the fact is that digital literacy, the ability to utilize technology to solve problems, has become a prerequisite for daily life in the United States (Harris, 2015, 2020; Jenkins, 2016; Vanek, 2020; Xie et. al, 2020; Xiao, 2021).

Purpose of the Project

The purpose of this field project is to provide printable Open Educational Resource (OER) material to teach smartphone-based Digital Literacy to older adult English Language Learners (ELLs). The intended audience includes local municipalities, ESL volunteers and educators with the aim to entice, encourage, and support the implementation of community-based digital literacy programs specifically developed to address the needs of adult English Language Learners over the age of 65.

The approach integrates authentic, basic digital tasks using student-centered instructional approaches to hone practical skills and English language acquisition through activities that are meaningful and relevant, and employ the learners' own resources following recommendations by Harris (2015), Vanek (2020), and Tour et. al (2021). Learners and the communities they are a part of need a simple, guided path to digital literacy starting from delivering foundation skills training tailored to support those less proficient in English. This field project aims to address this need.

This field project is designed as a 10-week, hands-on interactive ESL course that is designed to be delivered by a community-based organization (CBO), consisting of a total of 10 hours of in-person classroom instruction. Because CBOs often rely on volunteers, the course material is designed to instill confidence in specialist and non-specialist teachers alike. *Digital*

ESL is broken into weekly units covering Connecting to Wi-Fi, Smartphone Parts and Actions, Asking for Help, Apps I Use, Schedules and Dates, Using QR Codes, Filling out Online Forms, with students gaining experience through real-time, authentic practice using their own smartphone devices throughout.

Theoretical Framework

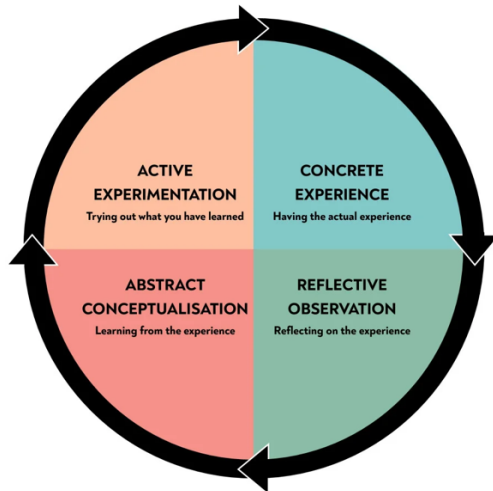
This field project seeks to apply Kolb's Experiential Learning Theory (1984), a Constructivist approach supported by the U.S. Department of Education in their brief published on teaching digital literacy to adult learners (Harris, 2015). By utilizing the learners' own smartphones as the devices on which to train, opportunities for authentic practice both in and outside the classroom are maximized. The aim is to encourage lifelong learning, which is said to have a positive effect on health and well-being (Narushima et. al, 2018; Zhu & Zhang, 2019; van der Ploeg et. al, 2020).

Epistemologically, Kolb's Experiential Learning Theory directly recognizes the models of Lewin, Dewey, and Piaget, synthesizing them into a framework where he posits that knowledge is "continuously derived from and tested out in the experiences of the learner (Kolb, 1984, p. 27)." The following paragraphs provide a brief summary of the background supporting Kolb's theory, focusing its development through the reflection of Lewin's Action Research model and Dewey's model of learning, both developed in the early 20th century.

Lewin's Action Research model, through the lens of Kolb, follows the Experiential Learning Process through four stages that include Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation, as summarized by Mcleod (2023) in the illustration below (see Figure 1).

Figure 1

Kolb's Experiential Learning Cycle (Mcleod, 2023)



Note: This figure provides a visual representation of Kolb's Experiential Learning Cycle. The figure is divided into four quadrants: Active Experimentation, Concrete Experience, Reflective Observation, Abstract Conceptualisation.

Although this four-stage model of the Experiential Learning Process is often referenced within the context of teaching and learning, Lewin's concept was originally rooted in studies advancing social justice in the area of industrial relations. As early as the 1930's, Lewin had already begun demonstrating the measurable benefit in both productivity and morale through implementing a democratic, participatory means of management over an autocratic one (Adelman, 1993).

In the experiment, Lewin took a new workforce and divided them into two groups. The first group was given directives for the new tasks they had to master and was given minimal opportunity to ask questions. Meanwhile, the second group was encouraged to collaborate on the division of tasks and provide continuous feedback on training. The outcome of this experiment

was that the second group not only exhibited a higher level of morale, they also acquired the new skills at a faster rate than their peers in the first group. Active participation in the training process proved to elicit improved engagement while also developing social relationships that improved both communication and cooperation (Adelman, 1993, p. 7).

From Kolb's perspective, Lewin's model was further concretized by Dewey (Kolb, 1984). Although both Kolb and Lewin discussed the continuous cycle of experience, reflection, and experimentation, Dewey delved deeper describing the learning process, expanding the set of inputs necessary for higher order learning beyond actions and reflection. Dewey explicitly discussed the importance of leveraging both learned experience and advice, identifying patterns and commonality across situations to both anticipate and solve potential issues in his 1938 book, *Experience and Education*.

As mentioned previously, there are four stages to Kolb's Experiential Learning Model: *Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation*. Since the basis for this model has been elaborated upon, the next section will review the stages of the learning.

Learning is seen as a never-ending cycle with the initial entry into the cycle beginning with *Concrete Experience*. This first stage sets into motion the learner's immediate involvement in an activity from which the participant comes away with subjective personal meaning (Kolb, 1984, p. 21). In this stage, the learner is given the opportunity to connect with the experience that may be totally novel to them or may be seen as an extension of prior knowledge.

The second stage is *Reflective Observation*. In this stage, the learner analyzes their recent experience, compares it against various components of their prior knowledge and reflects upon the outcome as part of the learning process. The third stage transitions out of reflection and moves toward experimentation through the necessary stage of *Abstract Conceptualization*. It is

in this stage, that the immediate experience, coupled with prior knowledge, synthesizes into developing or evolving a concept within the learner.

According to Kolb, "No two thoughts are ever the same, since experience always intervenes (1984, p. 26)." The final stage in Kolb's Experiential Model is *Active Experimentation*. This stage is the crux of the learning process, since the learning is observed as a result of the protagonist making decisions on the best course of action to take, based on processing concrete experiences and knowledge.

Two key elements of Kolb's model related to teaching digital literacy are the concepts of *Concrete Experience* and *Abstraction*. No human is born knowing how to use a smartphone. Such skills are acquired over time, with repetition, and through trial and error. While it is important to provide intentional sequencing to build practical skills in the classroom, it is also important not to overlook the value of unstructured, incidental learning enabled by technology (Bonk and Lee, 2017; Hannibal Jensen, 2019). In *Digital Literacy and Public Policy through the Library Lens*, Visser supports this by declaring, "Not only does informal (digital literacy) training often open a door to deeper training, it allows new users to practice skills in a way that is personally relevant" (2013, p. 109).

Paolo Freire is well-known for stating that "knowledge emerges only through invention and reinvention, through the restless, impatient, continuing, hopeful inquiry human beings pursue in the world, with the world, and with each other (2018, p. 72)." Kolb's Experiential Learning Theory embodies this very sentiment, stating that learning occurs through lived experience and reflection, incorporating thoughtful modifications in behavior and integrating external feedback and observations in an ongoing cycle of learning and relearning (1984).

Older adult learners bring with them a wealth of knowledge through prior education and experience. Zhu & Zhang (2019), in their study, *Active Learning for Active Ageing*, posit that

the concept of continuous learning, also known as lifelong learning, is not just a process or behavior, but that it is an ideology that values learning in all stages of life. They describe the cyclical nature of this ideology as a "transformative process in which learners undergo a process of becoming, change, construction, and reconstruction through reflective thinking and critical inquiry (Zhu & Zhang, 2019, p. 507)." In *Lifelong Learning: Conclusions from a Literature Review*, Kaplan (2016) explains that lifelong learning is an approach rooted in learning through doing and through experience and that this approach has the potential to provide opportunities to learners through the removal of barriers including socio-economic status, educational level, and age.

The curriculum developed for this field project was designed to offer continuous, guided experimentation on learners' own devices during class to instill confidence for learners to continue *learning by doing* outside the classroom. In this way, *Digital ESL* provides relevant and meaningful experimentation of concepts learned through modeling and practice in the classroom (Harris, 2015; Vanek, 2020) with the aim to promote lifelong learning opportunities for all.

Significance of the Project

There is an unmet need for free and accessible, printable digital literacy material tailored to the needs of older adult ELLs in the United States. OER Commons is an online library of free and accessible teaching resources. A simple search in this library for Adult ESL Digital Literacy resulted in 15 items. Most items were focused on how to use productivity software such as Google Docs and Excel, with the majority of materials added on or prior to 2018. The two items published since 2020 are misclassified since they do not pertain to ELLs, resulting in zero recent publications actually addressing Digital Literacy in an Adult ESL context.

Material related to teaching digital literacy must be timely and relevant in order to be effective. Teaching digital skills relies on material being kept up-to-date due to the advances in technology. In the United States, features such as two-factor identification, QR codes, and tap-to-pay, have only recently gained popularity in the past few years. Secondly, the material must be relevant to the learners' needs and proficiencies. Some digital literacy content is not relevant to the daily lives of older adults (i.e., learning how to build presentations or how to use LinkedIn). Other, more in-depth topics, are not adapted for English language learners (i.e., analyzing sources through lateral reading, how to reduce your digital footprint).

Even when considering popular digital literacy training sites such as *Digital Learn*, *GCF Global*, and *Northstar*, such resources do not address the needs of older adult ELLs since each assumes a baseline knowledge of digital navigation (e.g., using hyperlinks, buttons, and other general navigation tools for training) and general proficiency in the English language. More details will be provided later on in the Literature Review section.

By embedding English language learning in the *Digital ESL* course, increased class participation is expected through developing knowledge through meaningful practice and experience. The combination of building basic digital skills and English language literacy seeks to improve the learners' sense of community, access to services, and access to education and entertainment. Although targeted to help those over the age of 65, the skills and topics addressed are relevant across age groups and demographics.

Limitations of the Project

This field project is rooted in delivering relevant, foundational skills to support the development of Digital Literacy for older adult ELLs. However, it is important to note that there are limitations to the project. One of the limitations is lack of basic English language proficiency. Visser (2013) establishes that digital literacy "requires a mastery of foundational

literacy." In the *Digital ESL* course developed for this field project, basic English language literacy is required to participate. Using the Common European Framework of Reference for Languages (CEFR), it is recommended that learners are recognized to possess at least an A2 level, Basic User, of English language proficiency. In other words, learners should be able to communicate simple and direct information about themselves, their surroundings, and other topics relevant to their everyday routines (Council of Europe, 2020).

Definition of Terms

App – According to Dictionary.com (Dictionary, n.d.), this term is used when discussing digital technology, specifically when referring to small, specialized software applications on mobile devices.

Basic computer skills – According to IES National Center for Education Statistics (n.d.), this term represents a training program that supports the ability to operate a computer, use computer hardware and software, and perform basic troubleshooting.

"Bring your own device" (BYOD) – According to LINCS' *Integrating Digital Literacy into English Language Teaching*, BYOD is a classroom environment where the primary digital tools used are the devices the students bring to class (Harris, 2015).

Community-Based Organizations (CBO) – According to the U.S. Department of Health and Human Services, Community-Based Organizations are public or private nonprofit service organizations that provide services on a local level with the aim to improve the community's health and well-being (U.S. Department of Health and Human Services, n.d.). Examples of CBOs include community health centers, food banks, and libraries.

Computer literacy – According to IEEE, computer literacy is the ability to operate a computer, including the ability to turn on and off a computer, use peripherals such as mice and keyboards, use software, and perform basic troubleshooting (Kloza, n.d.).

Digital literacy – As defined by the Digital Literacy Task Force (2013), digital literacy is the ability to use digital tools, such as laptops and smartphones, to "find, evaluate, create, and communicate information, requiring both cognitive and technical skills."

Digital problem solving – According to the Institute of Education Sciences (IES National Center for Education Statistics, 2022), digital problem solving is the ability to perform practical tasks through accessing and interpreting information in digital environments such as websites, search engines, social media, mobile apps, and other web-based resources.

Digital native – As defined on Investopedia (Halton, 2021), a digital native is an individual who considers technology to be integral to their lives having had exposure and usage early in their lives.

Older adults – According to the Centers for Disease Control and Prevention (n.d.), persons at or above the age of 65 years are considered Older Adults. This is the age that individuals are generally eligible for federally-funded health insurance in the United States also known as Medicare (Medicare, n.d.). The term "*older adult*" is the suggested alternative provided by the American Psychological Association in their Inclusive Language Guide (2023) in order to prevent treating the population as being alien or different from oneself. Terms to avoid are, "the elderly, elderly people, seniors, senior citizens," labels which may be used or referred to in other publications cited in the field project.

Open Educational Resources (OER) – According to UNESCO (n.d.), this term encompasses educational and research materials that reside in the public domain and are available to access, re-use, re-purpose, adapt and redistribute by others at no cost to access.

Program for the International Assessment of Adult Competencies (PIAAC) – PIAAC is an international study of over 30 countries, developed by the Organization for Economic Cooperation and Development, which collects and analyzes the basic skills of literacy,

numeracy, and digital problem-solving of the adult working-age population with an aim to use this data to help drive economic growth through training and education (Program for the International Assessment of Adult Competencies, n.d.-a).

Telehealth/telemedicine – According to the United States Department of Health and Human Services, telehealth is a digitally-enabled means of accessing healthcare services primarily through internet access on a computer or smartphone. Examples of care that can be obtained via telehealth include services such as receiving lab test results, obtaining physical therapy or mental health treatment, prescription management, and addressing urgent care issues such as colds, coughs, and stomach issues (U.S. Department of Health and Human Services, 2023).

Translanguaging – According to García and Wei (2014), Translanguaging is the pedagogical approach that encourages multilingual speakers to strategically draw from their full linguistic repertoire to facilitate learning and communication.

CHAPTER II
REVIEW OF THE LITERATURE

Introduction

Review of the Literature

Summary

CHAPTER II REVIEW OF THE LITERATURE

Introduction

Digital literacy is a requirement for participating in modern society. However, basic digital skills, an entry point *and* component of overall digital literacy, can seem out of reach due to the intertwining nature of language proficiency and the ability to problem-solve using technology in that language (Harris, 2015; Jenkins, 2016; McHugh & Doxsee, 2018; Cherewka, 2020; Harris, 2020). In the United States, 40% of adult immigrants do not possess basic literacy in English (Batalova & Fix, 2015) which when paired with issues related to digital access and abilities, leaves deserving citizens of older generations and immigrant communities without government services (Ranchordás & Scarcella, 2021). By creating *Digital ESL*, a course teaching digital skills to beginner English learners, individuals and community-based organizations have a ready-made curriculum to improve digital literacy for older adult immigrants and others limited by lower language proficiency in English.

The theoretical framework underpinning the design of *Digital ESL* includes the work of Kolb and his principles of the Experiential Learning Theory, as described in Chapter 1 of this field project. I also explore the importance of Translanguaging as pedagogy in the ESL classroom, later in Chapter 3, to underscore the importance of leveraging learners' full linguistic repertoire to "co-construct their language expertise, recognize each other as resources, and act on their knowing and doing" (García & Wei, 2014, p. 75). By integrating the Experiential Learning Theory and Translanguaging, there are increased opportunities for learning from one another's experiences.

The review of literature supports the claim that older adult English language learners would benefit from specific material developed to help them on their path to digital literacy. The

body of scholarship that justifies this claim includes evidence about (a) the importance of digital literacy in a post-COVID-19 world, (b) the "invisibility" of older adults and digital literacy, (c) the inadequacy of available courses for beginner learners of English.

Joint reasoning is used to justify the claim that there is inadequate support in teaching digital literacy to older adult English Language Learners (ELLs) because individual elements of the argument are insufficient in forming the conclusion. However, when combined, the data justifies the final conclusion, as represented by the following logic equation: $(R1 + R2 + R3) \therefore C$ (Machi & McEvoy, 2021, p.112).

Review of the Literature

The Importance of Digital Literacy in a Post COVID-19 World

Digital literacy is the ability of an individual to find, evaluate, create, and share information across various online platforms, requiring a combination of technical and cognitive skills (Digital Literacy Task Force, 2013; Harris, 2015; Jenkins, 2016; Vanek, 2020). Digital means of interaction through the use of devices such as smartphones, have become commonplace consuming up to $\frac{1}{3}$ of the average user's waking hours (Data AI, 2022). Although the use of technology to perform everyday tasks has accelerated since the start of the pandemic, mention of this shift and its importance to daily life began much earlier (Visser, 2013; Harris, 2015; Jenkins, 2016).

The internet and the handheld devices that allow instant connectivity to the world's information are often taken for granted by those already participating in modern society through these means. Online forms are ubiquitous (Clutch, 2018) and automated customer service chatbots are increasingly used to help people resolve issues more expediently (Ritter, 2023). However, with these advances in technology, the human aspect must be accounted for.

Technology does not exist in a vacuum and should support the advancement of society and its people in total, not just those with the knowledge and tools to access and use information.

The can opener was invented in 1858 nearly fifty years after the tin can, a sealed container that improved the year-round availability of food and other essentials (Geoghegan, 2013; Eschner, 2017). While this observation may *seem* non sequitur, it illustrates how general accessibility can lag innovation. In modern times the internet is essential, but for those without basic digital skills, the contents of the internet might as well be tightly sealed in a tin can with no opener in sight.

In *Teaching Skills That Matter*, Vanek (2020) describes five facets of digital literacy: Basic Computer Skills, Network Literacy, Digital Problem Solving, Information Literacy, and Media Literacy. Many of these skills are intertwined, such as the ability to know when sufficient information has been obtained (Information Literacy) and the ability to locate said information (Network Literacy), or the integration of Information and Network Literacies with the ability to troubleshoot issues to effectively use technology in everyday life (Digital Problem Solving). Despite these interrelationships and interdependencies, the entry point to digital literacy is undeniably Basic Computer Skills (Harris, 2015) which I refer to as Basic Digital Skills in this paper to improve the accuracy of the terminology and what it encompasses in modern times, since smartphones act as handheld computers but are not typically referred to as "computers."

- **Basic Digital Skills:** turning on and off digital devices and actions such as long-pressing, knowing how to find, create, and save documents on the computer, using email and the internet;
- **Network Literacy:** knowing how to find and share information across social network applications;

- **Digital Problem Solving:** using digital resources to meet the needs of everyday demands in personal, professional, academic, and civic life. Includes cognitive skills such as asking questions to seek additional information, troubleshooting, abstracting and applying knowledge gained from previous experience with technology in new contexts;
- **Information Literacy:** using digital tools to find and use information across websites, search engines, and databases. Includes cognitive skills such as logical and critical thinking to evaluate the output and determine when additional information is required; and
- **Media Literacy:** finding, evaluating, creating, remixing, and communicating information across media including print and video.

As mentioned in Chapter One, the OECD's *Program for the International Assessment of Adult Competencies* (PIAAC) has been measuring digital problem-solving abilities in the United States since 2011. On the site, *What PIAAC Measures* (Program for the International Assessment of Adult Competencies, n.d.-b), they provide details on what is expected at each level of digital problem solving. There are four levels: *Below Level 1*, *Level 1*, *Level 2*, and *Level 3*. Higher numbers represent more advanced proficiency. In the following paragraph, I review the general level descriptions for each level starting from the basic level, *Below Level 1*.

In the PIAAC assessment, those that score *Below Level 1* are able to use a single, simple program to perform a single, well-defined task. By *Level 1*, respondents are able to use a widely available application such as email or a web browser to complete a multi-step task that requires simple reasoning, inferring the goal from the task statement. *Level 2* requires proficiency with specific technology applications, navigation across multiple pages and apps, potential troubleshooting and working through multiple stages to solve the problem. *Level 3* is similar to

Level 2, but requires additional cognitive and reasoning skills to determine criteria for success in addition to mapping out the stages by which to accomplish the goal. By *Level 3*, individuals are able to work through obstacles that require a multi-faceted analysis and monitor various tasks and sub-tasks, inferring and integrating information across tools and systems. *Level 3* is the most similar to real-life applications.

The "Invisibility" of Older Adults and Digital Literacy

COVID-19, Older Adults, and Digital Skills

During COVID-19, the internet was an indispensable resource for getting updates on the status of the pandemic and learning how to reduce the risk of exposure. It had also become the primary means to "visit" a doctor. Up to 44 percent of Medicare primary-care visits were performed via telehealth at the beginning of the pandemic, helping those over the age of 65 receive medical attention when in-person visits were limited to severe or life-threatening issues only. Unfortunately, as Cherewka (2020) points out, success rates in participating in this new dynamic relied on reliable internet access and the patient's ability to use the app or platform. In this paper, I focus on digital literacy and assume access to the internet is available to isolate the topic, focusing on the issue of underutilized resources.

Low digital literacy directly impacts access to healthcare (Cherewka, 2020; Harris, 2020; Xie et. al, 2020). In addition to obtaining medical consultations, the internet facilitates other preventive and general solutions that support overall health. In 2020, Xie et. al published a paper highlighting the unfortunate *triple jeopardy* that the COVID-19 pandemic inflicted on older adults including: a higher risk of death, an increased likelihood of loneliness and feeling isolated, and a low chance of being able to use the internet to locate services or quality information. The impact of shifting activities *online* resulted in unintentional consequences of exclusion, impacting already marginalized individuals, such as older people, in a time of need.

Older Adults and Access to Government Assistance

Researchers at Stanford University published a study in which they hypothesized poverty rates in California if one were to remove state and federal assistance from family resources. In the study, the poverty rate for working-age adults rose from 15.6% to 22.8%, whereas for older adults, the rate of poverty rose sharply from 18.0% to 40.1% (Kimberlin et al., 2021). It is clear that assistance such as food and housing subsidies and social security are important for reducing poverty rates for adults in America; even more so for those over the age of 65. However, unfortunately for those with limited digital literacy, access to these programs has been migrating online.

In 2018, Congress passed the *21st Century Integrated Digital Experience Act*, a law that aimed to improve access to government services online. This law declares that new websites and digital services should be "designed around user needs" allowing users to "complete digital transactions in an efficient and accurate manner." The verbiage used in this bill narrowly assumes its users as individuals that are already online and are merely seeking more consistency in the layout of government websites and improved searchability. Although the law mandates that physical forms be made available, it is unclear how this is audited since a simple search resulted in the U.S. Citizenship and Immigration Services site requiring online filing advising, "USCIS no longer offers paper copies of forms that are available to file online" (U.S. Citizenship and Immigration Services, n.d.).

The Needs of an Invisible Population

What is left unsaid or uncounted in studies can often reveal inequities in how populations are treated through the deliberate inclusion and therefore, exclusion, of certain groups. If digital literacy is a requirement for a thriving, modern society, where do older adults fit in this ideal? In the aforementioned PIAAC study, approximately 5,000 individuals were selected from each

participating country to represent the nation's competencies in the areas of language literacy, numeracy, and digital problem-solving in the adult population. In addition to recording the respondent's age and proficiency levels, the PIAAC also measured *nativity*, whether the person was born in the U.S. (in the case of the PIAAC study in the United States), and *language-use at home* (Program for the International Assessment of Adult Competencies, n.d.-a).

These two attributes are of utmost relevance to the *Digital ESL* field project, yet there exists a noticeable gap in available information for non U.S. Native-born population when compared to the fuller data set of the U.S. Native-born population. Specifically notable is the absence of representation of older adults not born in the United States, due to *reporting standards not met* per the publishers of the PIAAC 2017 study.

The PIAAC is an international study that "focuses on the basic cognitive and workplace skills needed for individuals to participate in society and for economies to prosper" (Program for the International Assessment of Adult Competencies, n.d.-a). If the older adult sub-group were seen as critical to economic prosperity, the study would have likely been designed with adequate reporting to this level, capturing details that would provide insight into the cross-section of older adults and ELLs. The issue of this invisible population is not unique to the United States.

PIAAC is an international study that includes over 30 countries. In the United States, the age cutoff is 74; however, for all other countries, 65 is the upper limit (Organization for Economic Cooperation and Development, n.d).

The deliberate exclusion or minimization of older people, although unfortunate, is a reality. This observation is not unique to studies motivated by economic development. Narushima et. al (2018), in their study of lifelong learning and aging in Canada, call out the lack of statistics on those over the age of 65, also attributing the scarcity of information to individuals falling into the *post-work* demographic.

In 2019, the Seattle Digital Equity Initiative analyzed the teaching of digital skill sets across 9 popular curricula including *Digital Learn*, *GCF Learn Free*, and courses offered by major tech companies created by Google, Microsoft, and Mozilla. After categorizing course offerings across the curricula, they identified the need to provide digital skills training tailored to two additional audiences not previously defined: Senior citizens and Mobile-based individuals who mainly access the internet on a mobile phone (Wedlake et.al, 2019).

The Inadequacy of Available Courses for Beginner Learners of English

Language literacy impacts digital literacy. In the *Integrating Digital Literacy into English Language Instruction Issue Brief* (2015), Harris highlights that although ELLs may already possess the ability to problem solve using digital tools in another language, English language proficiency is still necessary in order to use those skills in English. That is to say, even in an optimistic situation where an ELL is already skilled in using tech tools, beginner English hinders learners' ability to problem-solve using digital tools in the U.S.

Studies on ELLs and digital literacy cover a variety of material ranging from skills checklists and lesson plans, to discussing self-directed learning and recommending policy updates (Harris, 2015, 2020; Jenkins, 2016; Richards, 2015; McHugh & Doxsee, 2018; Cherewka, 2020). While the U.S. Department of Education's Literacy Information and Communication System (Jenkins, 2016) shares vignettes and annotated lesson plans targeting classroom instructors, other publications provide context on the topic of digital literacy and provides a framework for integrating student-centered practices useful for instructors, material creators, and school administrators alike (Harris, 2015, 2020). There is ample research explaining the need to teach Digital Literacy to ELLs; those papers often include recommended approaches on how to teach. However, the issue remains that there is a lack of ready-made teaching materials on digital literacy tailored to beginner-level English learners.

Searching for actual lesson plans to teach foundational digital skills to English language learners resulted in many of the same web-based solutions analyzed by the Seattle Digital Equity Initiative in 2019. As a result, the remainder of this literature review is dedicated to evaluating available courses on digital literacy through the lens of older adults with low digital literacy and that operate at a beginner English level.

Available Digital Literacy Teaching Material

After reviewing dozens of online resources claiming to improve digital literacy, I narrowed down the list to ten websites; five were categorized as *self-paced* sites for students to learn directly and the other five sites *for teachers*. In order to qualify for evaluation as an online resource to learn digital literacy, the site's content must be accessible free of cost and host teaching materials that are relevant for older adults. Sites that focus on career-development only, like EdGen and Byte Back, are excluded. The Microsoft Imagine Academy, reviewed by Wedlake et. al in 2019, transitioned to Microsoft Learn and no longer offers training on digital literacy (Abbott, 2023; Microsoft, n.d.). This program was excluded because it is now defunct. Also excluded were resource sites such as the *Barbara Bush Digital Literacy Resource for Educators, Employers, and Volunteers* since its contents could not directly be used for teaching Digital Literacy in a classroom.

Self-paced Modalities for Learning Digital Literacy

What remains after culling the list of sites is a strong set of tools to analyze, split between those that would be accessible by the student directly versus that which a teacher would utilize for teaching. The *self-paced* modality, driven by the student, is problematic for basic English Language Learners with low digital literacy because it requires not only that the student has adequate vocabulary to listen to the training or read the prompts, but also that they would have a foundation of digital familiarity to navigate the site itself, knowing which links, buttons, and

fields to interact with to successfully learn the content and complete the training. For this reason, Cyber-Seniors (<https://cyberseniors.org/>), GCF Global (<https://edu.gcfglobal.org/en/>), Google Applied Digital Skills (<https://applieddigitalskills.withgoogle.com/en/learn>), Learn My Way (<https://www.learnmyway.com/>), and Social Media Test Drive (<https://socialmediatestdrive.org>) are not recommended for teaching digital skills to beginner English language learners. Rather than review each one individually, I have chosen to highlight specific standout attributes from materials reviewed in hopes that others may choose to gain inspiration from and adapt similar practices from the following two sites: Learn My Way and Social Media Test Drive.

Learn My Way, based in the United Kingdom (U.K.), offers training for older adults based in the U.K. such as finding and booking health services, online shopping, online safety, and using online government services. This resource is well laid-out and practical but is not suitable for our learners due to the complexity of the language and use of a website to navigate the training modules. Additionally, the majority of the material is only available after inputting a U.K. postal code as part of the free registration process.

Social Media Test Drive, developed by Cornell University in conjunction with Common Sense Education, delivers realistic training through simulation, embedding tips throughout. For example, while simulating the creation of a user name, a prompt appears that teaches or reminds the learner, "Choose your username carefully! This is the name other people on social media will see" (Social Media Test Drive, n.d.). Although the content is delivered in a novel way, the language used is too complex for beginners and the voiceover option does not allow for adjustment in pace.

Materials for Educators Teaching Digital Literacy

Online resources for teaching Digital Literacy include DART (<https://tcall.tamu.edu>), Digital Learn (<https://training.digitallearn.org/>), Mozilla Web Literacy


(<https://foundation.mozilla.org/en/initiatives/web-literacy/>), Northstar (<https://www.digitalliteracyassessment.org/>), and Tech Goes Home (<https://www.techgoeshome.org>). With the exception of Northstar, all other materials for teaching are free to access and use. The Northstar Digital Literacy assessment tool is free; training materials are \$500 per year, per the website (Northstar Digital Literacy, n.d.). Both Mozilla Web Literacy and the Northstar self-assessment tool are web-based. DART, Digital Learn, and Tech Goes Home offer downloadable files for the teacher to print out, an approach that can help learners overcome a fear of technology, an important step when teaching digital literacy to adults (Harris, 2020).

DART, which stands for Digital Access and Resilience in Texas, contains 20 lessons ranging from recognizing letters of the alphabet, to creating an online account and searching for information on the internet (Rose & Guckert, 2023). It is the only resource that provides content that addresses the needs of lower-level English language learners and assumes that digital skills instruction supplements language instruction. The curriculum material estimates instructional time for different student audiences ranging from 20 hours for Advanced ELLs to 50+ hours for Beginners who are not literate in their native language.

Digital Learn, while attempting to create authentic materials, delivers too much information in a cramped space, making it difficult to read (see Figure 2).

Figure 2

The Learner Handout example from Digital Learn is Difficult to Follow (Frisque, 2022)

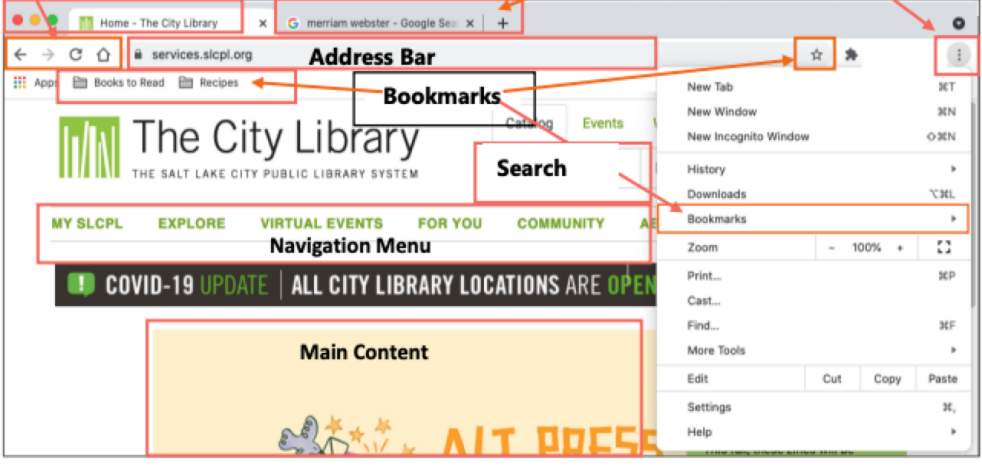


Learner Handout: Internet Basics

Navigation Buttons: Back, Forward, Refresh,

Tabs

Options and Settings



Parts of a Web Browser

Browser Window – Is how you view and navigate Web Pages. Within a Browser Window you can have multiple Tabs. You can also have multiple Browser Windows open at the same time.

Web Address – Tells the computer the correct combination of letters, numbers, and/or characters to reach a particular website. It's like the street address for a Website!

Address Bar – The box where you type a web address (URL). It can also be used to search for information and view content on the Internet.

Additionally, Digital Learn teaching material is focused on computer use instead of mobile use. As mentioned in Barbara Bush Foundation for Family Literacy & Digital Promise (2022), a key consideration for designing digital literacy lessons for adult learners is to keep in mind that 95% of adults have a smartphone. When coupled with Vanek's recommendation to use and teach relevant technology (2020), indicates that the material taught in Digital Learn is also not adequate for older adult ELLs.

Tech Goes Home, a non-profit community-based organization based in Boston, Massachusetts (USA), contains material ranging from print-outs to videos covering eight languages. The program mentions older adults as one of the groups of people they serve and report that 54% speak a primary language other than English (Tech Goes Home, n.d.). Per their website, they have reached over 20,000 learners in the past five years. The majority of their material is focused on computer use; however, there are useful lessons such as *Tips for Creating a Password* and *Zoom for Phones* that could be leveraged for our learners, who often do not own a laptop or desktop computer.

In summary, while there are many valuable resources for self-paced or teacher-led digital literacy training, there continues to exist a for basic digital skills training using and teaching the tools learners already own: smartphones. This allows for multiple exposure and practice, developing their confidence and ability to learn through continued practice outside the classroom (Harris, 2020; Vanek, 2020) while simultaneously building related vocabulary skills in English.

Summary

The three themes outlined in this literature review, together, highlight the need for material tailored for teaching digital literacy to older adult English Language Learners.

The review began with an outline of the components of Digital Literacy and its increasing relevance in a post-COVID-19 world due to the rapid digitization of resources spurred on by the pandemic. Many people have become dependent on technology such as smartphones and for some, its use can consume up to one third of their waking hours (Data AI, 2022). Digital literacy is a combination of multiple skills including *basic digital skills* through *digital problem-solving* which includes additional supporting literacies such as knowing how to find information on the internet (*Network literacy*), critical thinking (*Information literacy*) and creating new material to effectively communicate online in both print and video (*Media literacy*) (Harris, 2015). The

internet has become a one-stop-shop for news and information, healthcare, education, entertainment, and social interaction. However, for many older people, this gradual and then sudden shift *online* has left them fending for themselves.

After setting the foundation for why digital skills are a requirement for navigating daily life in a modern society, the review narrowed in on the over-65 adult population. It highlighted the need for this population to be able to know how to access online services due to their reliance on government assistance combined with an inconsistently-implemented law that may leave them without a paper alternative (U.S. Citizenship and Immigration Services, n.d.; 21st Century Integrated Digital Experience Act, 2018; Kimberlin et al., 2021). Lastly, older adults, who fall into a *post-work* demographic, are minimized in studies and discussions (Organization for Economic Cooperation and Development, n.d.; Narushima et. al, 2018; Wedlake et. al, 2019), an issue that results in a 5,000-person survey losing statistical significance when requesting data on digital literacy of older adult immigrants. Although relevant demographic data may tend to exclude those over 65 years old, luckily studies such as the Seattle Digital Equity Initiative continue to forge ahead with the insight that *Senior citizens* should be added to the list of audiences that may require specific digital skills (Wedlake et. al, 2019).

Lastly, while there is a plethora of materials that discuss the need to address digital literacy needs for English Language Learners, actual teaching material adequate for older adult ELLs was sparse. (Harris, 2015, 2020) provided a framework and checklist for creating material for this population which considered beginner English learner needs. In 2016, Literacy Information and Communication System published a companion learning resource full of example lesson plans, vignettes, and projects to encourage implementation in the classroom, but unfortunately the majority of the material was not appropriate for beginner speakers of English.

The review concluded with the evaluation of available popular digital literacy resources through the lens of older adults and ELLs with the hopes that this field project will be one of many who hope to address this gap. By creating a review of available materials, I hope that others interested in joining me in this space were able to leverage an updated overview of materials at the time of this publication.

In conclusion, the literature demonstrates the need for a *Digital ESL* curriculum tailored to older adult English language learners in the United States. Funding for research and education is easier to obtain when objectives are tied to the nations' potential for increased economic output. However, digital skills are essential at every age, and *especially in older age*, since basic services and means of communication have shifted online. The *Digital ESL* curriculum developed in this field project aims to deliver on this need and encourages others to adapt, adopt, and remix this material to ensure its relevance for classrooms around the world!

CHAPTER III
THE PROJECT AND ITS DEVELOPMENT

Description of the Project

Development of the Project

The Project

CHAPTER III THE PROJECT AND ITS DEVELOPMENT

Description of the Project

This field project consists of 10 sessions of Digital ESL curriculum for English language learners. The intent of the curriculum is to provide Adult Beginner CEFR A2 level ESOL students with the specific language and guided experience of operating their smartphones to perform common tasks that require foundational digital skills, a prerequisite to achieving digital literacy. The material is designed to support a 60-minute in-person class held weekly over a 10-week period for a total of 10 hours of instruction. Included in the project are 10 units of printable worksheets and visual aids to teach vocabulary, as follows:

Unit 1: Introduction – The *Digital ESL* course begins with learning classroom directions and identifying keyboard letters and popular mobile apps. This unit was also designed to serve as an informal assessment of the learners' speaking abilities, familiarity with common mobile phone apps in the United States, and ability to identify letters on a keyboard.

Unit 2: Connecting to Wi-Fi – The second unit extends topics covered in Unit 1. Classroom directions include the use of object pronouns. Basic letter identification expands to include finding symbols and lowercase letters on a smartphone keyboard. There is an activity for students to identify icons related to using cell service versus Wi-Fi. Lastly, in this unit, learners practice common actions and learn how to log into a secured Wi-Fi network connection using their smartphone and a password provided by the teacher.

Unit 3: Smartphone Parts – The third unit expands on topics covered in Units 1 and 2. Classroom directions include phrases and gestures that will be used by the class to demonstrate comprehension of digital skills concepts and vocabulary. This unit also reviews parts of a smartphone using both the diagram provided in the handouts and the learners' own devices.

Unit 4: Smartphone Actions – The fourth unit begins with a review of smartphone actions originally taught in Unit 2. There is a two-part activity for learners to write in English and draw app icons related to taking and sending a photo. Embedded in this activity is the use of ordinals to describe process steps (i.e., first, second, third, last). Comparison words related to smartphone settings is taught at the end of this unit.

Unit 5: Asking for Help – Topics included in the fifth unit include asking for and offering help related to smartphone settings using comparison words learned in Unit 4. In addition to speaking practice, this unit provides additional opportunities for the students to experiment with their phones.

Unit 6: Apps I Use – Unit Six begins with a matching game, introducing the names of activities in English with popular mobile app icons. In addition to teaching verbs, this unit also gives students space to draw the icons of the apps they use most often and learn the name of those apps in English. Frequency adverbs are introduced in this unit.

Unit 7: Schedules and Dates – The seventh unit introduces the days of the week and connects it to frequency adverbs. Calendar dates are taught using both the written-out names of months and days of the month as well as the MM/DD/YYYY format commonly used in the United States.

Unit 8: Using QR Codes & Forms – Unit Eight teaches how to use QR codes to access websites. In addition to identifying the names of shapes, this unit also serves as a review of ordinals and smartphone verbs. This unit contains a printed-out version of a digital form the students will complete online in Unit 9. The objective of this session is to familiarize students with common information requested through online forms such as mailing address, phone number, email, and personal demographics.

Unit 9: Filling out Online Forms – Unit Nine begins with an activity that teaches email formats through identifying differences between the provided correct version and intentionally incorrect ones printed on the page. Utilizing the answers prepared in Unit 8, students complete an online form accessed via a QR code which contains a variety of answer types including type-in, drop-down, multiple choice and yes/no.

Unit 10: Review and Final Survey – The tenth and final unit serves as a review of previous units. Although no explicit material is provided, it is recommended for students to complete a self-assessment survey which can either be administered as a paper copy or via an online survey. I provide a Certificate of Completion template for the teacher to personalize and print out for those who have completed the *Digital ESL* course.

Development of the Project

Healthy Aging is a Priority

In 2020, the United Nations General Assembly (UNGA) declared the subsequent ten years to be the *Decade of Healthy Ageing* citing that, by 2030, the number of persons aged 60 years or over is projected to be 1.4 billion, outnumbering youth (2020, p. 2). In addition to improved access to healthcare, the UNGA highlighted the need for strategies and policies to address social isolation and loneliness, lack of food and housing, and other fundamental freedoms to allow older adults to live dignified lives, actively participate in society, and have the opportunity to fully develop their human potential. *Healthy aging* is about thriving in older age, not just surviving.

Technology Enables Healthy Aging

One day, while working from home due to the pandemic, I received a call from my mom. Without even a *hello*, she quickly caught me up on the situation: friends had signed her up for "ballet stretch" online but she could not find the link to join the Zoom. This virtual pilates class

would help pull her out of her *low mood*, if only she could figure out how to participate. She did not want to disappoint her friends who, 20 years her junior, had signed her up for this activity through the community clubhouse.

As an only child who is also a distant caretaker, I quickly learned there are limits to what I can do from afar. Despite my years of experience troubleshooting technical issues over the phone in professional settings, I had found it very challenging to explain the abstract concepts of hyperlinks, switching apps, and logging on. Additionally, how could I, without demonstrating in person, explain that the pilates instructor *was* able to see her to evaluate her movements and form even though my mom *could not see her own image* on the screen? If a picture is worth a thousand words, a hands-on activity answers a thousand questions.

The literature review in this field project confirms the need for teaching digital skills to older adult English learners. Learning digital skills can open up a world of multilingual learning and community resources that can build English proficiency among other lifelong-learning opportunities (McHugh & Doxsee, 2018, p. 11). In *Digital ESL*, my field project is centered on developing digital skills, supporting beginner learners of English with visuals and scaffolded, hands-on experimentation.

Following Kolb's Experiential Learning Theory, as discussed in Chapter 1 of this field project, the learners acquire both skills and confidence through *Active Experimentation*, which is the culmination of prior knowledge joined by new experiences and the synthesis of those experiences into a concept that establishes a new baseline of learning with each experience (Kolb, 1984). The course is designed for students to use their own devices in a face-to-face setting to help them overcome potential anxiety that may be caused by having to use unfamiliar tools and also allowing them to have increased exposure and ample practice both during and after class, guided by suggestions made by Harris (2020) and Vanek (2020). To ensure the focus

remains on gaining knowledge through hands-on experimentation, student worksheets are limited to three double-sided sheets. All worksheets have ample space for answers and taking notes in whichever language(s) would be most effective for the learner.

Harnessing the Power of Translanguaging to Develop Digital Literacy

Digital ESL covers technology terms such as "tap on" and "swipe up" supplementing demonstration with a pictorial representation of relevant gestures and movements. Hands-on experience can help teach basic concepts, but the reality is that mechanically memorizing routine actions is inadequate for building the problem-solving skills required for digital literacy. Information presented to users is dynamic, ever-evolving, with layouts that vary across websites, apps, and digital tools. Digital literacy requires meaning-making and the ability to draw upon prior experiences with similar technology to inform future interactions (Vanek, 2020). Space is provided on each worksheet for students to write down translations and other notes in the language(s) of their choice.

Given the complexity of teaching technology, digital literacy concepts should not be constrained to discussion in English alone. Allowing learners to pull from their full repertoire of language and experiences, a practice referred to as Translanguaging (García & Wei, 2014), is important since many late-life immigrants benefit from sharing knowledge and building community support with others from similar cultural and linguistic backgrounds (Maleku et al., 2022).

Lastly, Valdez and Park, in their paper on *Translanguaging as a Culturally-Sustaining Pedagogy* (2021), discuss the power of encouraging learners to participate in the classroom as co-learners and co-teachers, allowing the class to demonstrate and share their knowledge with one another. Collaborative teaching also encourages active participation and deeper exploration of the content by the students (Office of Educational Technology, 2017). Learning through

experience paired with encouraging the fluid use of languages is especially helpful for older adults who may have "deeply internalized deficit ideologies" (Valdez & Park, 2021, p. 331). Translanguaging can also serve as a tool of empowerment that facilitates a deeper understanding of the digital skills content, help with the development of English, and allow learners across proficiency levels to collaborate with one another (Marrero-Colón, 2021, p. 8).

Community-Based Organizations and Their Role in Teaching Digital Literacy

In 2013, the American Library Association published a report on behalf of the Office for Information Technology Policy's Digital Literacy Task Force. In their report, they not only provided one of the original definitions for *digital literacy*, they also established the library's role as one that "supports all literacies – from basic reading and writing to digital literacy to literacies in specialized areas like health, financial, or government information (Digital Literacy Task Force, 2013)." For this reason, it only seemed appropriate to partner with a local library in the development of *Digital ESL*.

The city of Hayward boasts more than 150,000 residents, topping other more prominent cities such as Pasadena, Berkeley, and Santa Monica (State of California Department of Finance, 2023). Additionally, 58.9% of residents speak a non-English language, as referenced on the city of Hayward's website citing the 2020 U.S. Census and 2021 ACS Estimates. I reached out to the Hayward Public Library and inquired about the existence of Digital Literacy classes for ELLs. Since the library had both *Tech Tutoring* and various *ESL* classes, I thought it would be a natural fit that they would also cover the needs of the intersection of the two. At the time, such a program did not exist, so we jointly decided it would be advantageous for us to partner together to pilot a program that met this need.

Digital ESL is a project that combines insights from the literature review and the knowledge of two highly-engaged members of a local library: Ivan Padilla, the Education

Services Coordinator and Tingying "Jessie" Wu, the Literacy Program Coordinator. I had the honor of meeting with these two individuals who represented the Technology and ESL departments at the Hayward Public Library. I wanted to understand their perspective about the needs of the community. After a couple meetings, it was determined that the most impactful material would be that which addressed the needs of older adult English Language Learners.

Their insights, paired with my research on the topic, informed the objectives and content of the material for Digital ESL. Leveraging Jessie's awareness of the community's specific needs, I created a curriculum focused on delivering three outcomes: the ability to get on password-protected Wi-Fi, the ability to use QR codes, and the ability to fill out basic online forms. See Appendix A for The Field Project.

CHAPTER IV
CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Recommandations

CHAPTER IV CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Digital literacy is a requirement for participating in modern society (Cherewka, 2020; Xie et. al, 2020) and yet there is a lack of teaching material to address the needs of beginner English language learners in this space. Additionally, general courses in digital literacy typically assume a baseline level of computer literacy abilities in English and focus skills-building on laptop and desktop computers (Cyber-Seniors, GCF Global, Google Applied Digital Skills, Learn My Way) despite the rising use and availability of smartphones used to facilitate everyday activities (Barbara Bush Foundation for Family Literacy & Digital Promise, 2022; Data AI, 2022).

Because the majority of Adult ESL funding is tied to the Workforce Innovation and Opportunity Act (WIOA), the general needs of adult learners over the age of 65 are underserved, even if considering recent proposed revisions to WIOA to include digital literacy (McHugh & Doxsee, 2018; Petek, 2022; Workforce Innovation and Opportunity Act of 2022, 2022). An increasing number of resources have migrated online leaving those without digital skills unable to access basic services related to obtaining housing, healthcare, and education (21st Century Integrated Digital Experience Act, 2018; Cherewka, 2020; Xie et. al, 2020, Xiao, 2021). Even if language accessibility tools are built into government websites, they are only helpful if the user can first navigate to the site and understand how to update the settings.

The curriculum created for this field project attempted to address the needs of an aging population that will continue to grow as a proportion to the world's total population over the next ten years (United Nations General Assembly, 2020). Older people, those over the age of 65, have different needs than those in the workforce and also rely on government assistance more so than their working counterparts (Kimberlin et al., 2021). Healthy aging should not just be a

priority established by the United Nations; it should be one that we take action on in our local communities.

Digital ESL was created to build both the skills and the confidence of older adult ELLs through hands-on training so they could continue on the path toward digital literacy. Learning how to connect to Wi-Fi, to help one another adjust basic settings, to utilize QR codes to get online, and to fill out digital forms are all activities that adults of all ages can benefit from. Beginner learners of English could especially benefit from knowing how to leverage such skills to obtain assistance online.

This project is intended for use by specialist and non-specialist educators for older adult beginner ELLs through community-based organizations such as libraries. However, the curriculum could also be adapted for use in other audiences and settings such as adult education, community college, or vocational ESL programs since the material covers topics that are used in everyday situations and serve as a foundation for overall proficiency using digital tools.

Digital literacy is not a single skill, but a combination of abilities that require experience in problem-solving and proficiency in English, in the case of living in the United States (Digital Literacy Task Force, 2013; Harris, 2015). It is my hope that through this introductory digital skills course, individuals and organizations across the country are inspired into action using *Digital ESL* to strengthen entire communities by lifting up the most vulnerable. Upon completing this field project, I intend to publish and promote *Digital ESL* as an Open Educational Resource (OER) allowing others to adapt, adopt and update it to improve its relevance across regions, audiences, and across time as technology and related tools evolve.

Recommendations

When considering teaching *Digital ESL*, it is important to take note of three things:

(1) the objective of the course is to teach foundational digital skills as an entry point to digital literacy; (2) digital concepts are best acquired through guided opportunities to learn by doing; (3) students benefit from learning relevant skills experimenting with their own smartphone devices (Harris, 2020; Vanek, 2020). For the effective implementation of the curriculum, I recommend requiring students to have at least an A2 Beginner proficiency in English, defined by the Common European Framework of Reference for languages.

Teaching Foundational Digital Skills

Students in need of foundational skills-building may not have confidence in their abilities. However, if they are given the opportunity to understand how these skills positively impact their lives, they may be more apt to continue on the learning journey when faced with challenges (Blackley & Sheffield, 2015; Jenkins, 2016; Harris, 2020). One way to implement this is to find a community liaison, a trusted community member who can communicate how the course objectives connect to the students' personal lives and aspirations. By encouraging a desire to learn the material, the learners will be more willing to try out new functions, resulting in increased acquisition of digital skills.

Additionally, it is important that the teacher's own attitude towards digital literacy and lifelong learning fosters learning opportunities for the students (Jenkins, 2016; Cosby et. al, 2023). In addition to modeling the behavior of experimentation, instructors should encourage students to teach one another (Sharp & O'Brien, 2018) and to allow students to demonstrate their knowledge especially if the student knows more than the teacher (Jenkins, 2016) since "with digital literacy, everyone is a learner" (Harris, 2015, p. 3). Experimentation is the key to learning

digital skills and digital skills are the foundation for digital literacy. To continue learning, *everyone* must be open to making mistakes and learning through experience.

Learning Through Guided Opportunities

The materials provided in *Digital ESL* include printable student worksheets and visual aids. Each unit is contained to three double-sided pages or fewer to maximize hands-on learning opportunities. Most pages also provide ample space for the learners to take notes and draw diagrams that help them understand the concepts being taught and employ large font sizes to help with readability. Units are set up in a spiraling curriculum and revisit previously-taught concepts as the course progresses. According to Vanek (2020), it is important that educators provide ample time for the students to use the technology both in and outside class, which is why *Digital ESL* is centered around the use of smartphones: specifically, the students' own devices.

Classroom setups should minimize the use of technology that is not the learner's own device. Avoid the use of laptops and projectors to encourage the students to focus on *learning by doing* and taking notes as needed. In addition to hands-on demonstrations, it is important for the class to utilize multi-modal means of teaching and learning through gesturing, drawing, writing and speaking. For writing and drawing examples, I recommend using a large whiteboard. For demonstrations, teachers should use exaggerated body movements and gestures, speak slowly and clearly, and allow students ample one-on-one opportunities to demonstrate their understanding of digital skills through their actions. The use of Total Physical Response (TPR) as a teaching technique connects actions with vocabulary through gesturing; setting up the classroom in a U-shape allows the teacher to see and be seen by all the students.

Building Relevant Skills Using Their Own Smartphone Devices

In *Digital ESL*, ten units of instruction guide the learners through foundational skills that allow them to get familiar with a tool they do not need to borrow nor travel to use. Although

Vanek (2020) recommends offering computers or computer lab location information when teaching digital literacy, I opted for the alternative, which was to make use of the learner's own device. Teaching digital skills specific to mobile devices is a fairly nascent topic based on my research of available material to teach digital literacy. As previously mentioned, as part of the Seattle Digital Equity Initiative, Wedlake et. al (2019, p. 22) highlighted a need for curricula that addresses the needs of "senior citizens" and "mobile-based individuals that exclusively use the internet on a mobile phone."

In the learning resource, *Integrating Digital Literacy into English Language Instruction*, Jenkins (2016) suggests an approach he referred to as *BYOD, Bring Your Own Device*. The idea was suggested as a means to address the constraints of limited resources. In 2020, Vanek encouraged the concept of making use of technology learners already own and by 2022, the Barbara Bush Foundation for Family Literacy and Digital Promise was suggesting to "explore mobile-friendly and offline lessons (p. 29)" as a key consideration for supporting adult learners. By using learners' own smartphones, not only is there inherently more relevance to their lives, but it also allows educational programs to operate in a limited resource environment.

Further Development

Digital ESL is a 10-unit introductory course that offers foundational skills needed to build towards problem-solving using technology. Although there are numerous areas of further development that could be pursued, I will focus on three. First of all, a next installment of this material should be created, allowing students to progress in their pursuit of digital literacy. For older immigrants, digital skills are seen as a survival skill that can help them stay connected with loved ones through chat apps, find information online, and use the tap-to-pay technology (Zhu & Zhang, 2019). Potential topics could include video calling, identifying scams, and creating online accounts and passwords, to equip learners with knowledge on how to operate safely

online. Performing a needs analysis through local community-based organizations is an avenue that could help guide which topics should be covered. Subjects to prioritize are those that would be most impactful for older adult ELLs and others with the combination of limited English proficiency (LEP) and low digital skills.

Second, as ELLs begin to develop digital literacy, they may benefit from guidance on where to find reliable and engaging resources to support learning beyond the classroom, a suggestion made by Harris (2020). Such activities could include practicing English conversation enabled by Zoom or participating in *incidental learning* which can include games, everyday communication, and other activities where the primary goal is not learning itself (Hannibal Jensen, 2019).

Lastly, there is an opportunity to study and to advocate on behalf of beginner ELLs with low digital literacy, regardless of age. With an increasing number of resources migrating to digital spaces, there is a double-barrier to accessing information. Language access plans are intended to help improve the level of service provided to those with limited English proficiency. The expectation of organizations such as the Centers for Medicare and Medicaid Services is that the presence of an interpreter or language assistance will ensure improved health outcomes (Centers for Medicare and Medicaid Services, 2023). However, the reality is that the problem of *access* is multi-faceted and there is a need to surface and address the impact of digitization and digital literacy in addition to language proficiency.

In conclusion, we are living in an exciting time of rapid technological growth and connectivity. It is our duty as educators and citizens to deliver programs that enable our communities to share the wealth of resources online that are out of reach for those without digital skills. Ensuring our most vulnerable populations are able to access and make use of basic services such as healthcare, housing, and education should be a priority. It is my hope that

Digital ESL inspires others to teach and to build upon the material created for this OER field project.

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Appendix A
The Field Project

Digital ESL

an open educational resource



This image was created with the assistance of AI (DALL·E)

For more information, contact Talley Caruso at info@digital-esl.org

Digital ESL

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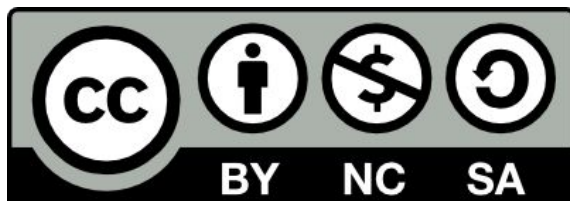
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SUBJECTS

Adult ESL; Adult Basic Education; Digital Literacy; Digital Skills

Note to the Teacher

Thank you for your support and for choosing to teach *Digital ESL*.

Your impact, as a leader and educator, is one of great importance. Because of people like you, neighbors, friends, and loved ones in your community will gain the confidence to get on Wifi, use QR codes, and fill out online forms all while practicing English along the way!

This course, ***Digital ESL***, offers a simple, guided path to digital literacy starting with foundation skills training for those less proficient in English. It was designed to maximize hands-on learning opportunities both in and outside the classroom, utilizing students' own smartphone devices.

Smartphones are powerful, handheld computers.

According to a Gallup poll from 2022, smartphones are used by over 90% of Americans, however many have yet to explore features that go beyond watching YouTube, playing games, or receiving phone calls from loved ones.

The ability to navigate text messages, apps, email, and the internet has **evolved into a necessity** with many ordinary tasks, such as paying bills, withdrawing money, and checking in at the doctor's office, now requiring at least some level of proficiency using digital tools.

Digital literacy, the **ability to problem-solve** using devices such as smartphones, requires knowledge of how to interact with specific technology *and* also requires traditional language literacy. As early as 2013, the American Library Association recognized this interdependence explaining that, "**being digitally literate will continue to require basic reading and writing skills**, access to up-to-date digital instruction, and a commitment to lifelong learning."

Through your patience, positive attitude, and support of lifelong learning, your **students will find confidence in their abilities** to use their smartphones in ways that they would never have imagined! Helping your students take the first step on the path of digital literacy will open up a world of possibilities that will extend beyond the classroom.

Thank you again for teaching *Digital ESL*. Feel free to reach out to me with questions or suggestions at info@digital-esl.org and join our LinkedIn group to the latest updates <https://www.linkedin.com/company/digital-esl>

Talley Caruso
ESOL Teacher and Materials Writer

How to Use

Digital ESL is guided by three research-backed principles:

- (1) foundational digital skills are a prerequisite for digital literacy;
- (2) digital concepts are acquired through guided *learning by doing*;
- (3) students benefit from learning relevant skills on their own devices (Harris, 2020; Vanek, 2020).

Although *Digital ESL* was originally designed for teaching older adult (age 65+) beginner learners of English, it can be used for teaching common smartphone features to adults of any age.

MATERIALS PROVIDED IN DIGITAL ESL

Worksheet printouts for each unit cover one topic in a "spiraling curriculum," revisiting previously-taught concepts as the course progresses. Each unit is limited to 6 sheets of content and includes ample spacing for the students to take notes, draw diagrams, etc.

Visual aids for the teacher are associated with the original unit each concept is introduced. It is recommended to reuse visual aids to bolster knowledge throughout the course.

Folding Name Card and **Certificate of Completion** templates are provided to identify individuals in the class and recognize their achievement at the end of the 10-unit course.

Note: Students should be instructed to bring their smartphones to each session.

RECOMMENDATIONS

- Liaison:** Identify a trusted community member that can communicate how the course objectives connect to the students' personal lives and aspirations.
- Class size:** 5-15 students of Beginner ([NRS 1](#), [CEFR A1](#)) proficiency in English or higher
- Tools:** A large whiteboard for writing examples
A projector, screen, laptop and document reader for clear demonstrations

Class dynamic:

1. Use **exaggerated body movements** and gestures to describe actions.
2. **Speak slowly and clearly.** Spell vocabulary words together as a class.
3. If using a whiteboard, **write legibly** and large enough for all students to read.
4. Be patient and **allow students ample one-on-one opportunities to demonstrate their understanding** of digital skills through their actions.
5. Encourage students to **help one another**, even if they are not using English.
6. **Model the behavior of experimentation.**
7. Above all else, **be positive and encouraging.** Remember, we are on this journey together!

How to Edit & Remix

This textbook was designed to be shared, edited, remixed, and expanded!

Follow the directions below to create your personal copy of the material

1. Go to this link: bit.ly/digital-esl-slides
The link brings you to the "view only" version of the *Digital ESL*, in Google Slides
2. To edit in **Google Slides**, Click on **File > Make a copy > Entire presentation**
 - a. A "Copy document" window will appear
 - b. Rename the file in the "Name" box
 - c. Click on **Make a copy** > the file is now yours to edit and remix!
3. To edit in **PowerPoint**, Click on **File > Download > Microsoft PowerPoint (.pptx)**
 - a. A "Save as" window will appear
 - b. Rename the file in the "Save as" box
 - c. Click on **Save** > the file is now yours to edit and remix!

LICENSE



Digital ESL is licensed under a **Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License**, except where otherwise noted. Go to page 2 of *Digital ESL* for details.

RECOMMENDATIONS FOR EDITING & EXPANDING THIS MATERIAL

Copy and edit existing slides to create new slides for format consistency

Make fonts easy-to-read

- Headers: Open Sans, normal, size 36 font
- Worksheet content: Open Sans, normal, font sizes 18 to 24
- Visual aids: Open Sans, extra bold, font sizes 72 to 96

Provide adequate space on each worksheet for note-taking including sketches, etc.

Use **Noun Project** to find and **create clear visual aids**: <https://thenounproject.com/>

Remix the material to make it relevant: Update and remix the material to include locally-relevant apps, mobile providers, keyboard layouts, date order, address and phone structure, top level domains (.co.uk vs. .com), hardware and icons (Samsung vs. iPhone), new functionality (two-factor authentication). If there are local resources relevant for the students, steer them to practice interacting with those sites / apps through meaningful, guided classroom activities.

Lastly, I invite you to join the **Digital ESL community on LinkedIn** to share resources related to teaching Digital Literacy to learners of English <https://www.linkedin.com/company/digital-esl>

We are lifelong learners together!

Feedback, suggestions, or questions? Email info@digital-esl.org or talley.hsu@gmail.com

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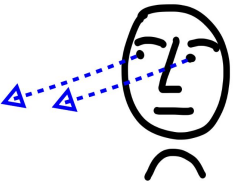
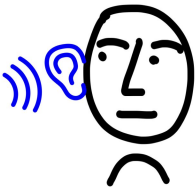
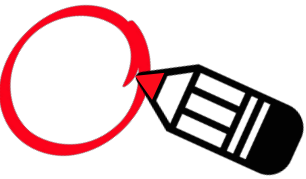
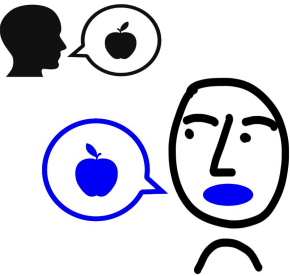


Unit #1

Class Schedule

#	Date	Topic
1		Introduction
2		Connecting to Wifi
3		Smartphone Parts
4		Smartphone Actions
5		Asking for Help
6		Apps I Use
7		Schedules and Dates
8		Using QR Codes and Forms
9		Filling out Online Forms
10		Review and Graduation

Learn Classroom Directions

Action	Action Name	Practice
	to look	Please look here.
	to listen	Please listen to me.
	to circle	Please circle the letter "A". A B C
	to repeat	Please repeat after me.

Identify Keyboard Letters





The teacher's name is **TALLEY**.



My name is [].



Identify Apps

App Icon	App Name	This is for...
	WhatsApp	
	Facebook	
	YouTube	
	Zoom	

Word Search

K E Y B O A R D K J
N U P P E R C A S E
H A P P Y S F N E T
P A S S W O R D P F
A C C O N F U S E D
L O W E R C A S E F
S M A R T P H O N E
I R Z L E T T E R S
R O E E B C W X N T
S Y M B O L S C L R

smartphone

keyboard

confused

uppercase

lowercase

password

letters

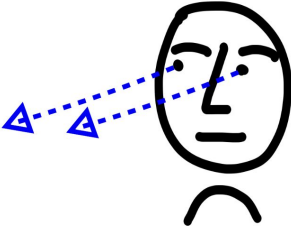
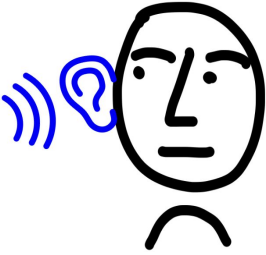
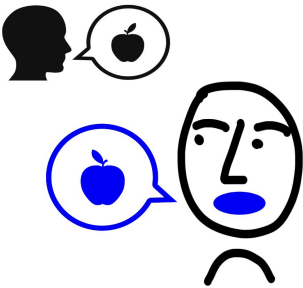
symbols

happy

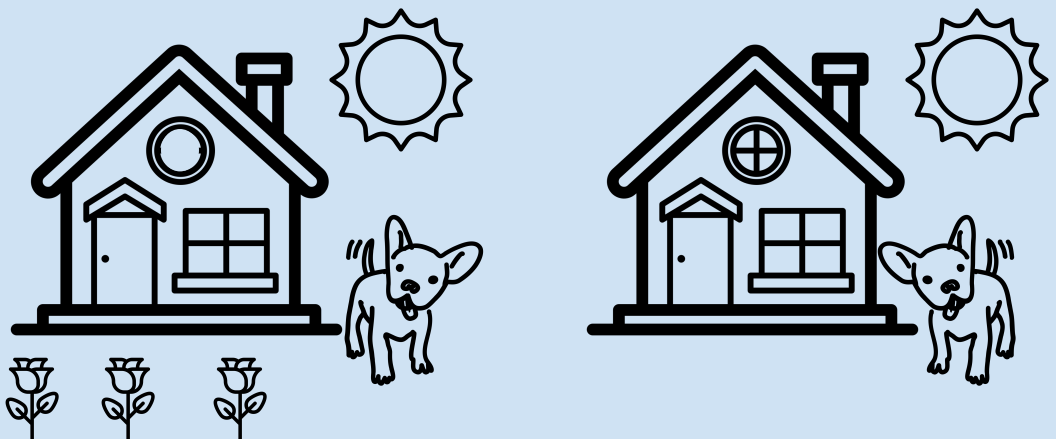
Unit #2

Unit #2

Practice Classroom directions

Action	Please...	
	<p>look at me.</p>	<p>look at him.</p>
	<p>listen to me.</p>	<p>listen to them.</p>
	<p>repeat after me.</p>	<p>repeat after her.</p>

Circle the differences (3)



Practice Speaking

Which cell service provider (company) do you have?

T Mobile

verizon^v

 **boost**
mobile[®]



My name is [_____].

I have [_____].

How about you?

Unit #2

Circle the differences (3)

Image A

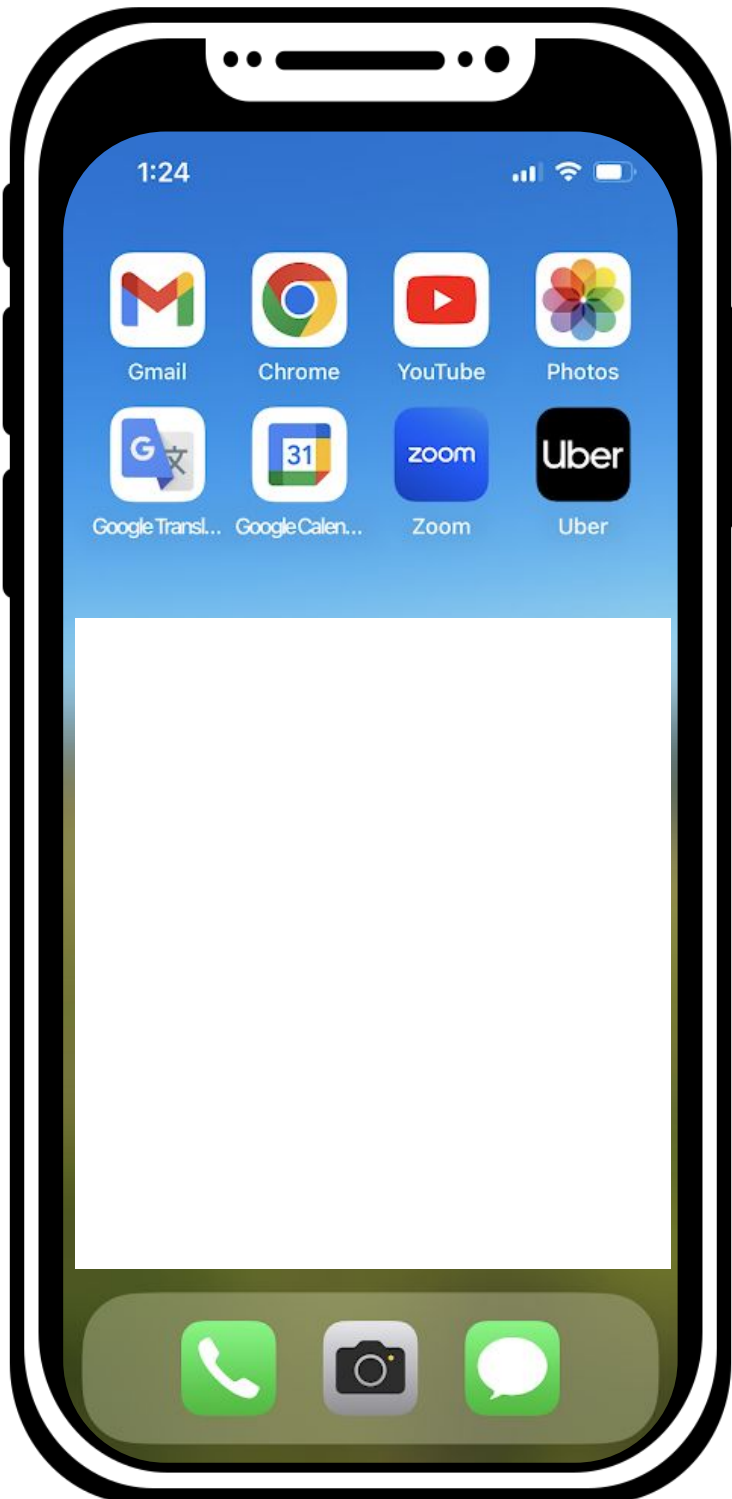
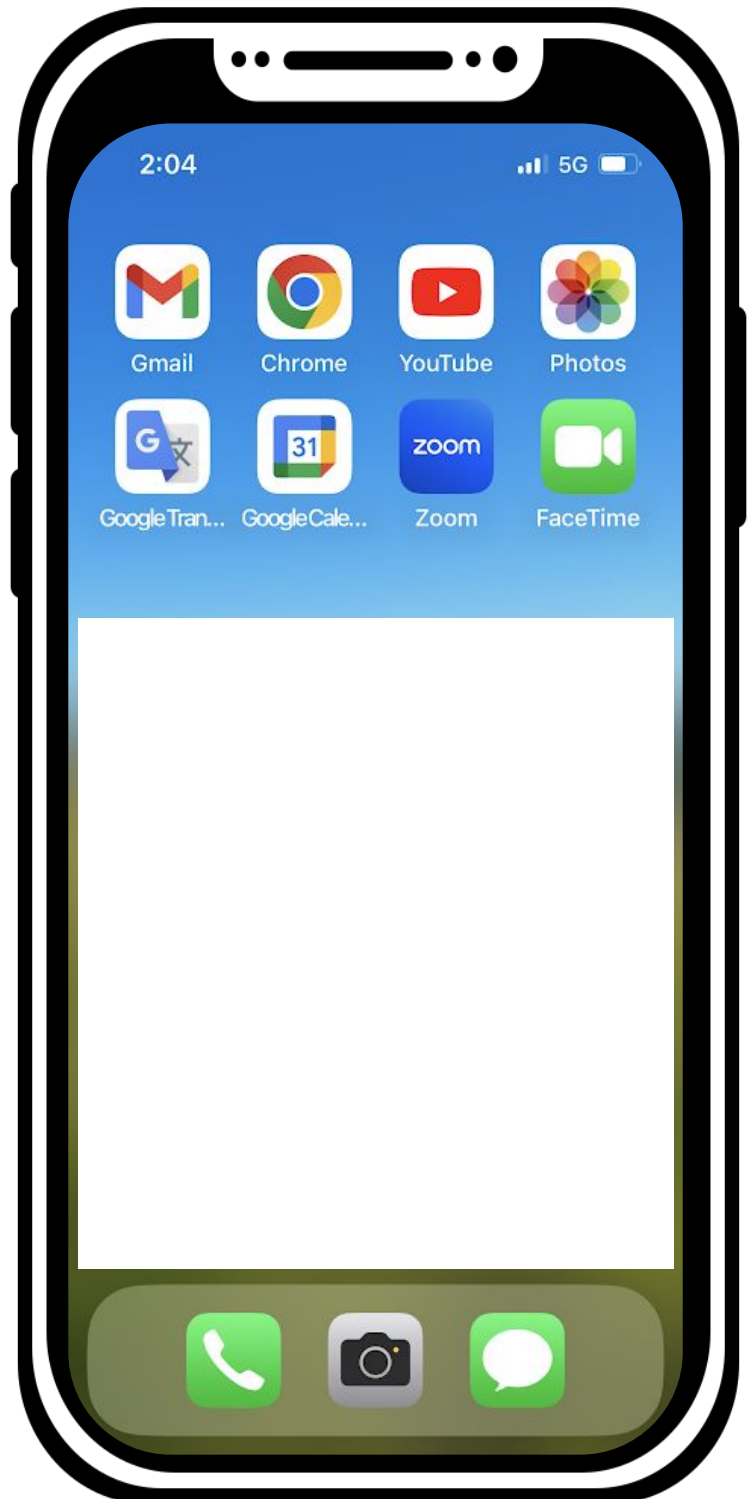

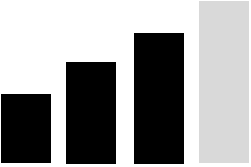



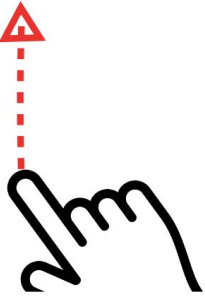
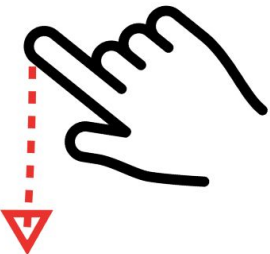

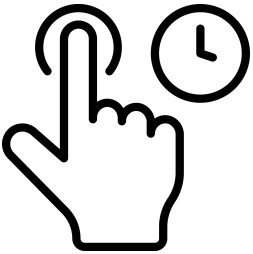
Image B



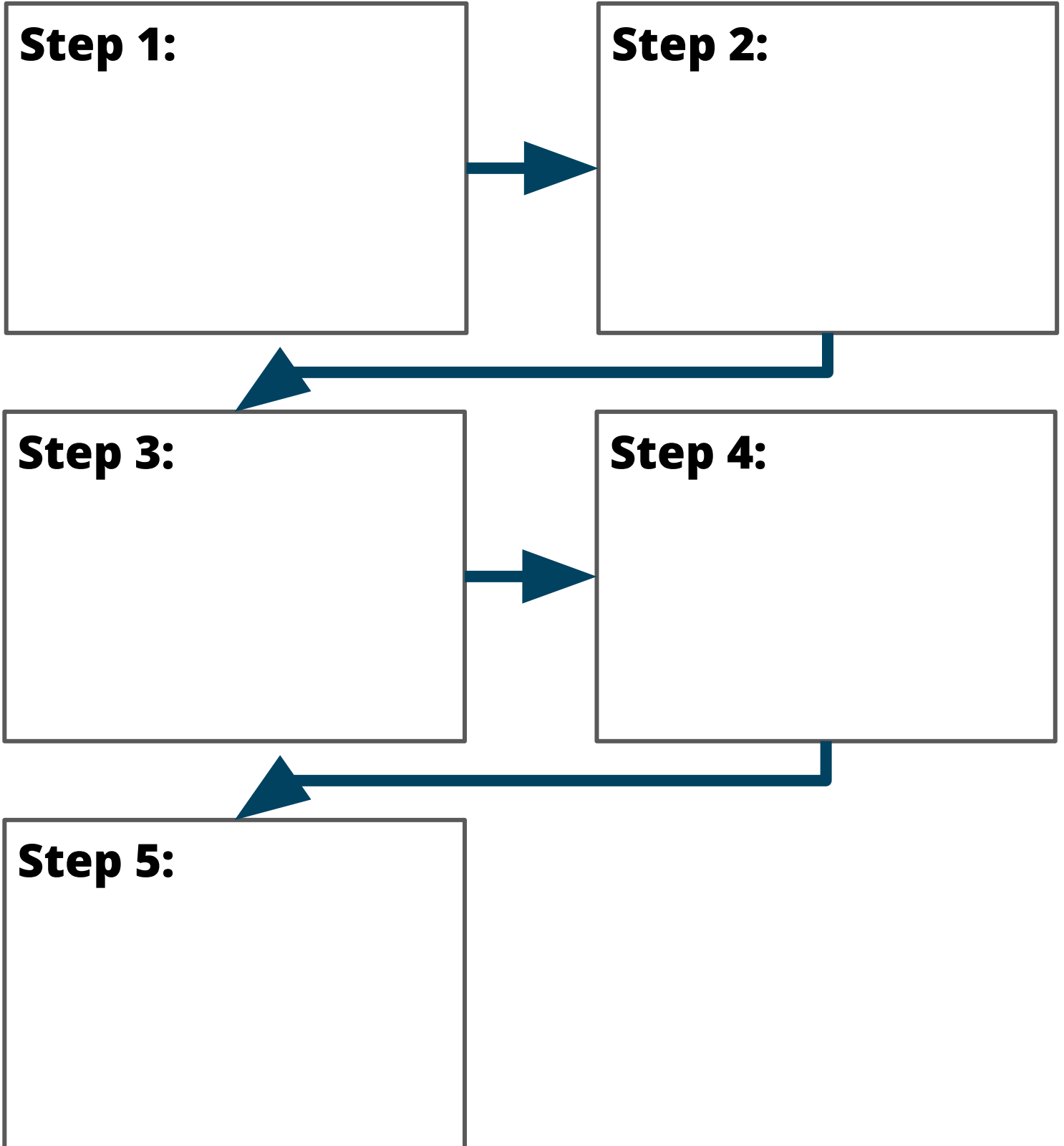
Identify Smartphone Icons

Icon	Icon Name	This is for...
	battery level	
5G	cell service speed	
	cell service signal	
	WiFi signal	

Practice Smartphone Actions

Action	Action Name	How to...
	swipe up	
	swipe down	
	tap on (or) select	
	"long press" (2 seconds)	

How to connect to WiFi



Unit #3

Practice Classroom directions

Sentence example:

Please **show me** [something].

Please **show me how to** [action].

Please **point at** [something].

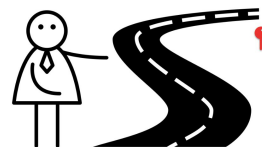
Where is [something] ?

It's right here.



(or)

It's over there.



(or) **I'm not sure.**



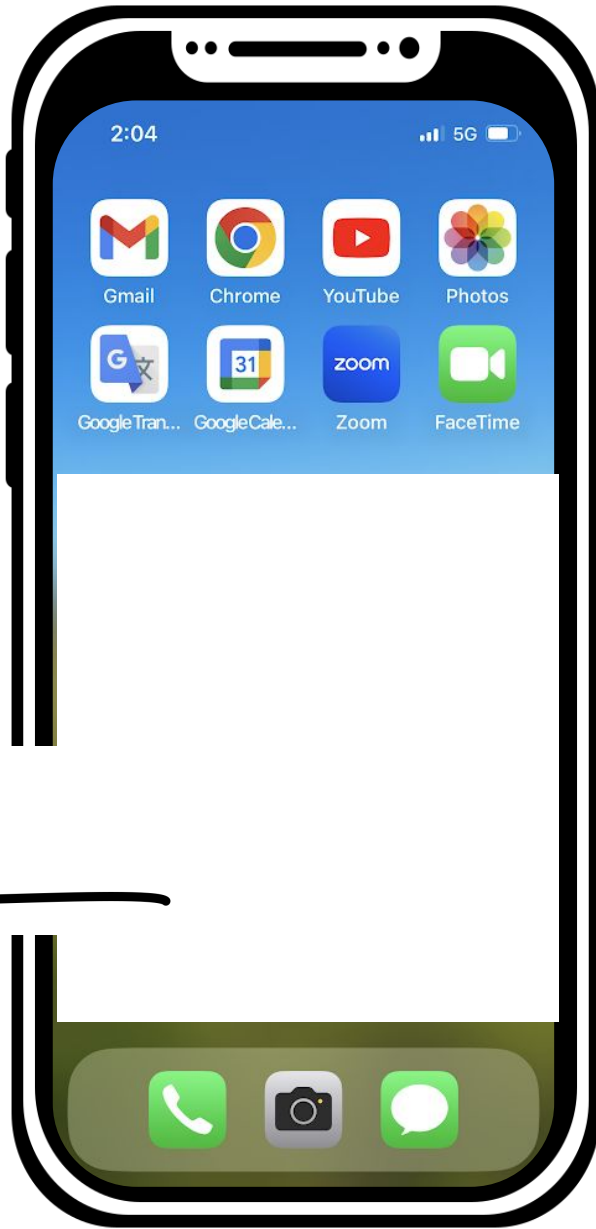
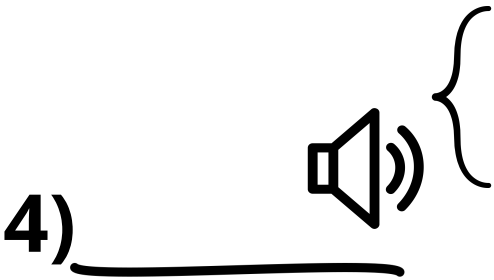
Smartphone Parts

phone



phone charger

Smartphone Parts

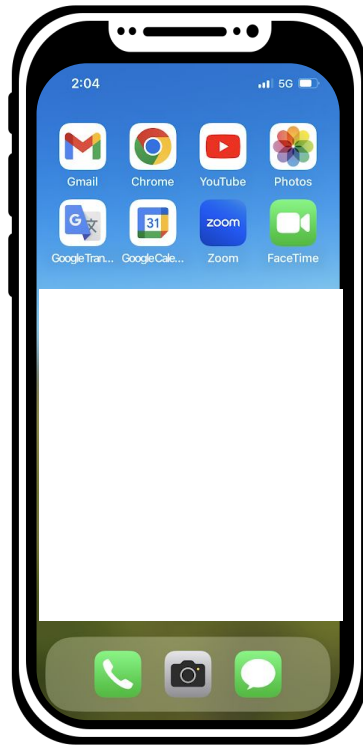


Identify Sides

top

left

right

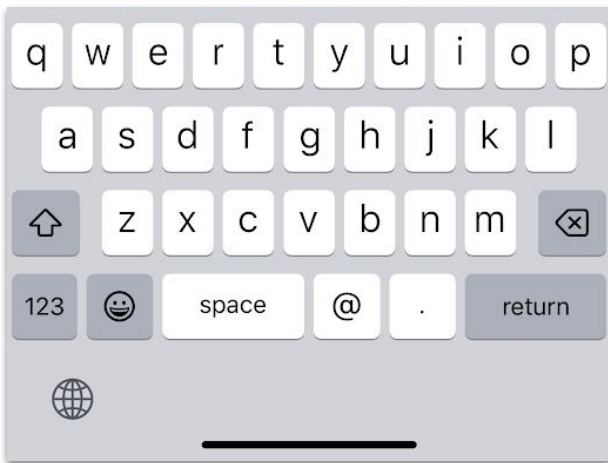


bottom

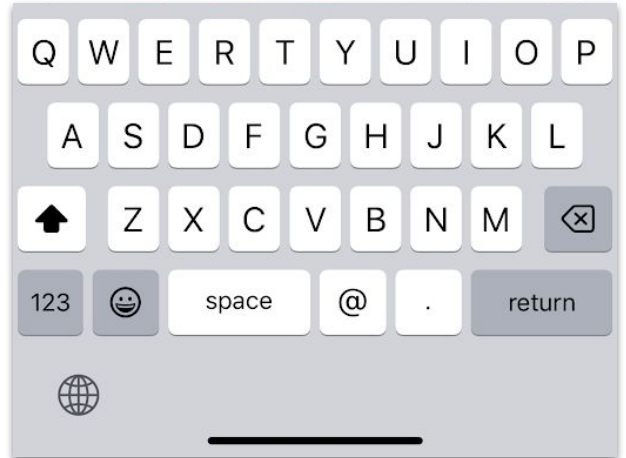
Unit #3

Smartphone Keyboard

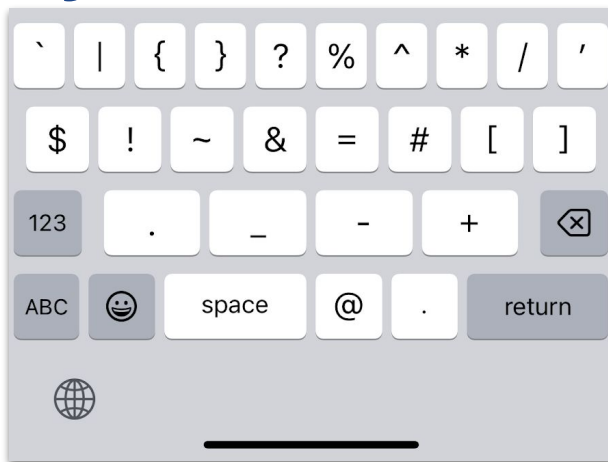
lowercase letters



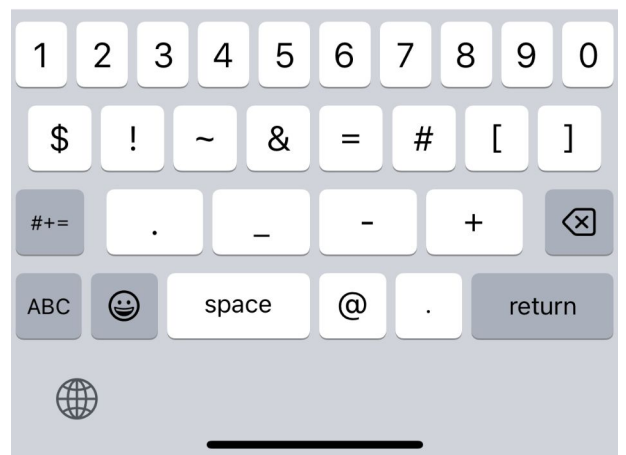
UPPERCASE letters



symbols

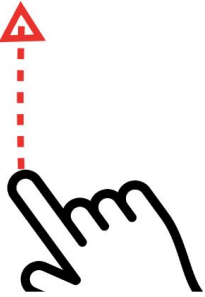
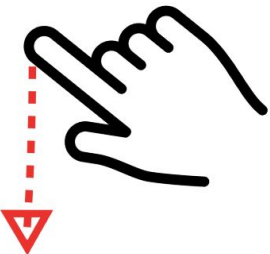

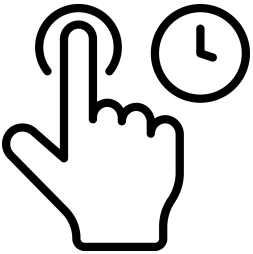


numbers

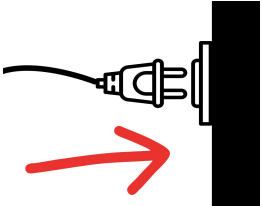
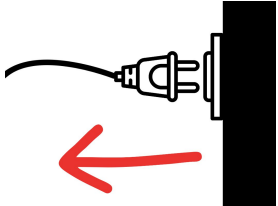
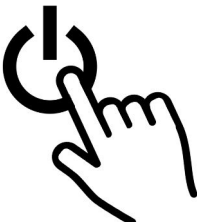



Unit #4


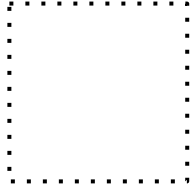

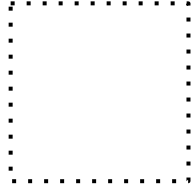
Practice Smartphone Actions (review)

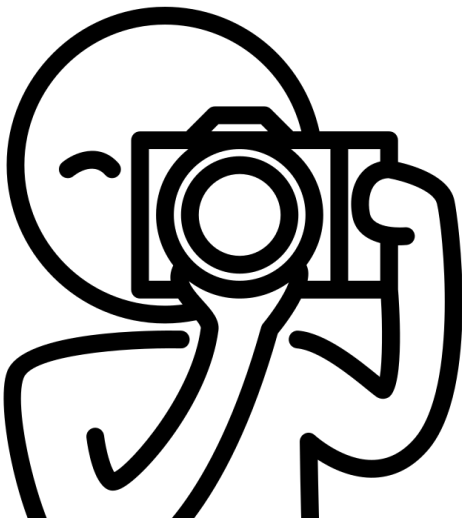
Action	Action Name	How to...
	swipe up	
	swipe down	
	tap on (or) select	
	"long press" (2 seconds)	

Practice Classroom directions


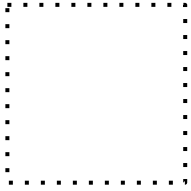


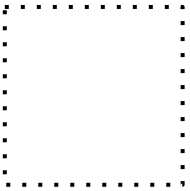


Action	Please...
	<i>plug in [something].</i>
	<i>unplug [something].</i>
	<i>press the power button .</i>
	<i>find [something].</i> <i>search for [something].</i>

Practice Smartphone Actions









Questions	Answers
<p>1. How do I take a photo?</p>	<p>First,</p> <p> _____ the  app ,</p> <p>and then</p> <p> _____ on the  button.</p>



Practice Smartphone Actions

Questions	Answers
<p>2. How do I send a photo ?</p>	<p>First (1st) step:  _____ the  app .</p> <p>Second (2nd) step:  _____ the photo .</p> <p>Third (3rd) step:  _____ on the  button .</p> <p>Final step:  _____ and  _____ .</p>

Descriptive Words

Characteristic	Descriptive Words		
battery level	 low	 medium	 full
brightness	 dim	 bright	
volume	 muted	 quiet	 loud
font size	A small	A normal	A large

Unit #5

Asking for help and helping others



Practice Speaking

Hi ! How are you today?

I'm good. And you?

I'm good too. Thank you.

Can you help me, please?

Sure!



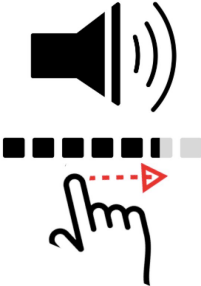

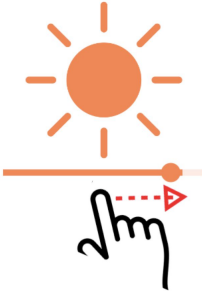
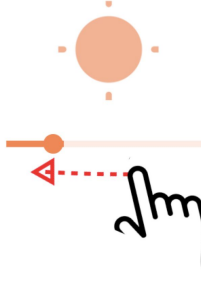

I can help you.

Sorry,

I **can't help you.**

Asking for help and helping others

Questions using comparison words

<p>Can you help me make it ...</p>	 <p>?</p>	 <p>?</p>
	 <p>?</p>	 <p>?</p>
	 <p>?</p>	 <p>?</p>
<p>Can you help me ...</p>	 <p>?</p>	

Asking for help and helping others



Practice Speaking

It's too [*large*]. Can you make it [*smaller*]?

large	/	smaller
small	/	larger
dim	/	brighter
bright	/	dimmer
quiet	/	louder
loud	/	quieter
hard	/	easier
easy	/	harder

Asking for help and helping others



Practice Speaking

Can you help me []?

Okay. Let me try.

Let me see your phone.

It looks **good!**

It **didn't work.**

Thank you!

Thanks for trying.

Unit #6

Matching game

Match the activity on the left with the app on the right.

_____ 1) to watch videos

a)



_____ 2) to translate words

b)



_____ 3) to chat with friends

c)



_____ 4) to take photos

d)



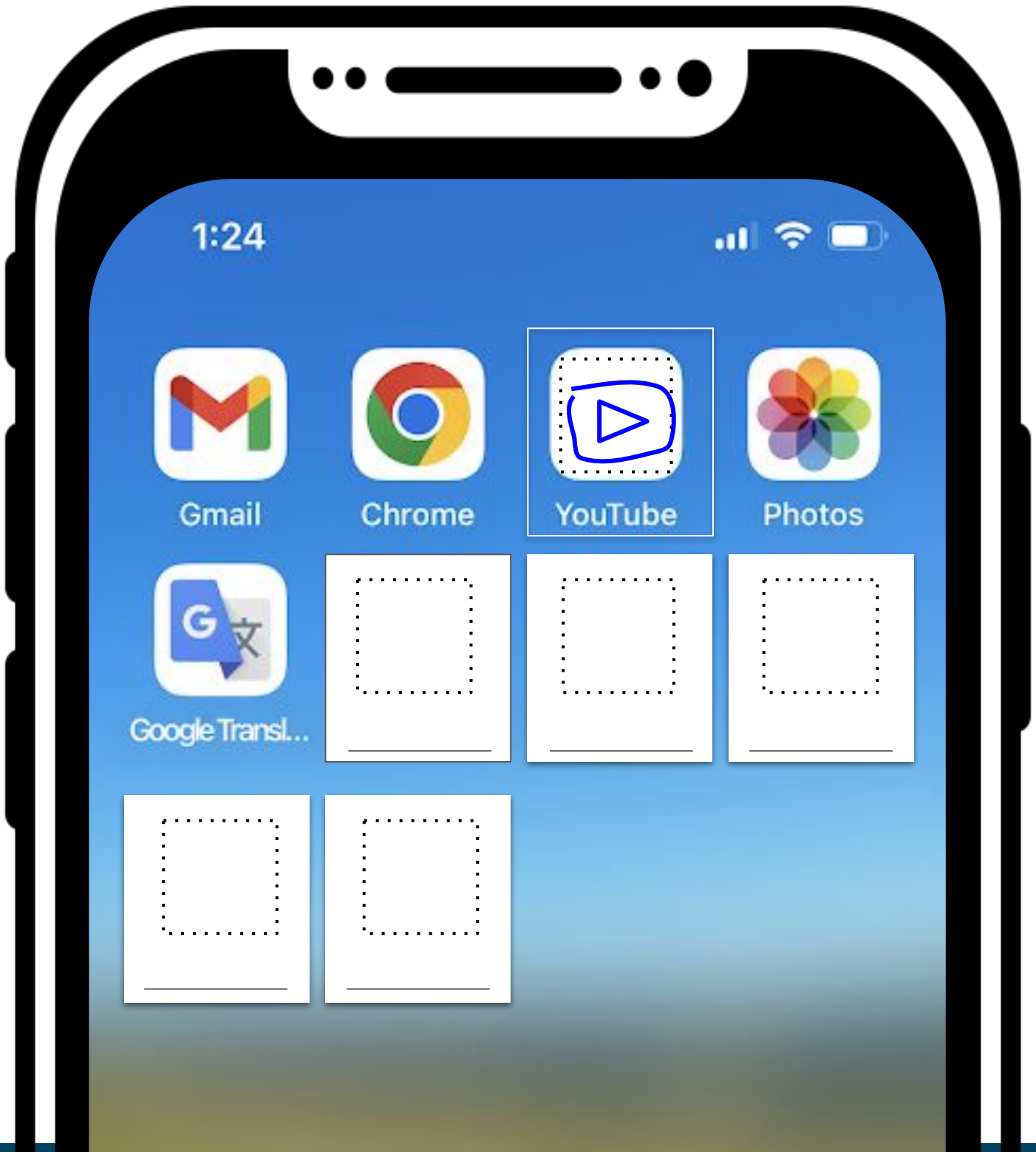
_____ 5) to look up information

e)



Apps I use

In the blank boxes, draw icons of the apps you use.



Apps I use



Practice Speaking

What is your favorite app?

My favorite app is _____ .

I use it to _____ . And you ?

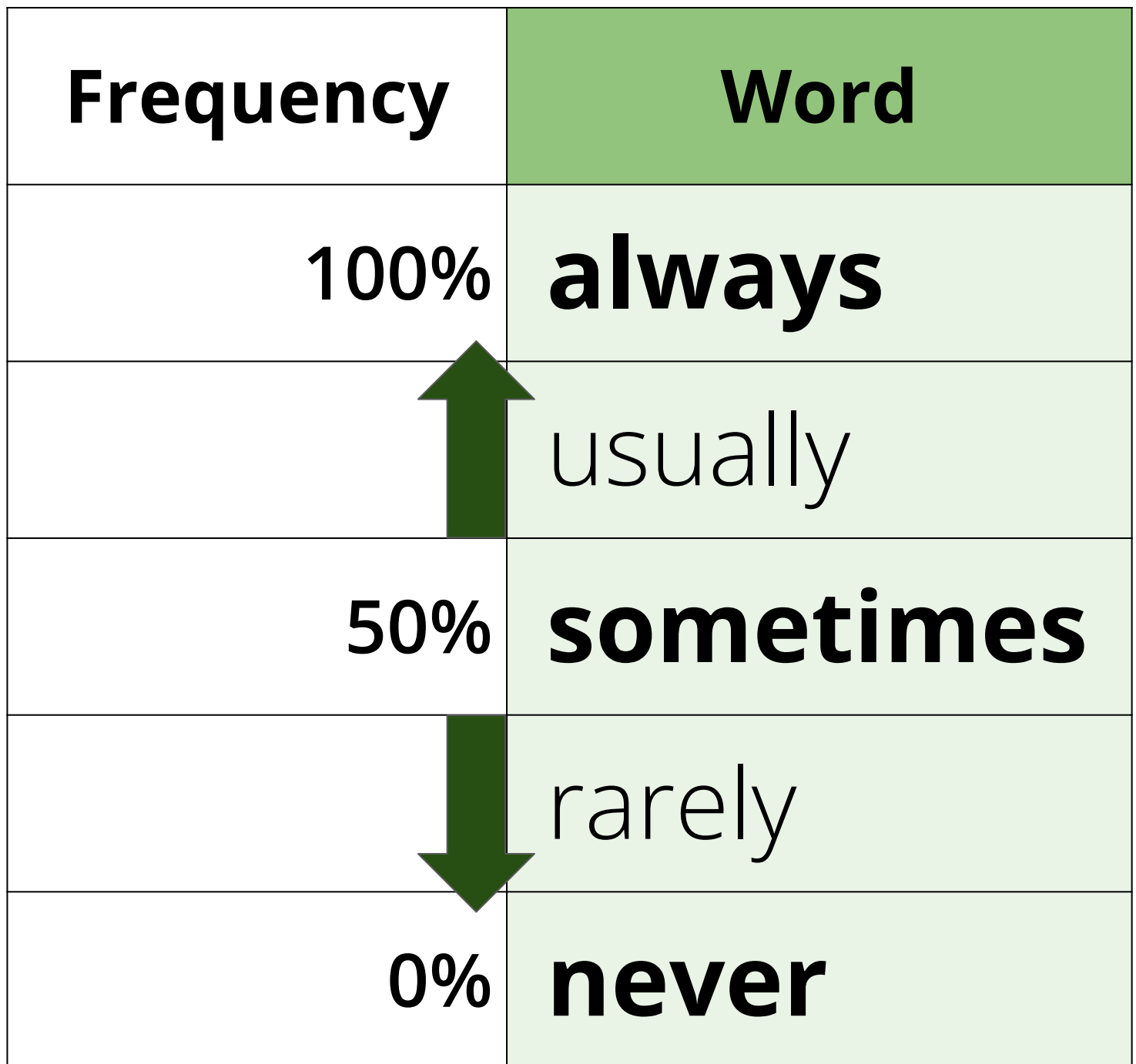
My favorite is _____ .

I use it every day to _____ .

Adverbs of Frequency











Frequency adverbs describe **how often** an action occurs.

Frequency	Word
100%	always
	usually
50%	sometimes
	rarely
0%	never



Unit #7

Schedules and Activities

Casey's Schedule	the week					the weekend	
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
<i>Morning</i> A.M.							
<i>Afternoon</i> P.M.							



Practice Speaking

Question #1: **Does** Casey walk?

Question #2: **Does** Casey watch YouTube?

Question #3: **Does** she skateboard?

Adverbs of Frequency (review)

Frequency adverbs describe **how often** an action occurs.

Frequency	Word
100%	always
	usually
50%	sometimes
	rarely
0%	never

Unit #7

Calendar Dates - Months

Your Date of Birth (birthday)	____ / ____ / ____ Month Day Year
--	---

Months	
01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December

Last month:						

This month:						

Next month:						

Unit #7

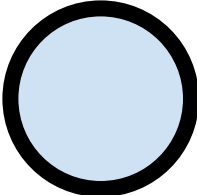
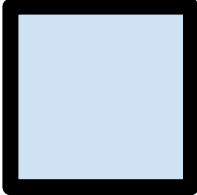
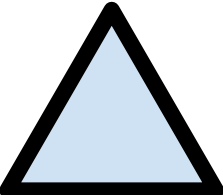
Calendar Dates - Days

Your Date of Birth (birthday)	____ / ____ / ____ Month Day Year
--	---






Number / Day of the Month		
01 one / first	12 twelve (th)	23 twenty-three
02 two / second	13 thirteen (th)	24 twenty-four
03 three / third	14 fourteen (th)	25 twenty-five
04 four / fourth	15 fifteen (th)	26 twenty-six
05 five / fifth	16 sixteen (th)	27 twenty-seven
06 six / sixth	17 seventeen (th)	28 twenty-eight
07 seven (th)	18 eighteen (th)	29 twenty-nine
08 eight / eighth	19 nineteen (th)	30 thirty
09 nine / ninth	20 twenty	31 thirty-one
10 ten (th)	21 twenty-one	Note the pattern: 20th twentieth 21st twenty-first 30th thirtieth
11 eleven (th)	22 twenty-two	

Unit #8

Using the camera to go online

Questions	Write the answer
<p>1. What is the shape of a QR code?</p>	<p>A QR code is usually a square.</p> <p> a) _____</p> <p> b) _____</p> <p> c) _____</p>

Using the camera to go online

Questions	Write the answer
<p>2. How do I use a QR code?</p> 	<p>(1st) _____ step:</p> <p> _____ the  app .</p> <p>(2nd) Second step:</p> <p>Aim the camera at the QR code .</p> <p>(3rd) _____ step:</p> <p> _____ the </p>

Unit #8

Practice filling out a form (1 of 3)

1. Scan the QR code	(ask your teacher for the QR Code)
2. Input / type your name	<p><i>First Name</i></p> <p><i>Last Name</i></p>
3. Input / type your address	<p><i>Street Address</i></p> <p><i>City</i></p> <p><i>State</i></p> <p><i>Zip Code</i></p>
4. Input / type your email	<p>_____ @ _____ . _____</p>
5. Input / type your phone number	<p>(_____) _____ - _____ - _____</p> <p>Area code Phone Number</p>

Unit #8

Practice filling out a form (2 of 3)

<p>6. Input your Date of Birth (birthday)</p>	<p>____ / ____ / ____</p> <p>Month Day Year</p>
<p>7. Select your Household size</p>	<p>(# of family members in your house or apartment)</p> <div style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;"> <p>Household Size { note: # of family members in your house or apartment } *</p> <p style="text-align: center;">1 2 3 4 5 6 7 8 9</p> <p>1 person <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 9+ persons</p> </div>
<p>8. Select your Household income</p>	<p>(total combined annual income of members in your house or apartment)</p> <div style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;"> <p>Household / Family Income Level { note: total combined annual income of members in your house or apartment } *</p> <p><input type="checkbox"/> \$0 to \$40,000</p> <p><input type="checkbox"/> \$40,001 to \$70,000</p> <p><input type="checkbox"/> \$70,001 to \$106,000</p> <p><input type="checkbox"/> \$106,001 to \$139,000</p> <p><input type="checkbox"/> Other: _____</p> </div>

Unit #8

Practice filling out a form (3 of 3)

9. Are you Hispanic Ethnicity?

Are you Hispanic Ethnicity? { note: Hispanic is defined as a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race. source: census.gov } *

- Yes
- No

10. Select your Race and Ethnicity

Race/Ethnicity > note: Race/ethnicity is the group to which an individual belongs, identifies with, or belongs in the eyes of the community *

- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Other Pacific Islander
- Other Race not listed

11. Check the box "I understand"

I acknowledge that the Digital Lending Library is intended for library patrons who do not otherwise have access to the equipment or services sufficient to meet the patron's educational needs. *

I have read and understand these terms and guidelines.

- I understand



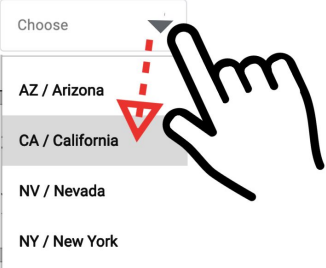


Unit #9

Circle the mistakes

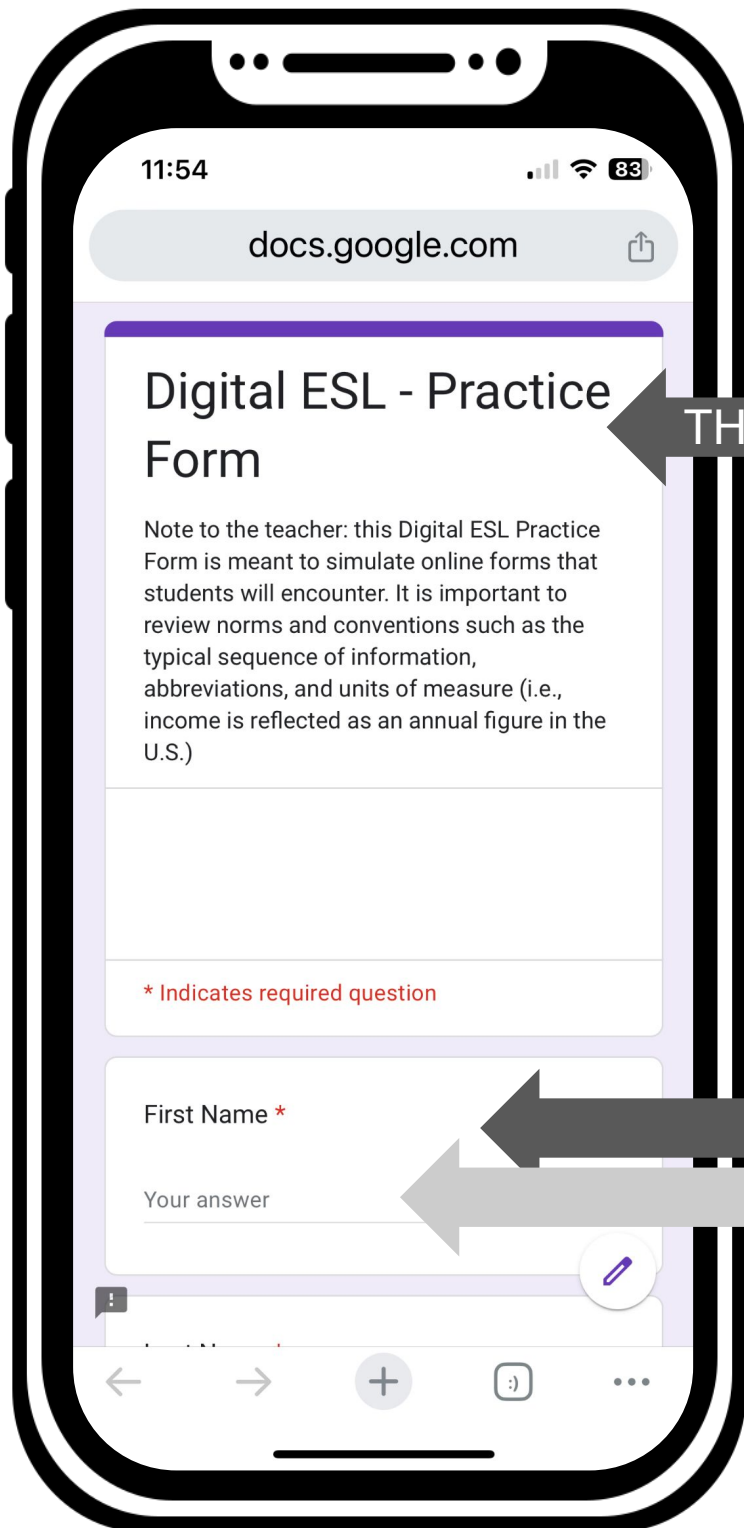
The correct version of the email is: johnny26@aol.com

1. johnny26@aol
2. johnny26@com.aol
3. johnny26@.com
4. johnny26.aol@com
5. johnny2 6@aol.com

Practice Directions

Action	Please...
	<p>tap the button</p>
	<p>check the box</p>
	<p>select from the drop-down</p>
	<p>move the cursor</p>
	<p>fix a mistake</p>

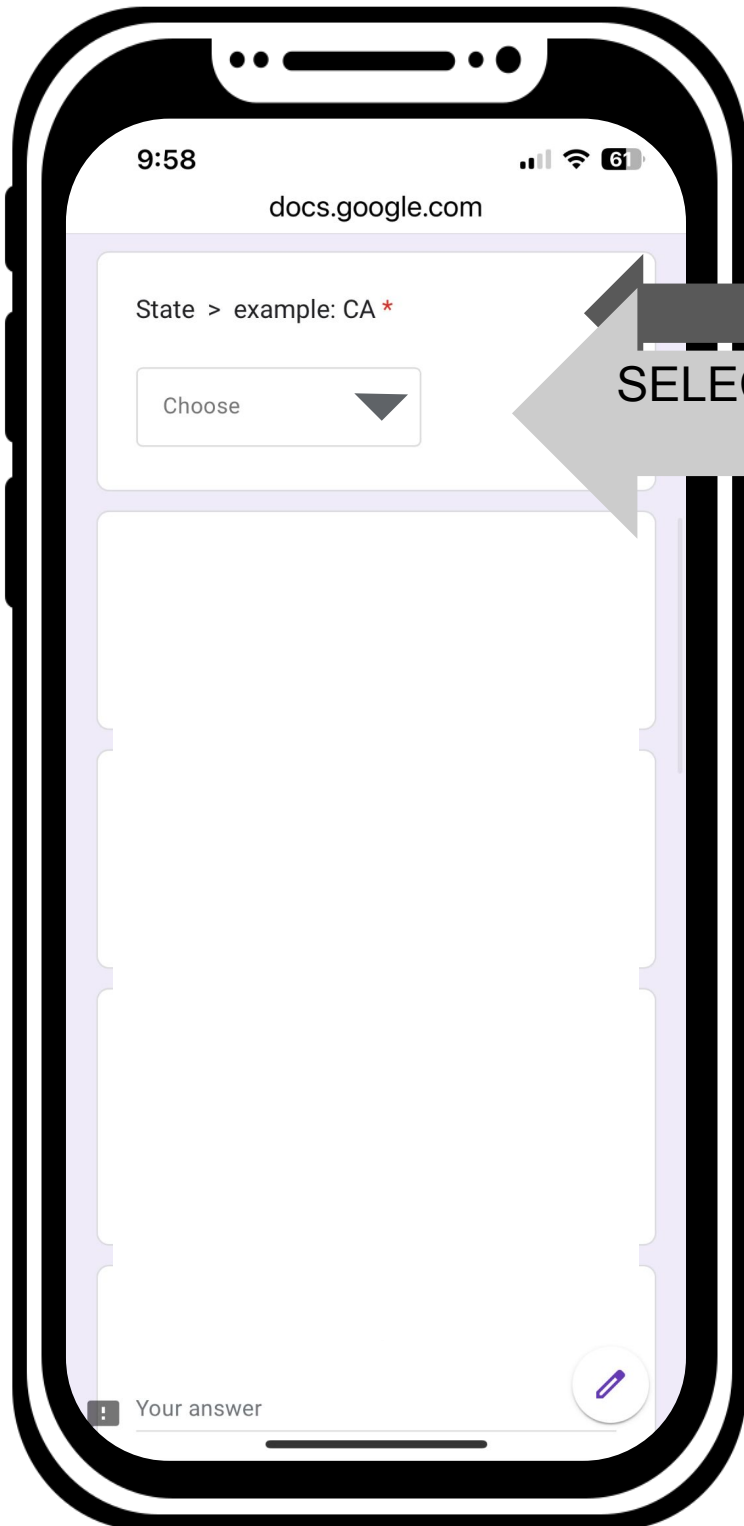
Practice using Online Forms



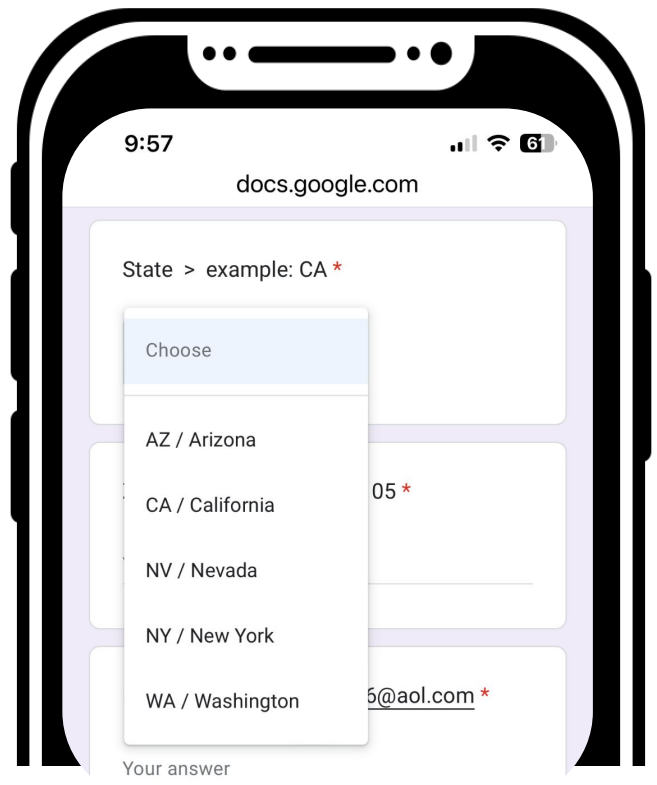
THIS IS THE NAME OF THE FORM

"SHORT ANSWER " QUESTION
TYPE YOUR SHORT RESPONSE

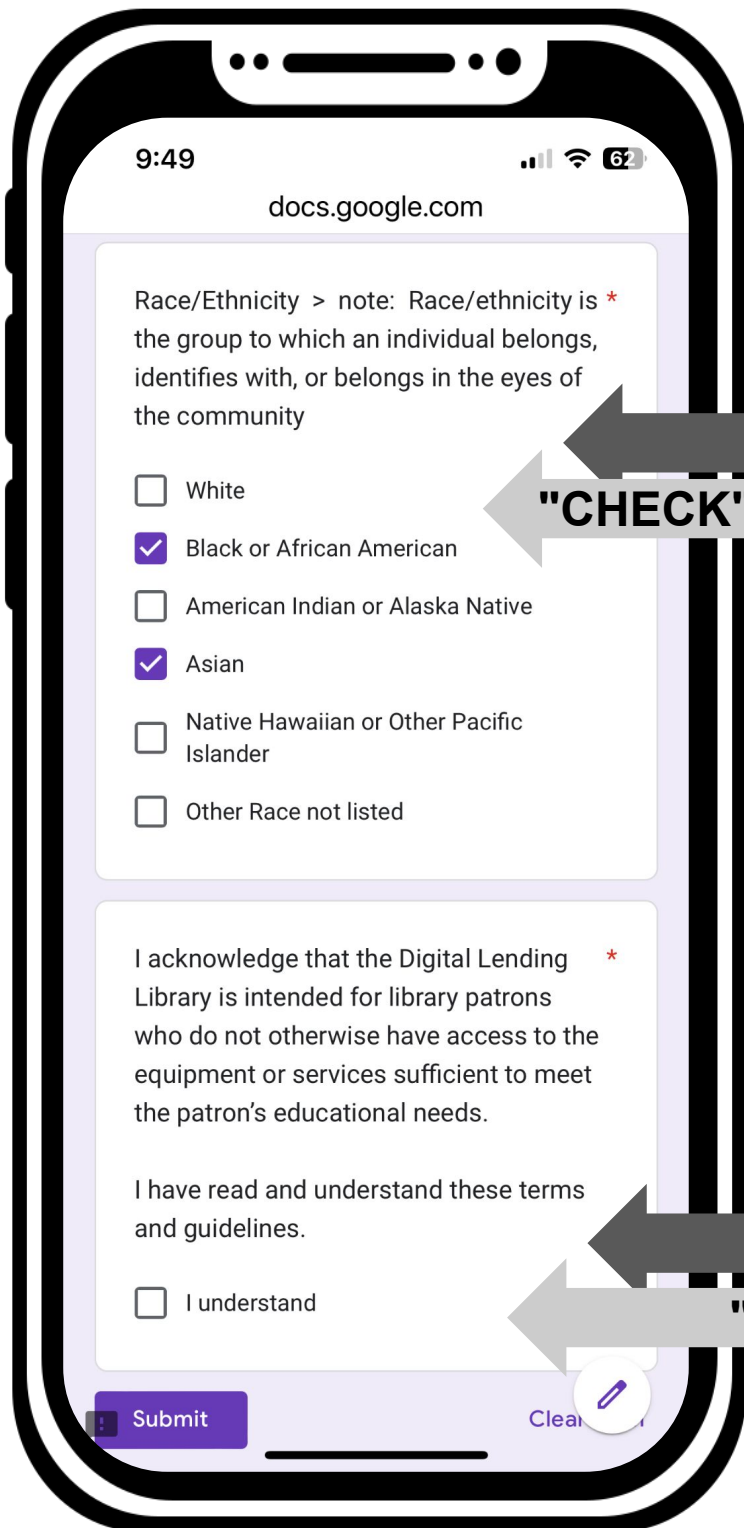
Practice using Online Forms



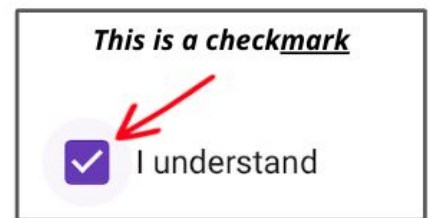
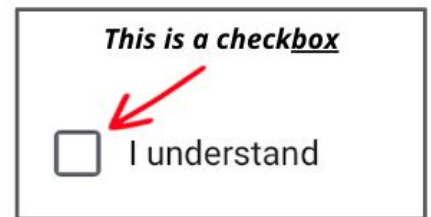
"DROPDOWN " QUESTION
SELECT YOUR RESPONSE FROM THE
DROPDOWN MENU



Practice using Online Forms



"CHECKBOX" QUESTION
"CHECK" (select) ONE OR MORE BOXES



"CHECKBOX" CONFIRMATION
"CHECK" THE BOX TO CONFIRM

Practice using Online Forms

9:51 docs.google.com

- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Other Pacific Islander
- Other Race not listed

I acknowledge that the Digital Lending Library is intended for library patrons who do not otherwise have access to the equipment or services sufficient to meet the patron's educational needs.

I have read and understand these terms and guidelines.

I understand

Submit Clear form

Google Forms

SUBMIT THE FORM

TAP THE " SUBMIT " BUTTON

Unit #10

What did you learn?

- ❑ Directions: Look here, listen to me, repeat
- ❑ How to connect to WiFi
- ❑ How to find symbols (% \ *)
- ❑ Smartphone verbs: swipe, tap, long press
- ❑ How to make your phone louder, brighter
- ❑ How to ask and answer "where" questions
- ❑ Frequency words: always, sometimes, never
- ❑ How to ask for and give help
- ❑ Talking about Apps & their names in English
- ❑ Taking a photo using your smartphone
- ❑ Using a QR code to get online
- ❑ Filling out and submitting an online form

TEACHER'S COPY

[Creating a QR Code to teach Unit #9](#)

Folding Name Card Tent - Template

Certificate of Completion - Template

Unit #1 Word Game - Answer Key

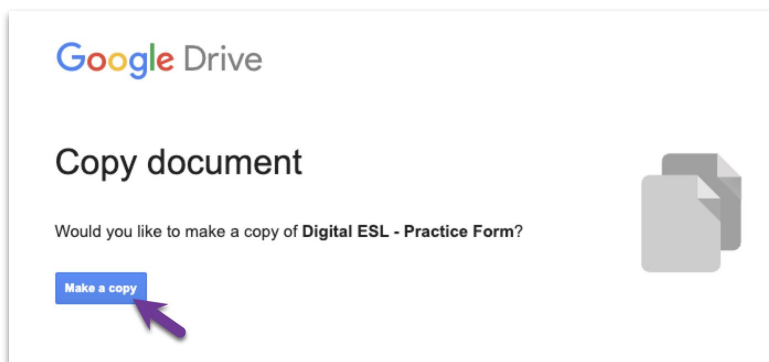
Printable Visual Aids

Image and Icon Credits

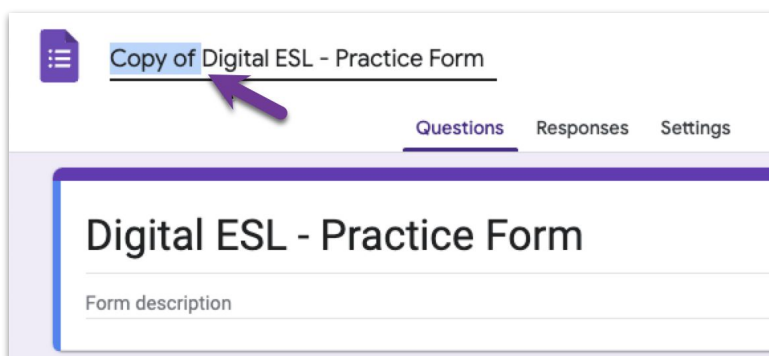
Create a QR code for your students

Prior to Unit #9, follow the directions below:

1) Visit this website to make a copy of the the *Digital ESL Practice Form*
https://bit.ly/desl_practiceform



2) Rename the form you created



3) Next, create a QR code that links to the form you created in step 2.
(I use bitly.com, but you can use any site you would like.)

4) Download the QR Code and print it out for the class to use in Unit #9
Be aware that although this is a **practice form**, responses will be saved in the "Responses" section of the survey, that by default, is accessible to the person who created the file in step 2.

My name is

My name is

Digital ESL



Certificate of Completion

**STUDENT
NAME**

This certificate acknowledges
your active participation and commitment
to completing 10 hours of instruction on

DIGITAL ESL

held on-site at

in collaboration with

Name of Instructor

Today's Date

Word Game - Answer Key

Word Search

K E Y B O A R D K J
N U P P E R C A S E
H A P P Y S F N E T
P A S S W O R D P F
A C C O N F U S E D
L O W E R C A S E F
S M A R T P H O N E
I R Z L E T T E R S
R O E E B C W X N T
S Y M B O L S C L R

smartphone

keyboard

confused

uppercase

lowercase

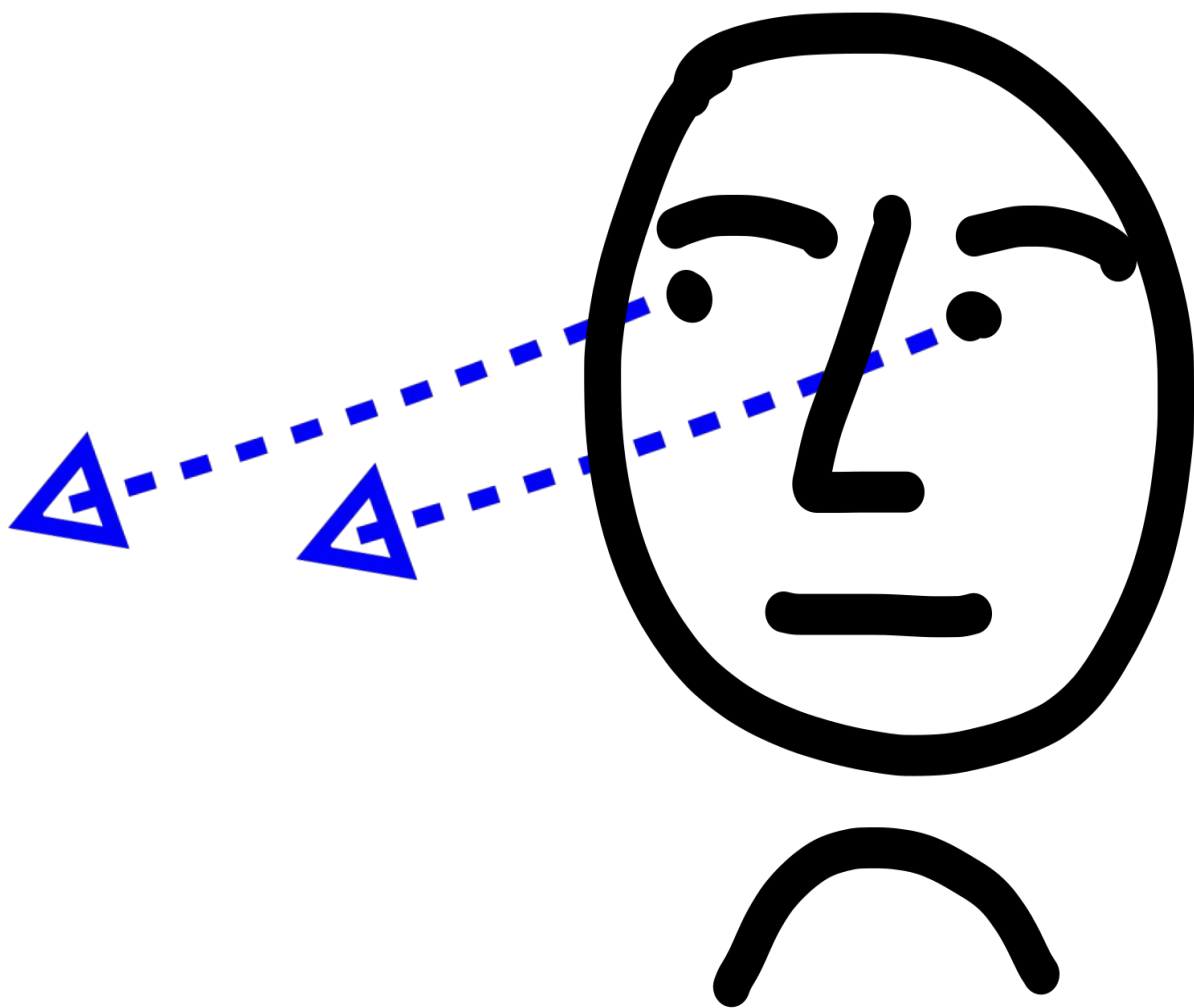
password

letters

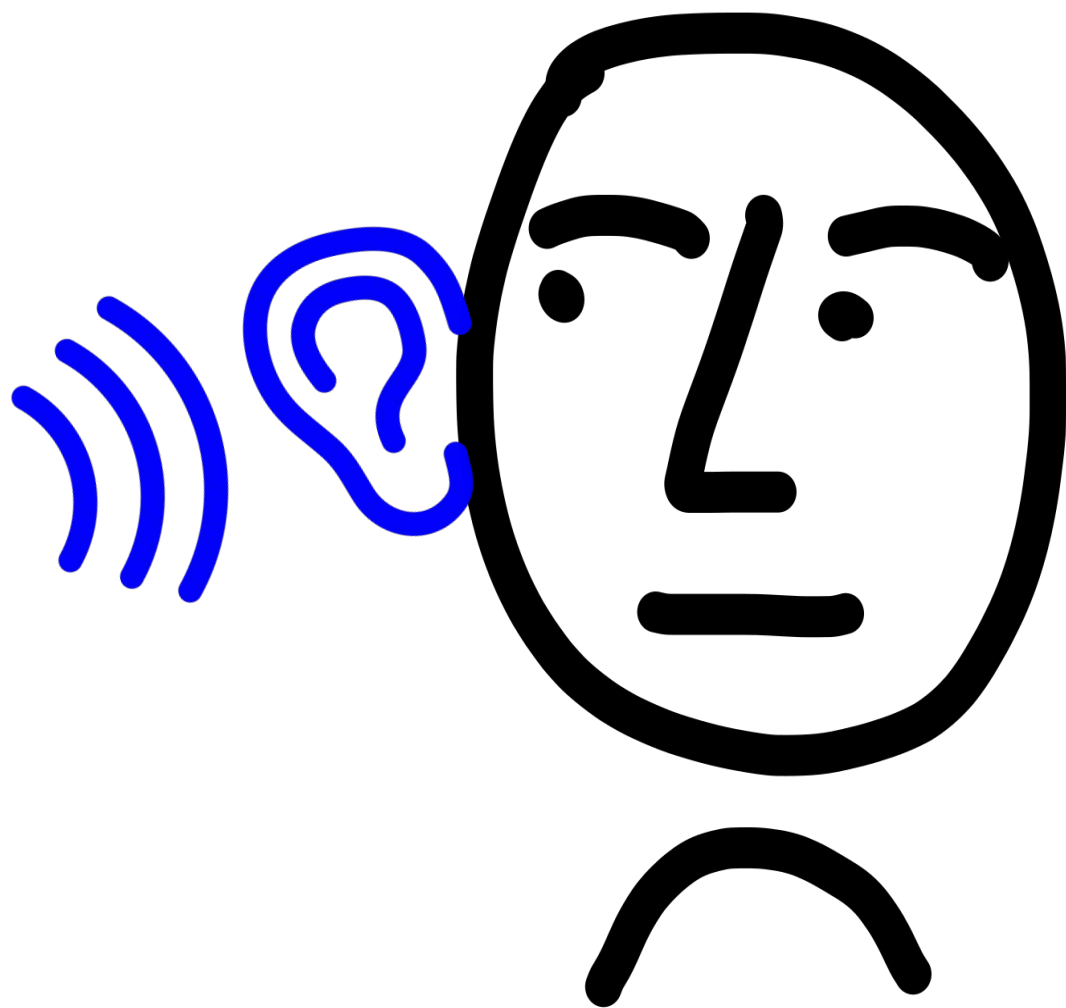
symbols

happy

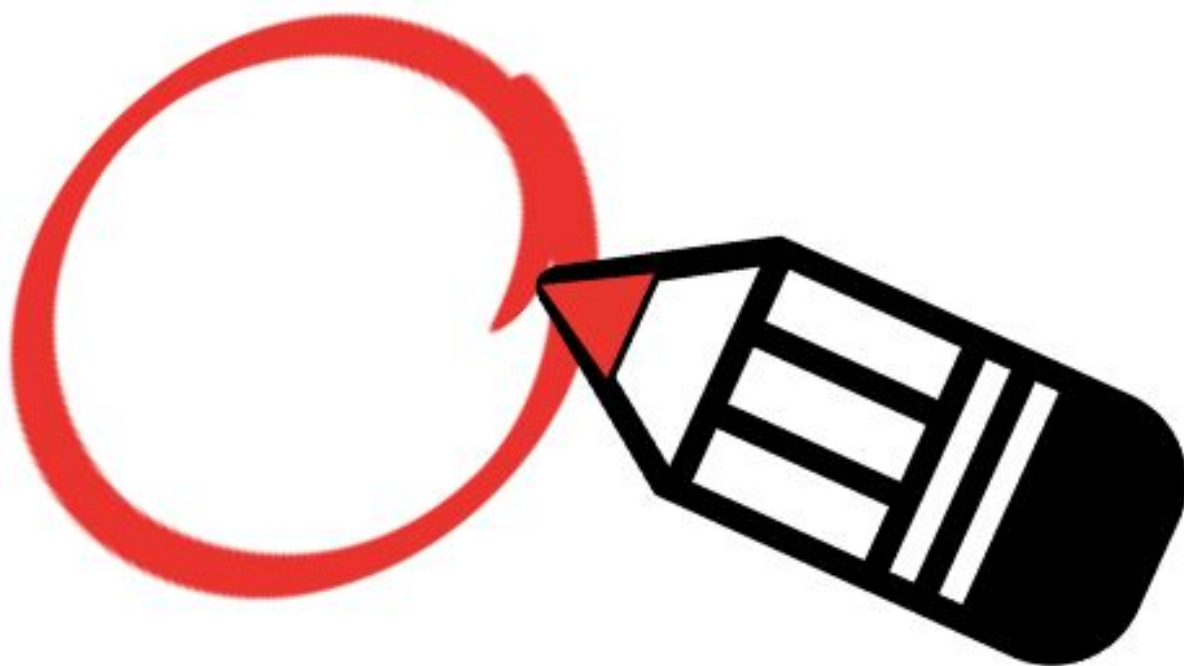
Printable Visual Aids



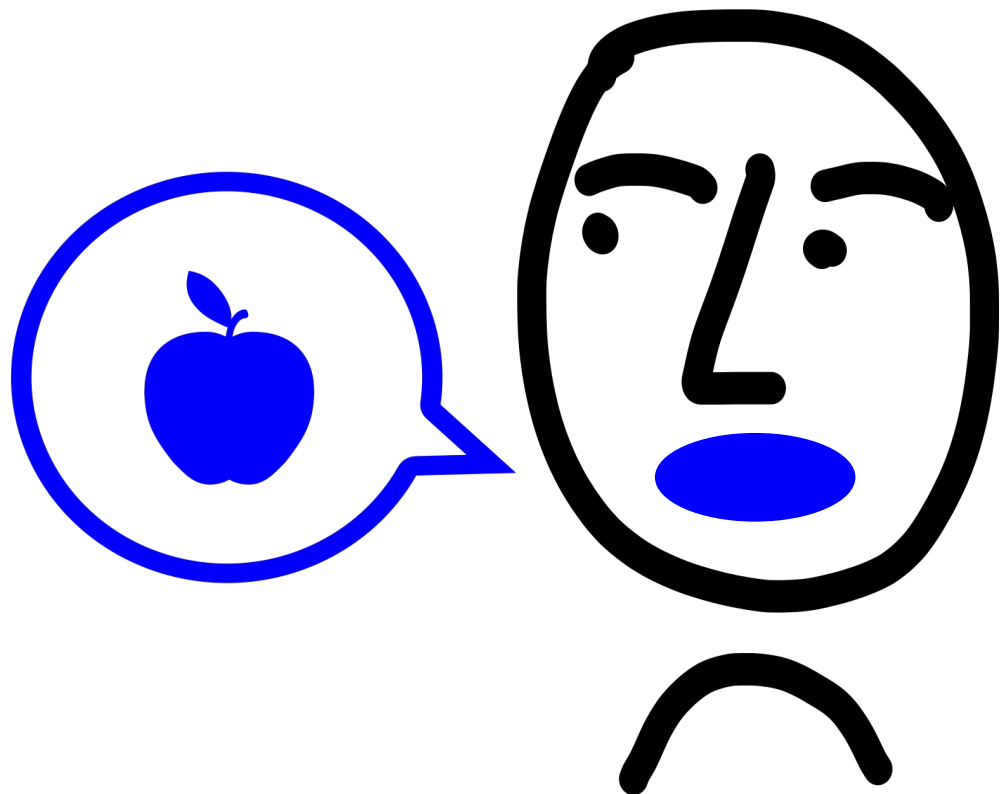
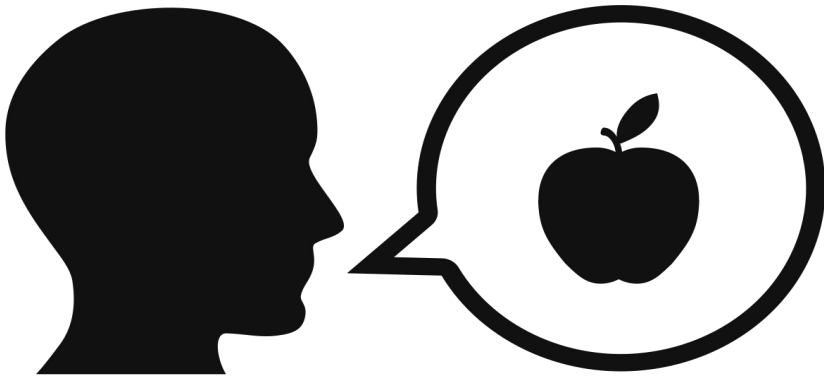
to look



to listen



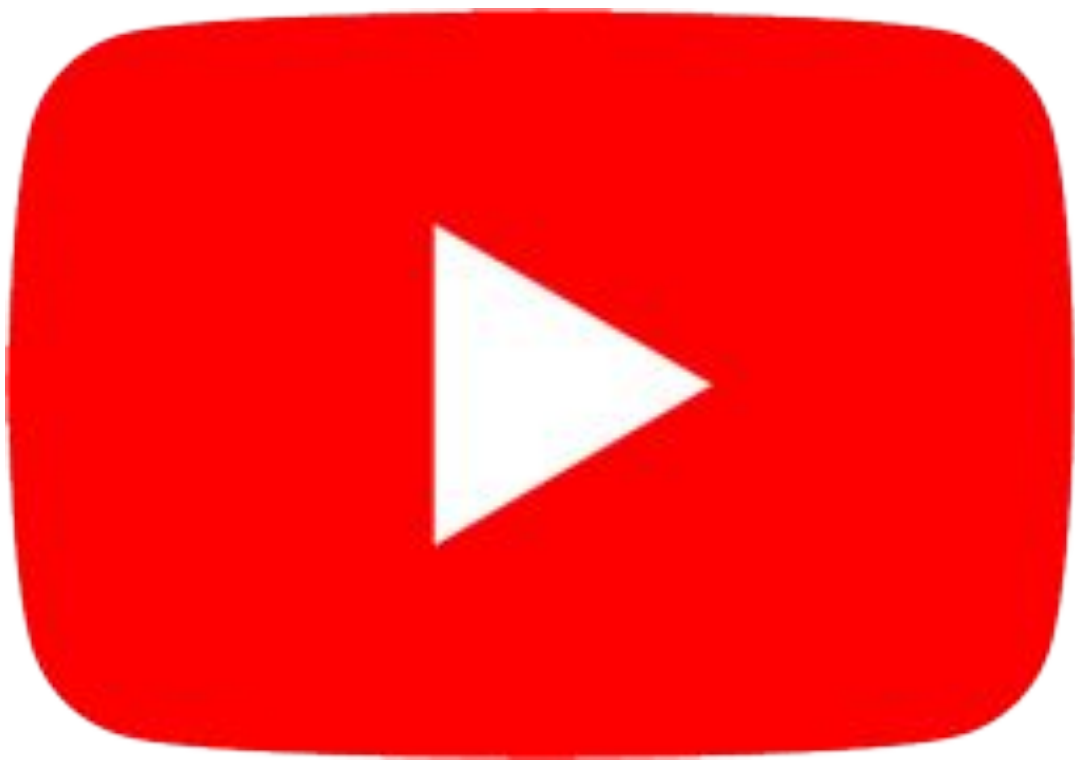
to circle



to repeat











Cell Service Providers (companies)

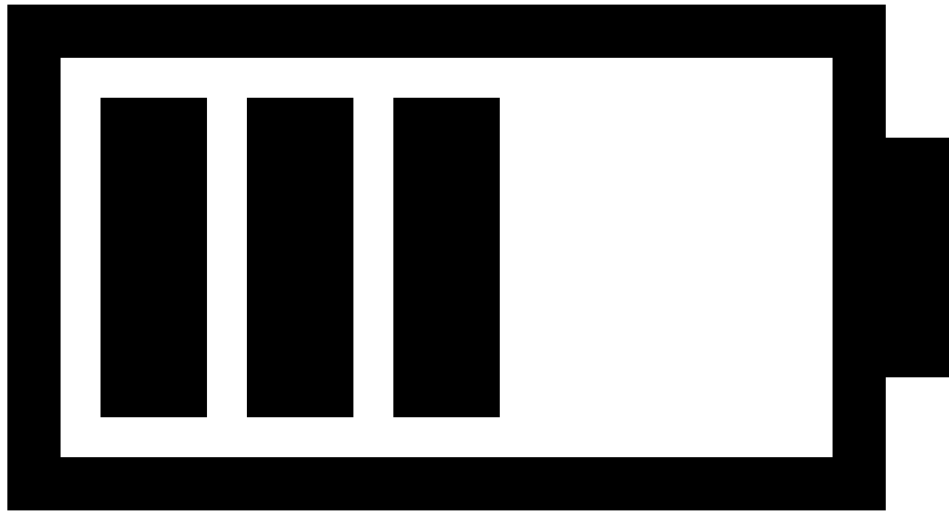


cell service

Join Wifi on your Smartphone

Network:

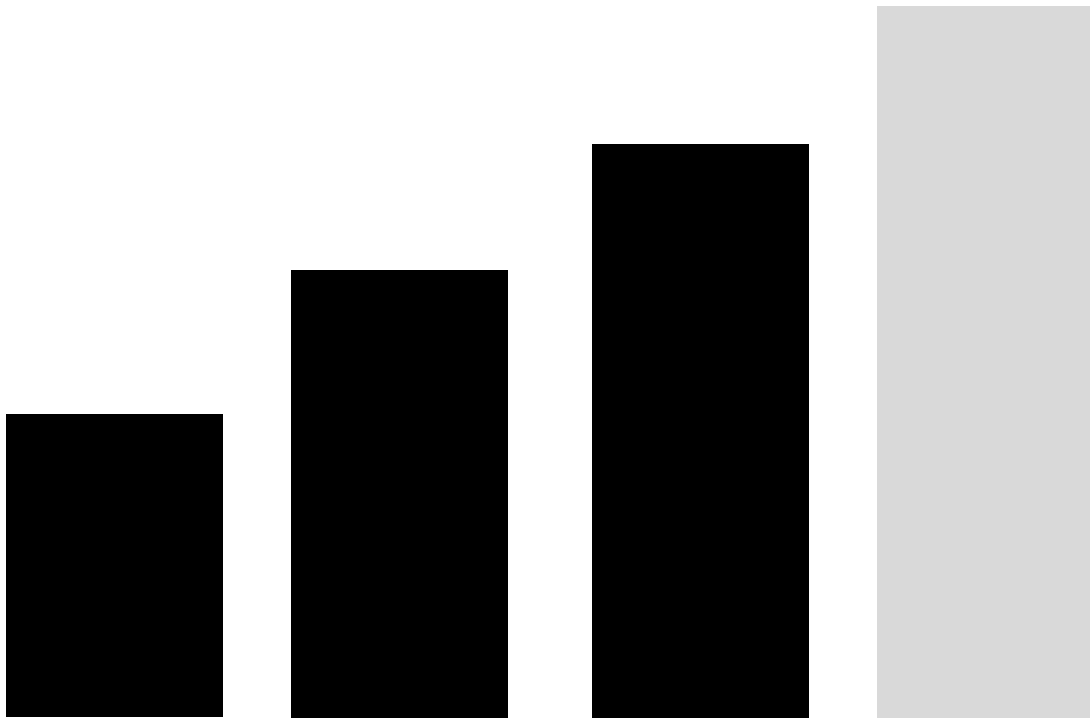
Password:



**battery
level**

5G

**cell
service
speed**



WiFi signal



WiFi

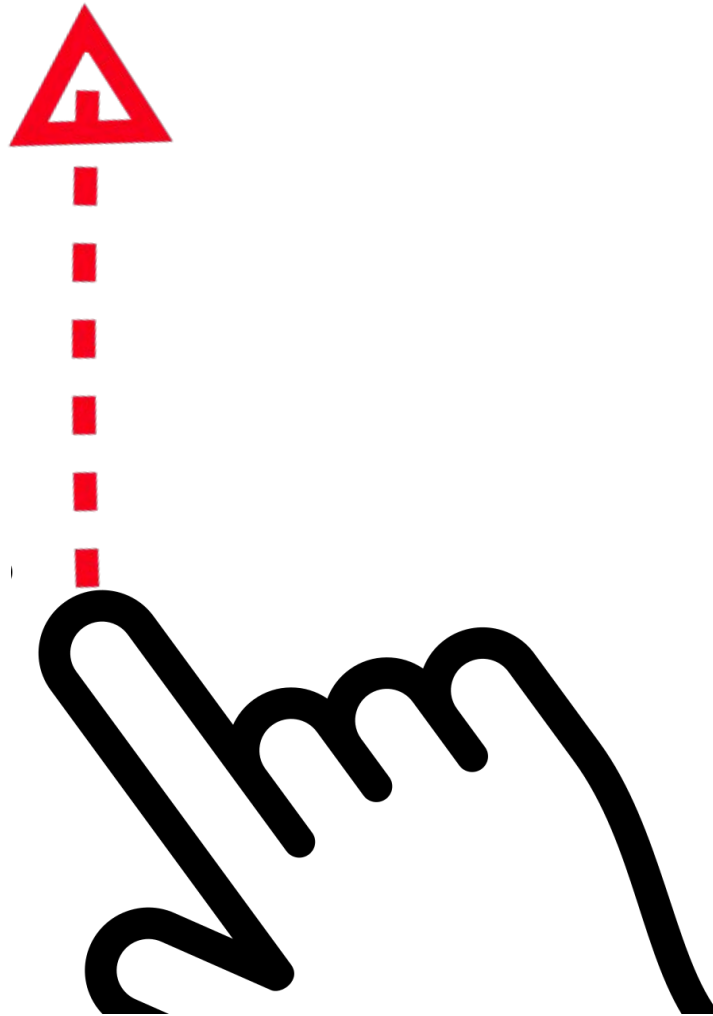
internet

Spot the differences - Image A



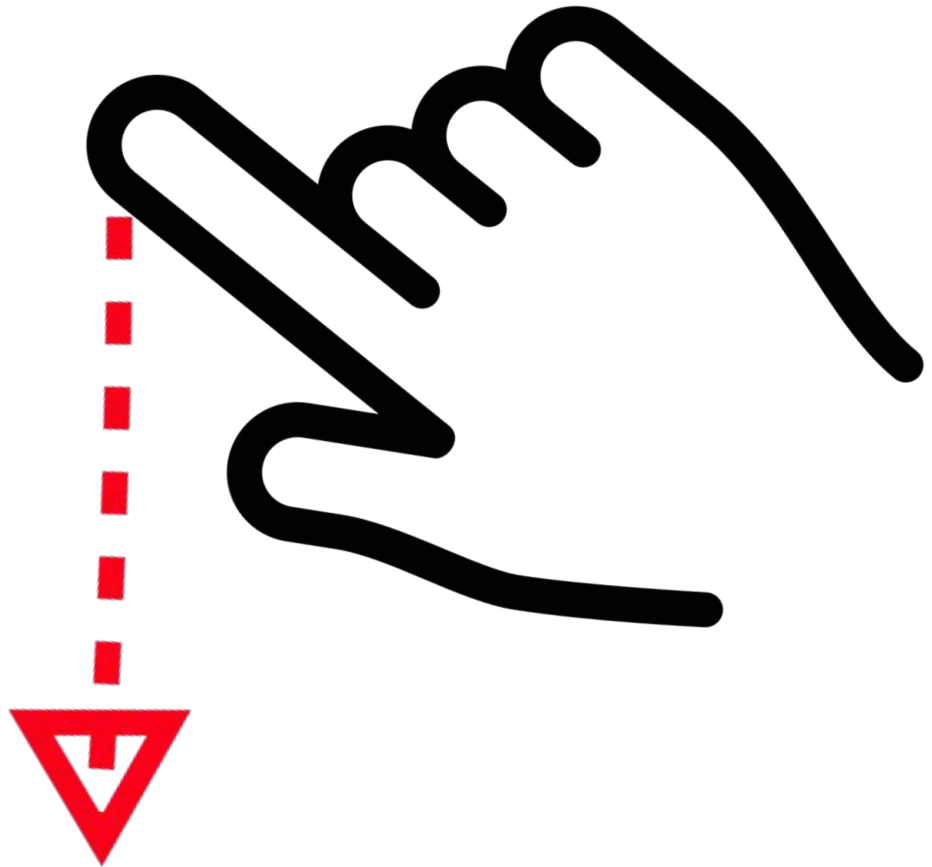
Spot the differences - Image B



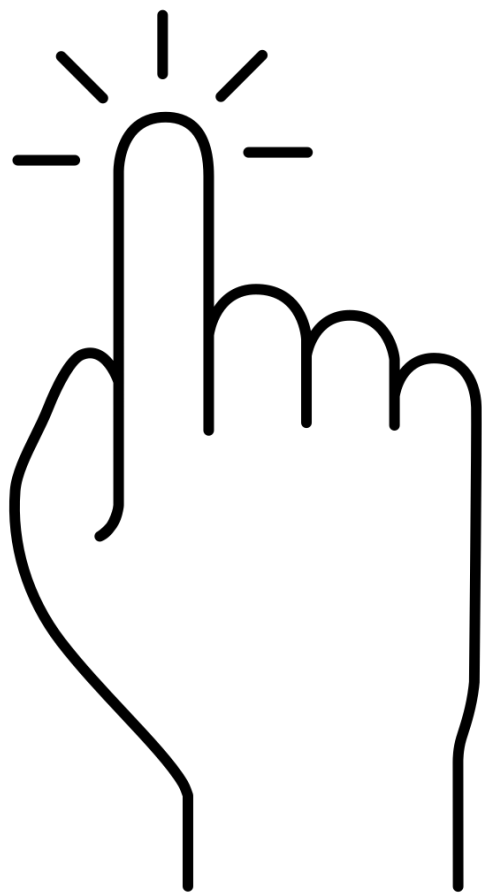


to

swipe up

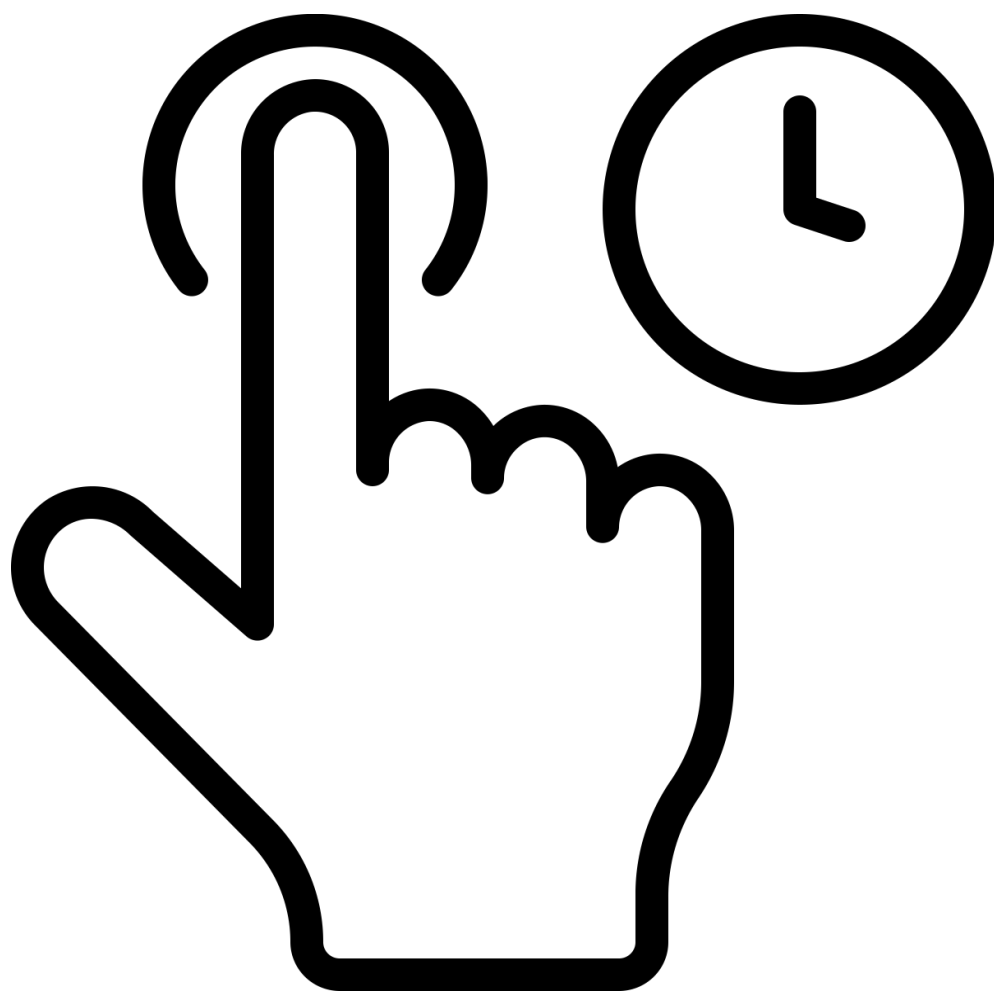


**to
swipe
down**



to

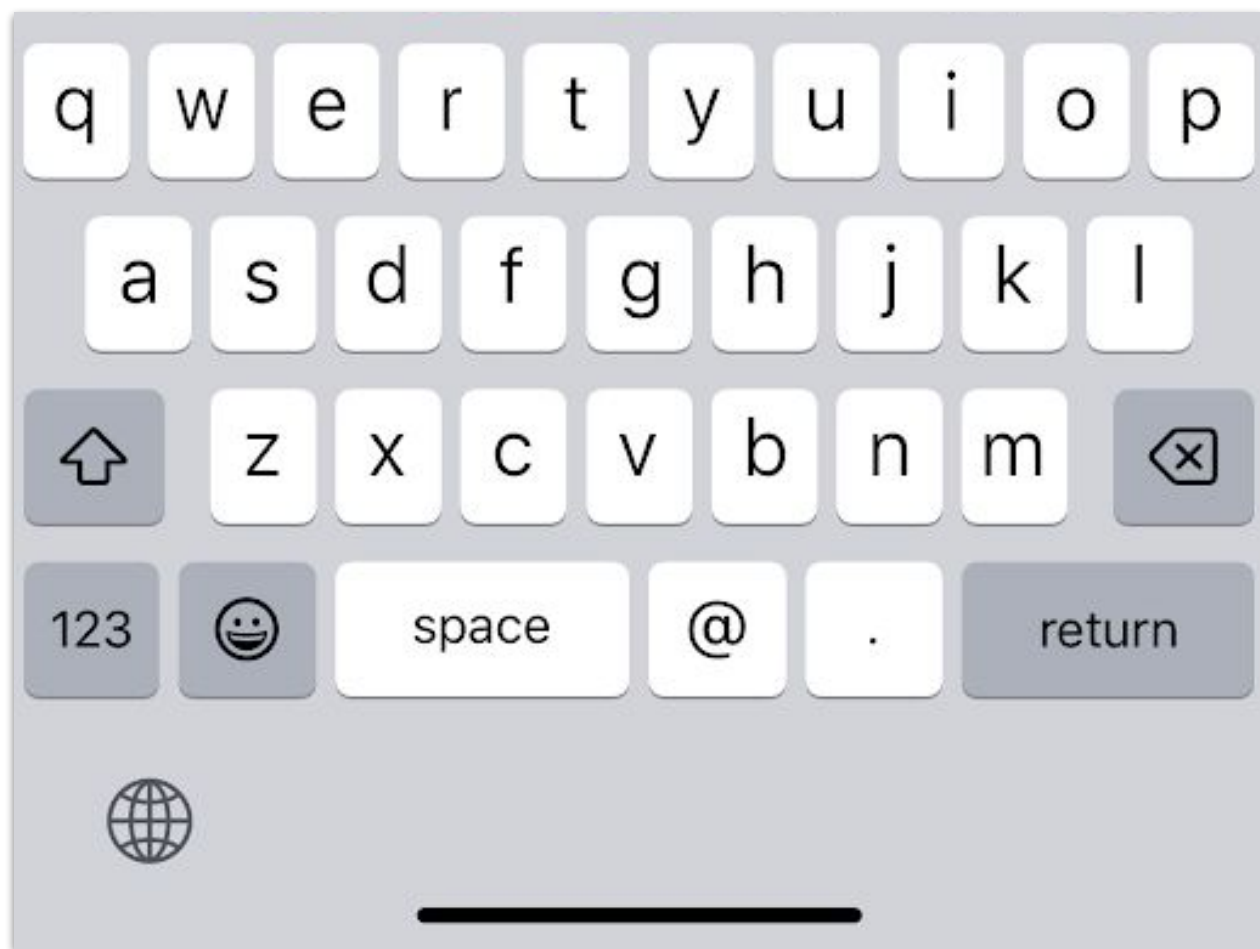
tap on



to

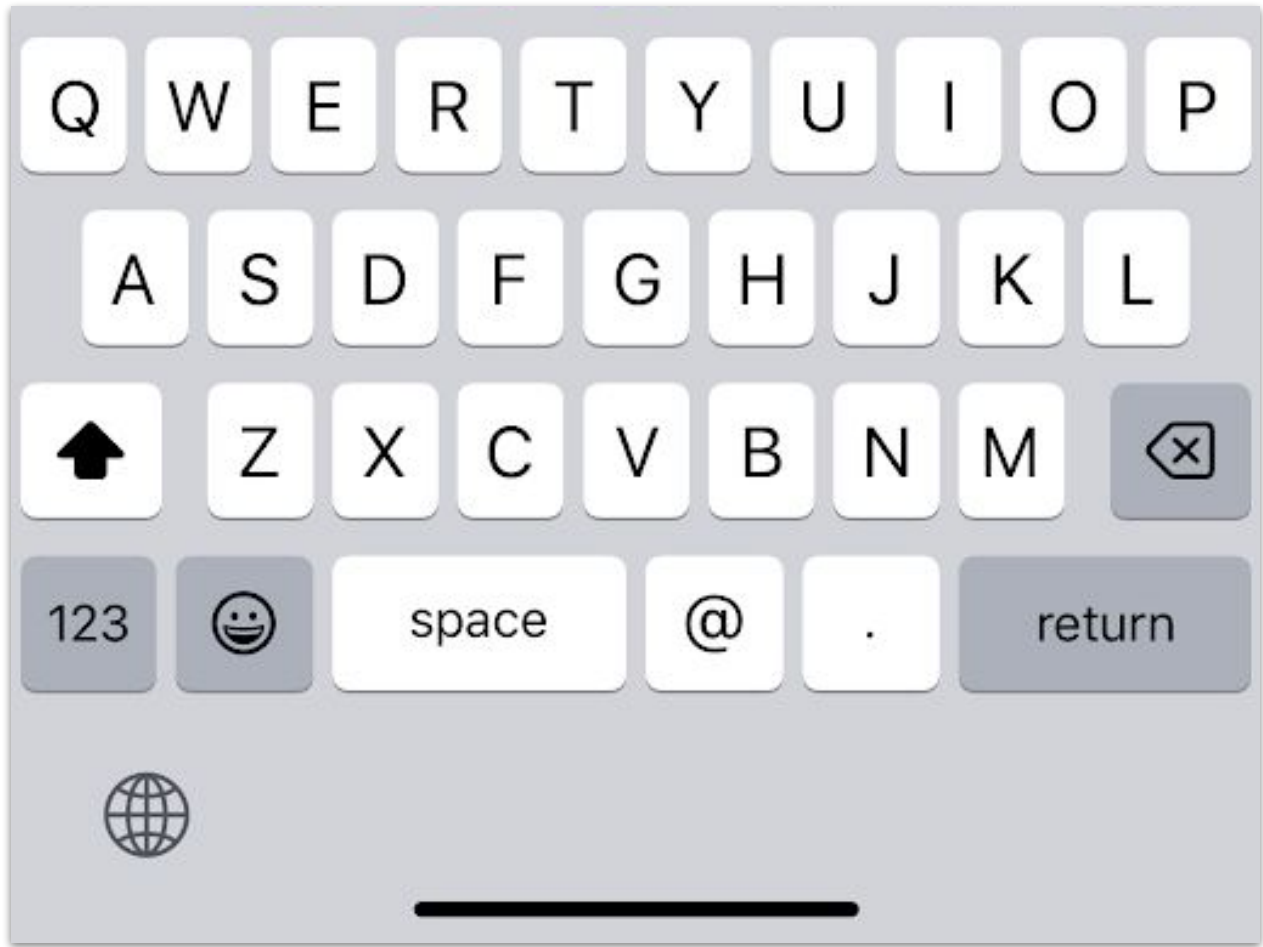
long press

Smartphone Keyboard



lowercase letters

Smartphone Keyboard



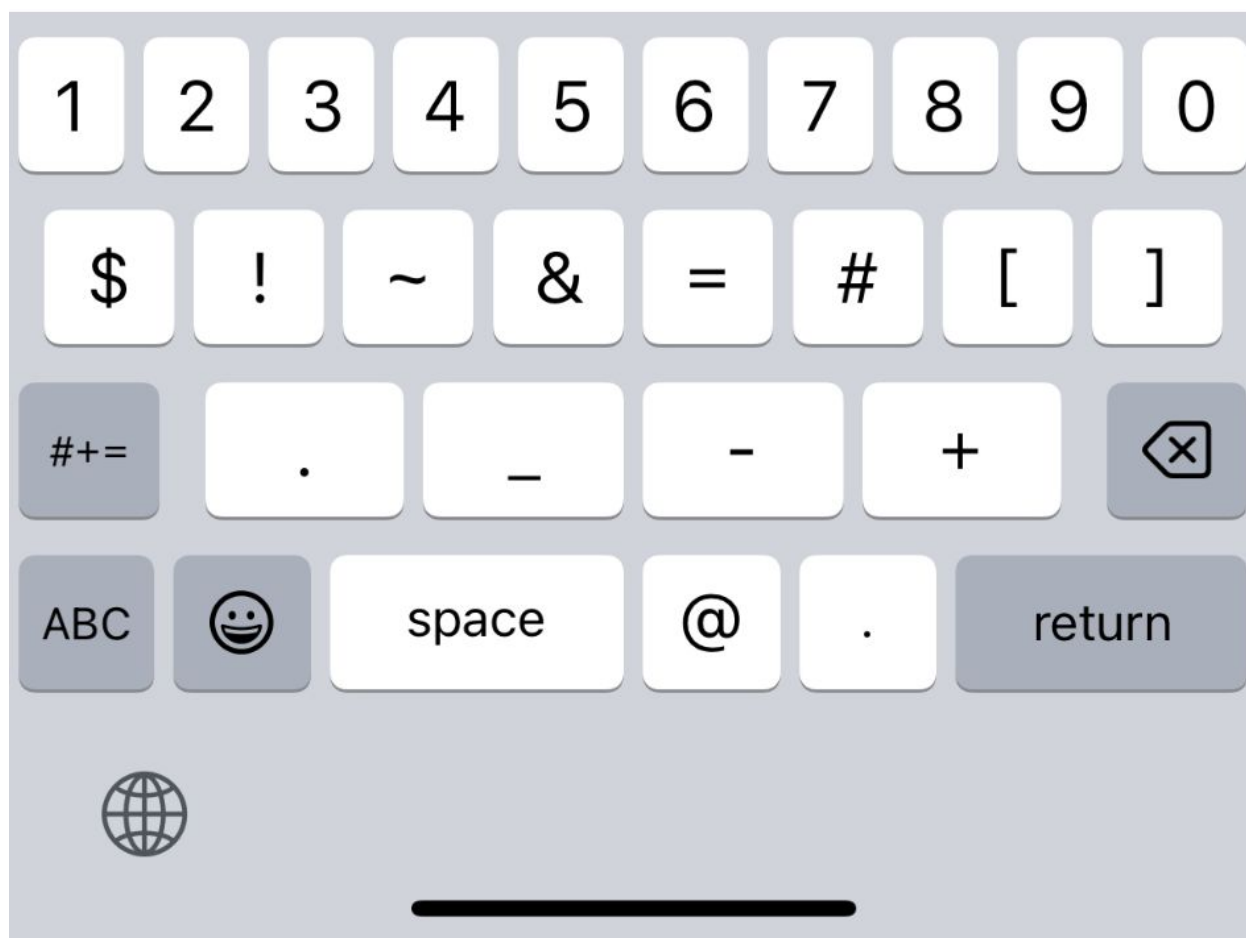
UPPERCASE
letters

Smartphone Keyboard



symbols

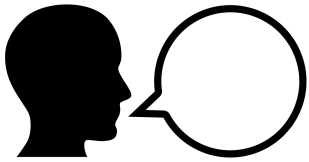
Smartphone Keyboard



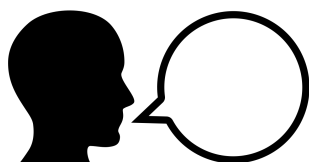
numbers



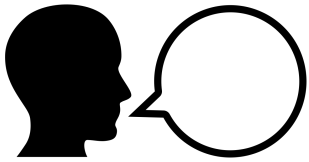
**Please
show
me...**



**Please
show me
how to...**



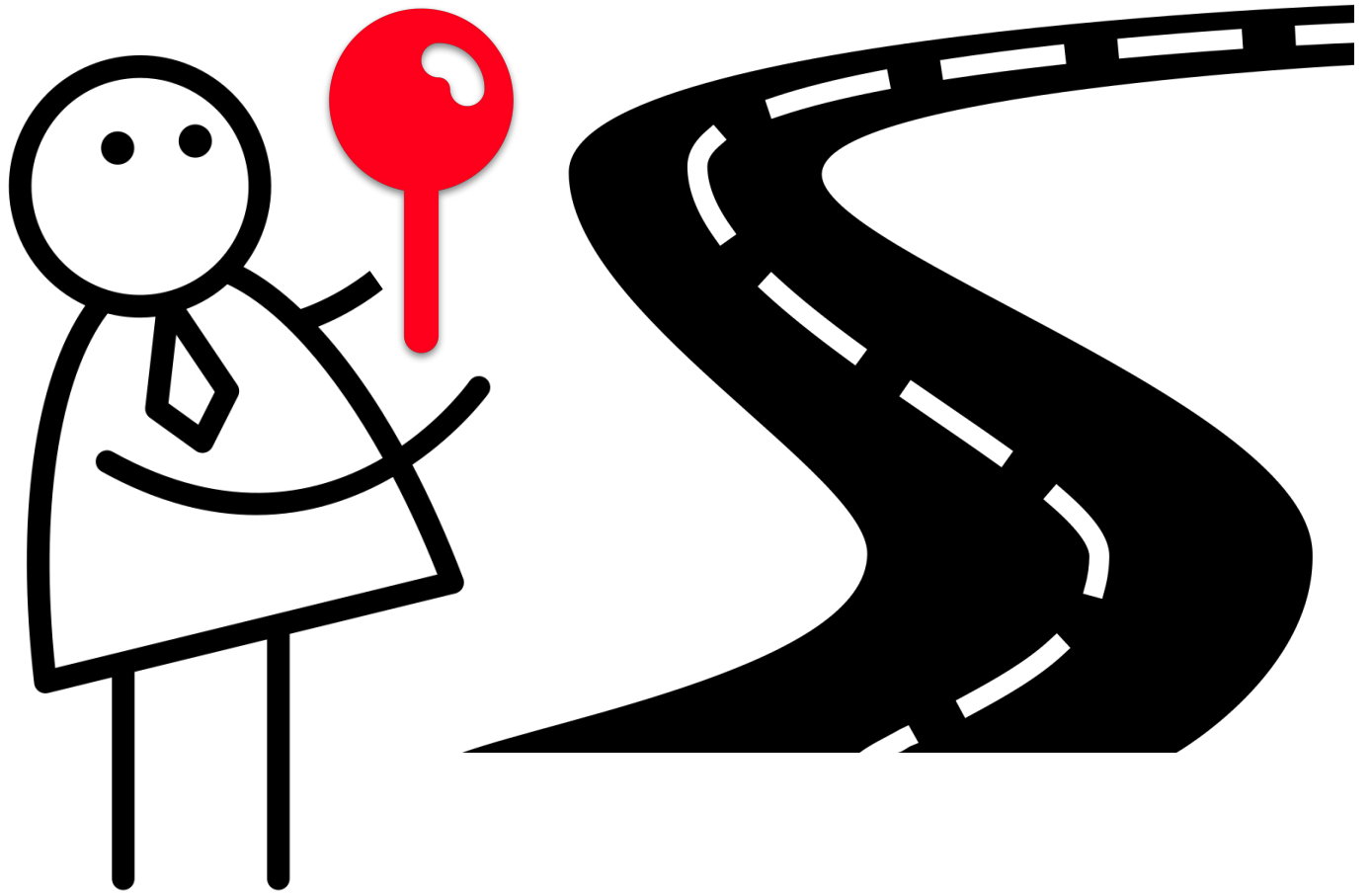
**Please
point
at...**



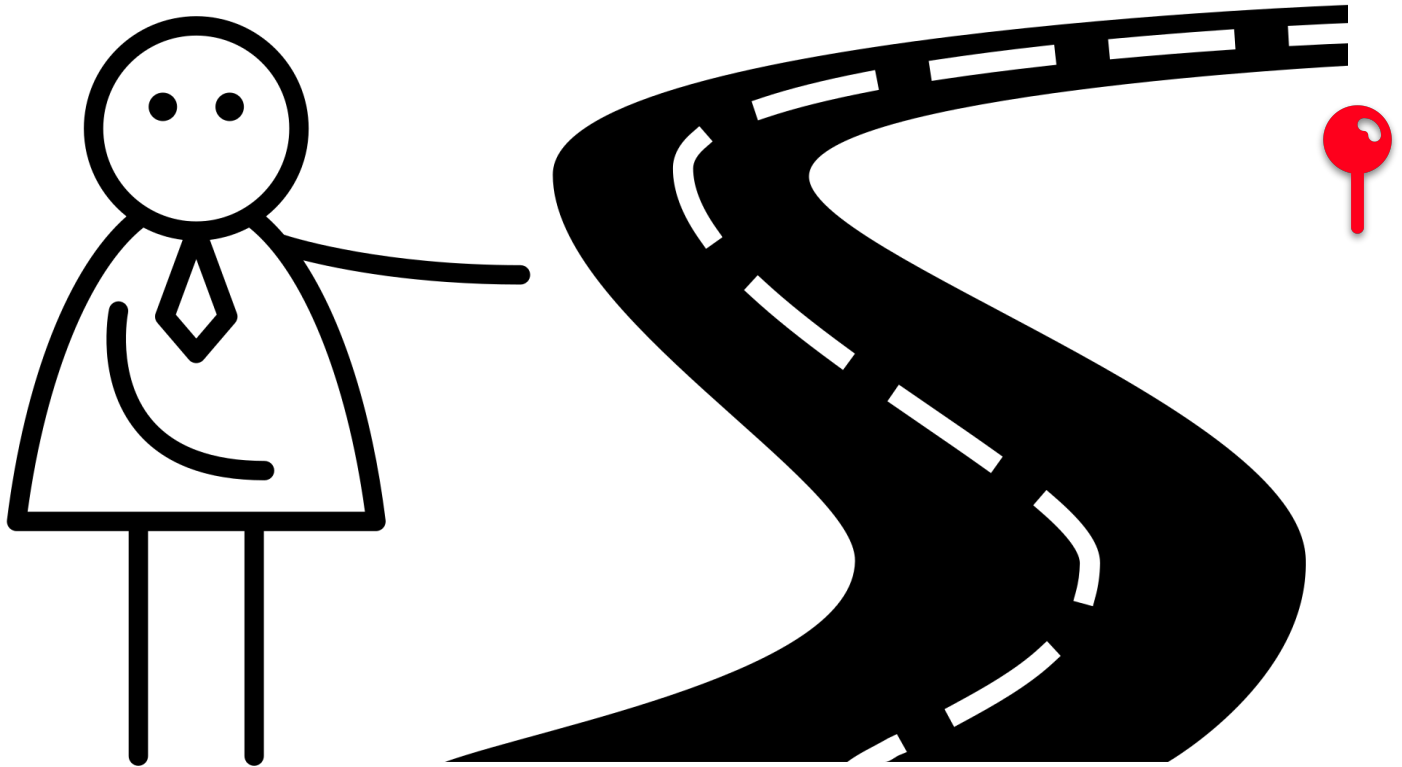
Where

is

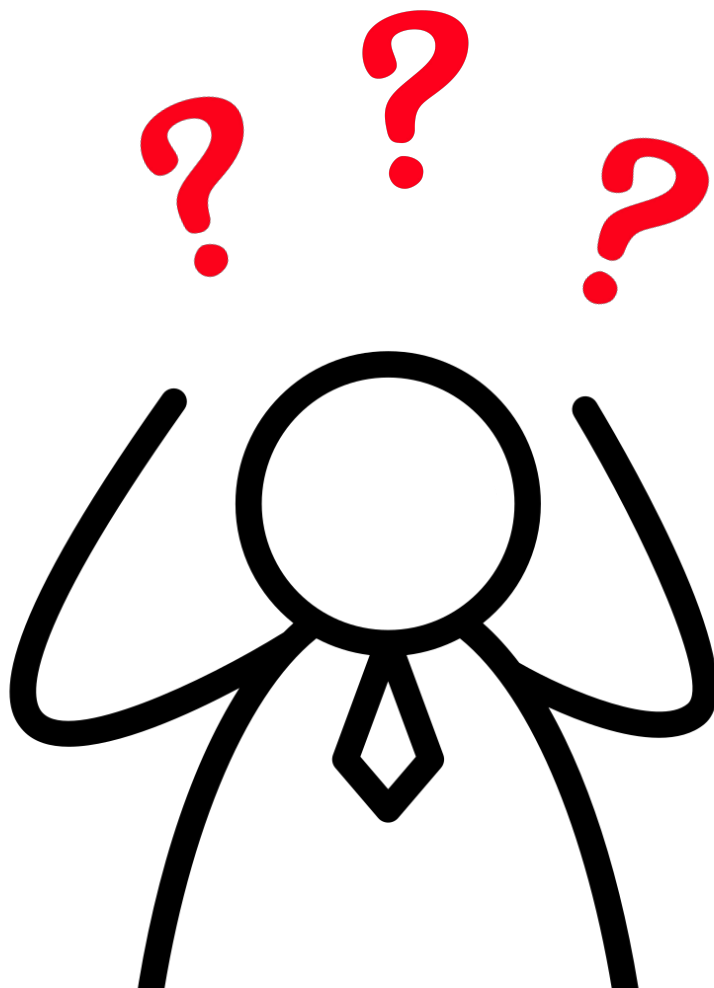
...?



**It's right
here.**

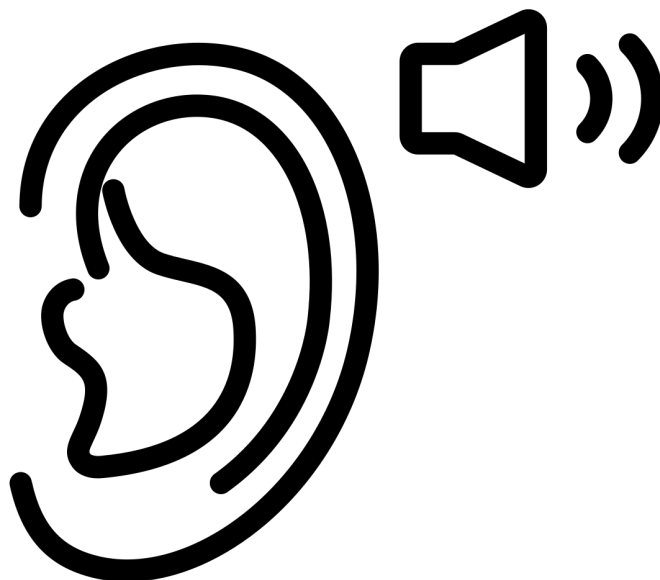


**It's over
there.**



**I'm not
sure.**

Smartphone Parts



**the
speaker**

Smartphone Parts



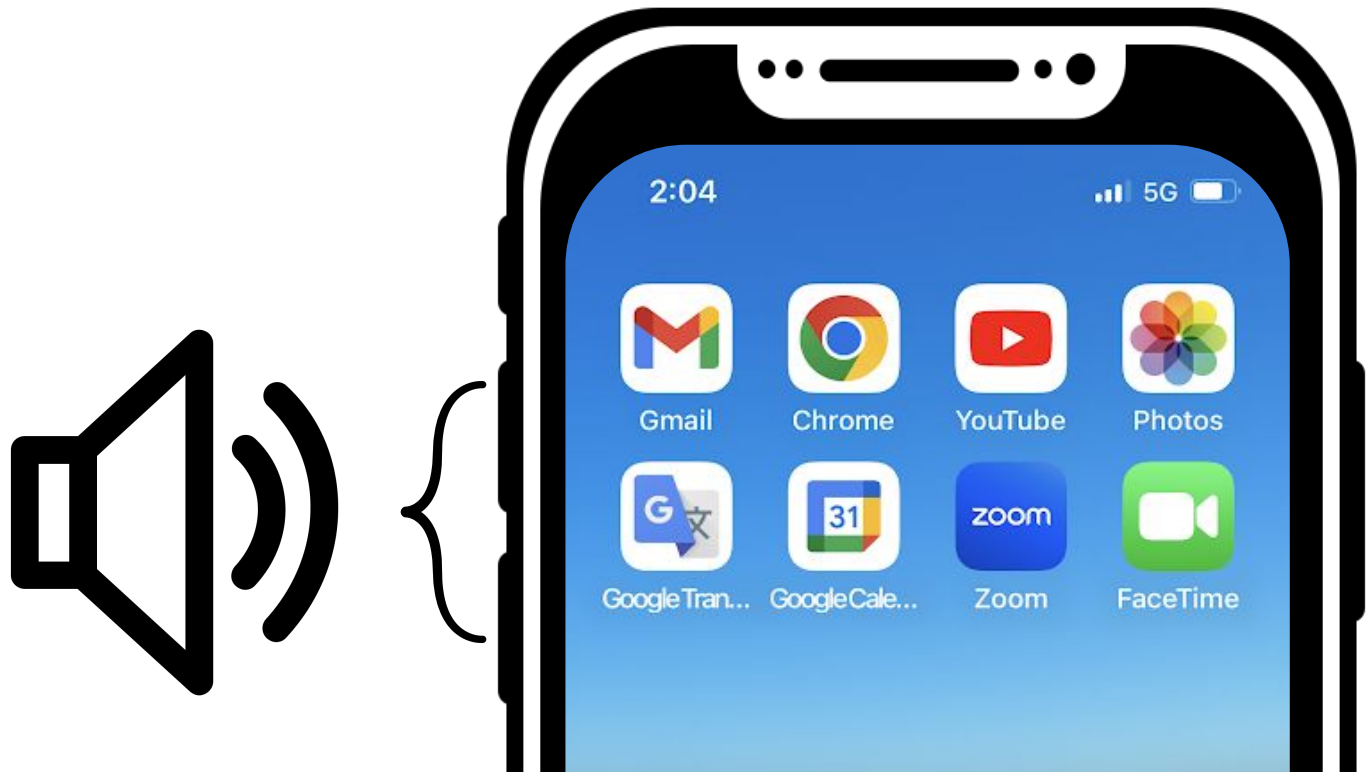
**the ringer /
silent switch**

Smartphone Parts



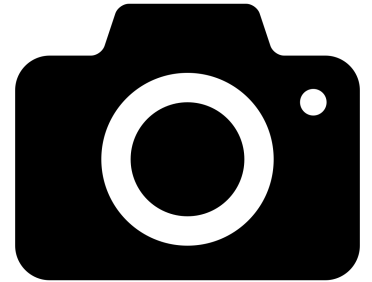
**the
microphone**

Smartphone Parts



**the volume
buttons**

Smartphone Parts



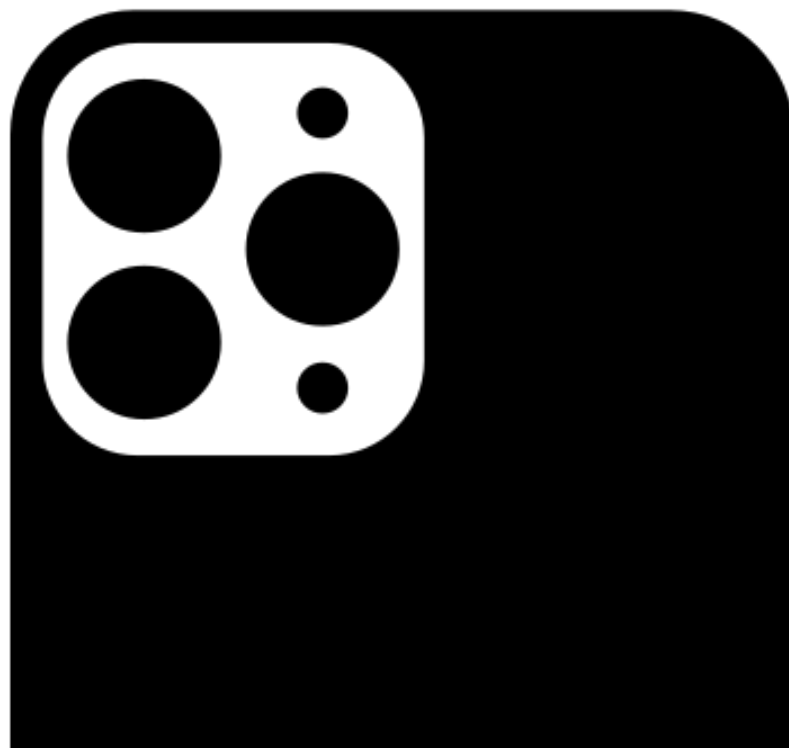
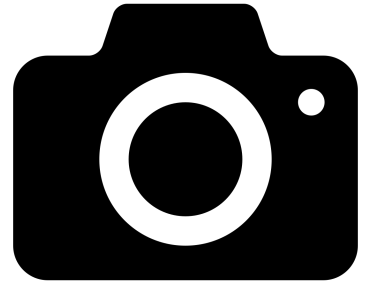
the front camera

Smartphone Parts



**the side
button**

Smartphone Parts



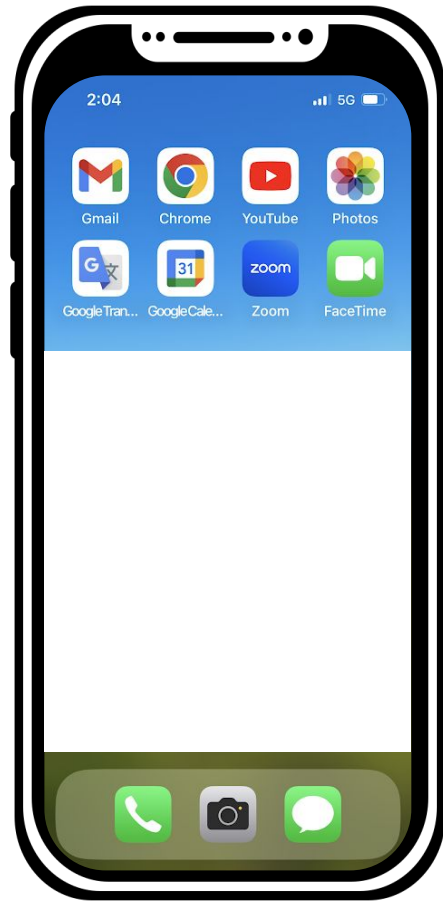
**the back
camera**

Smartphone Hardware



Identify Sides

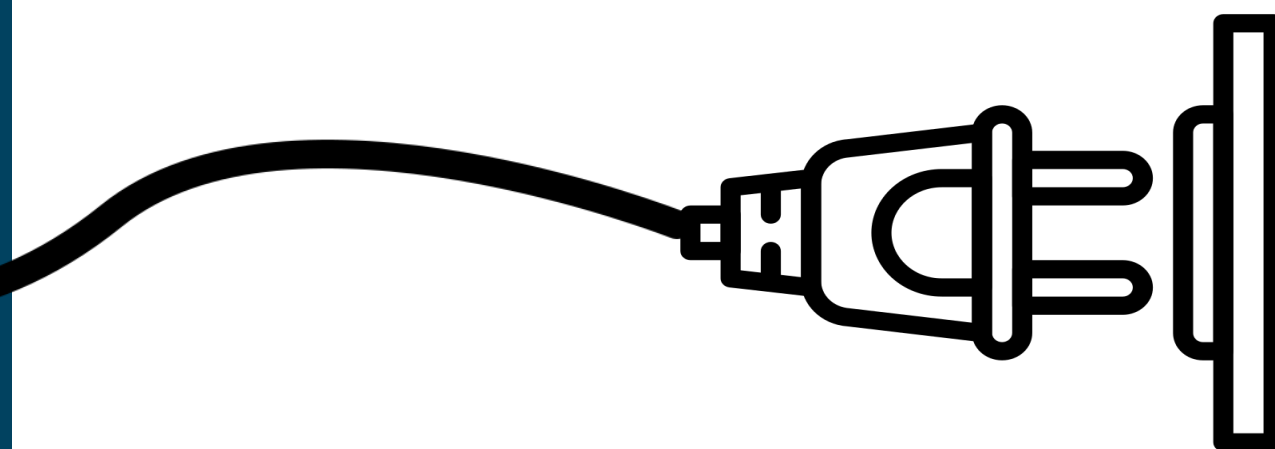
top



left

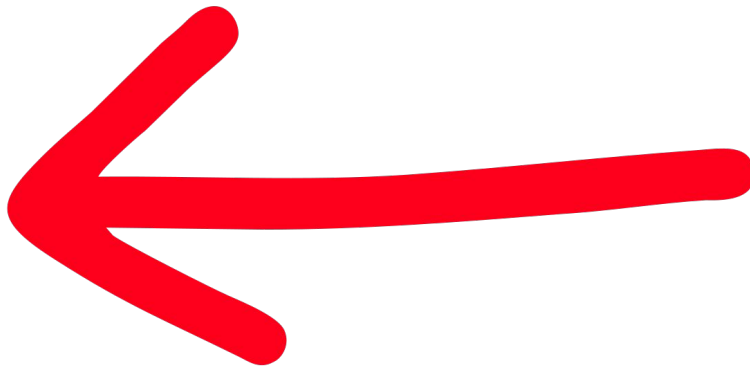
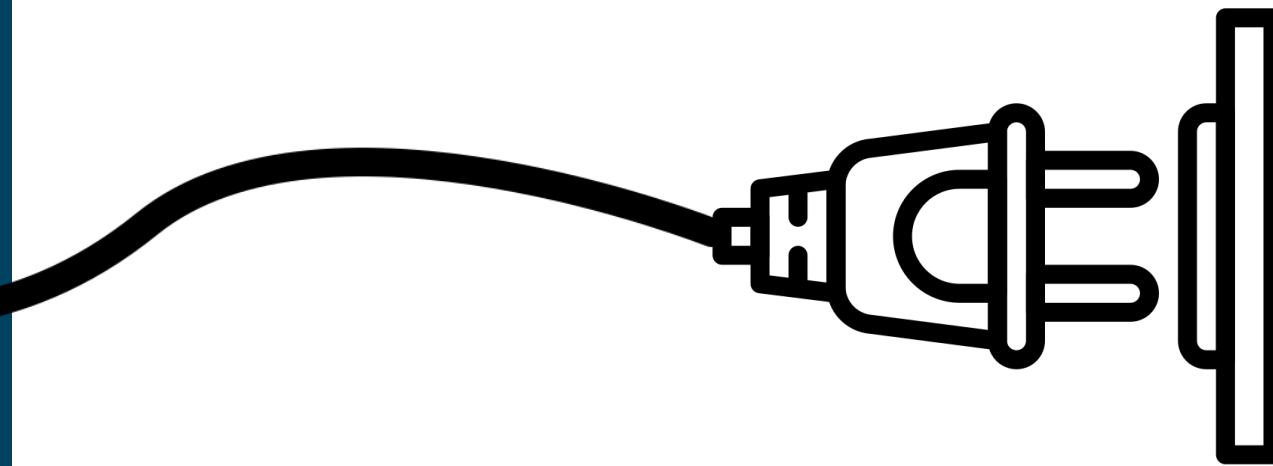
right

bottom



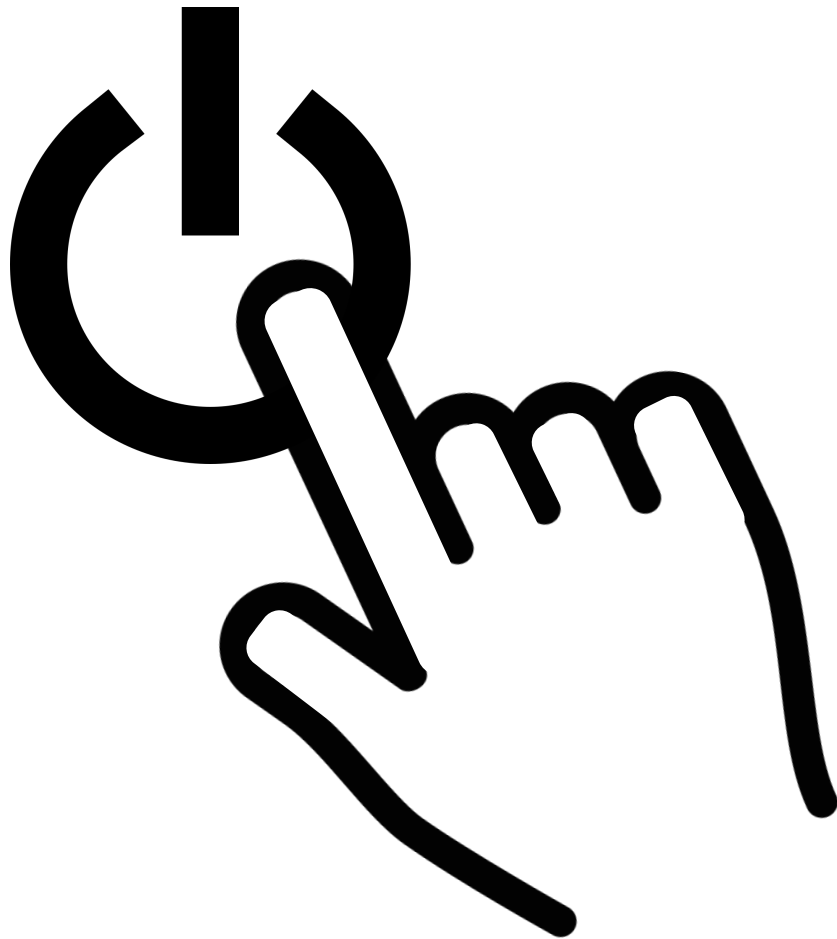
to

plug in



to

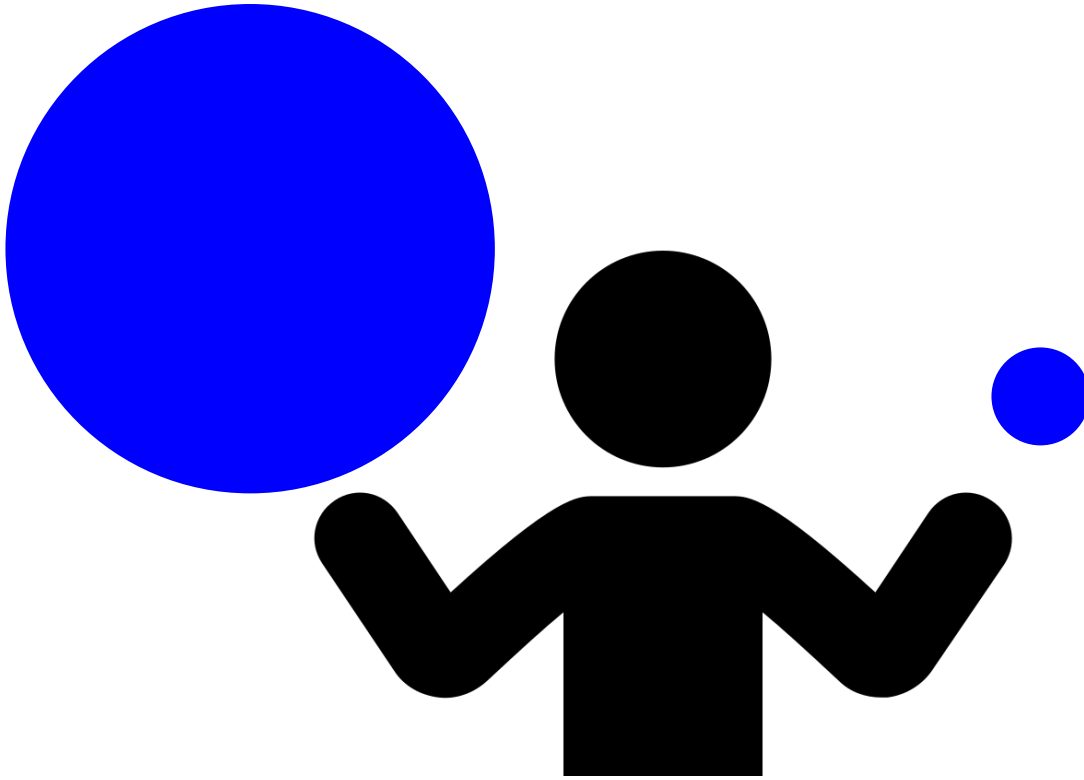
unplug



**to press the
power button**



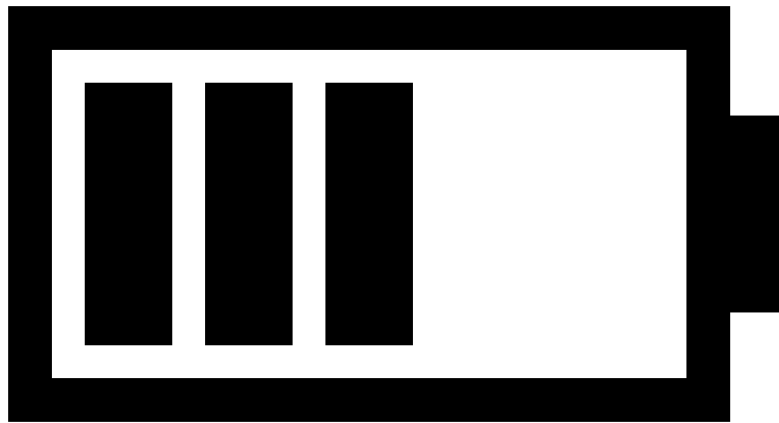
to find



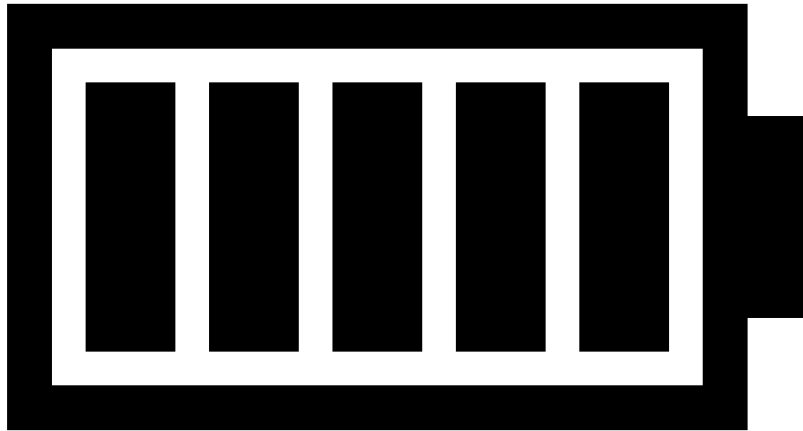
to
compare



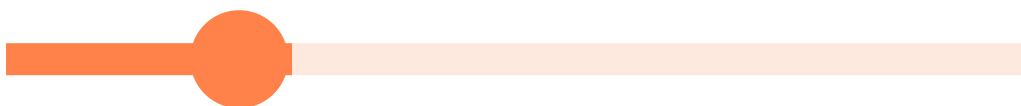
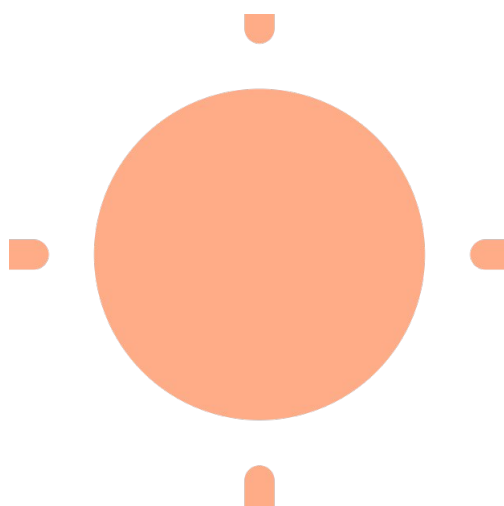
**low
battery**



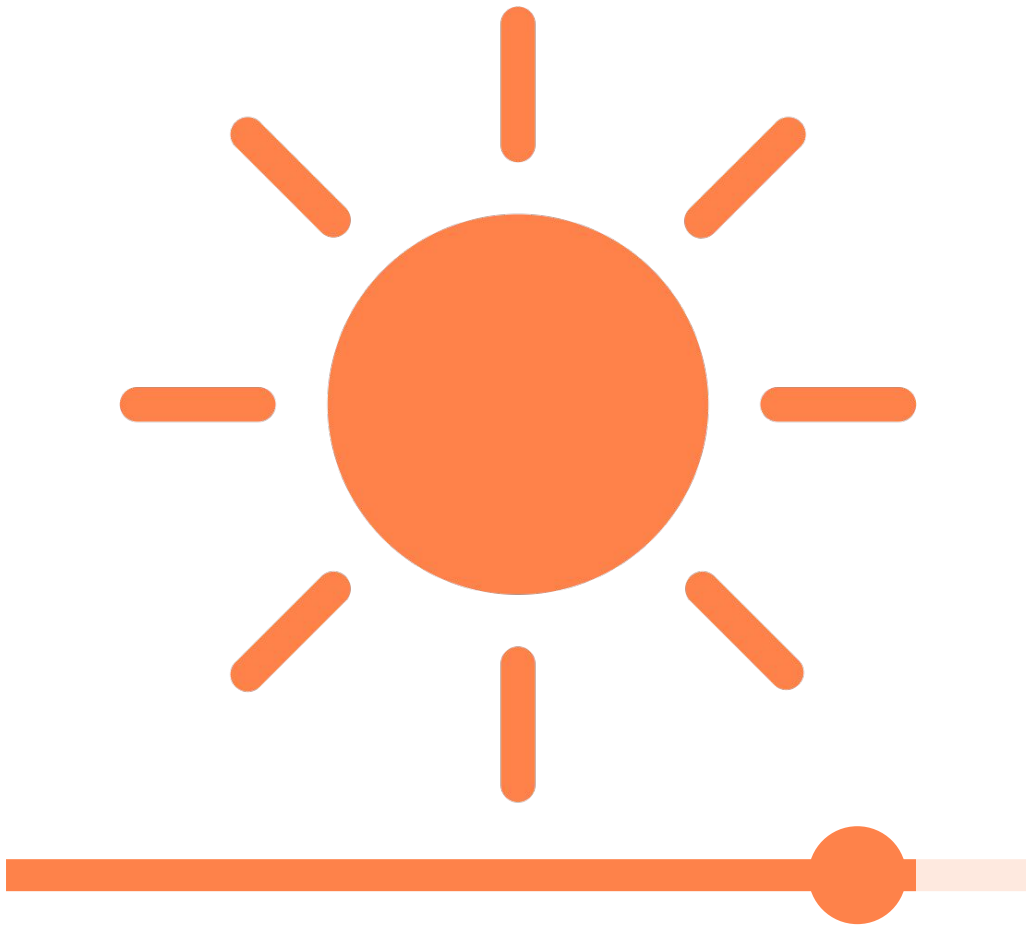
**medium
battery**



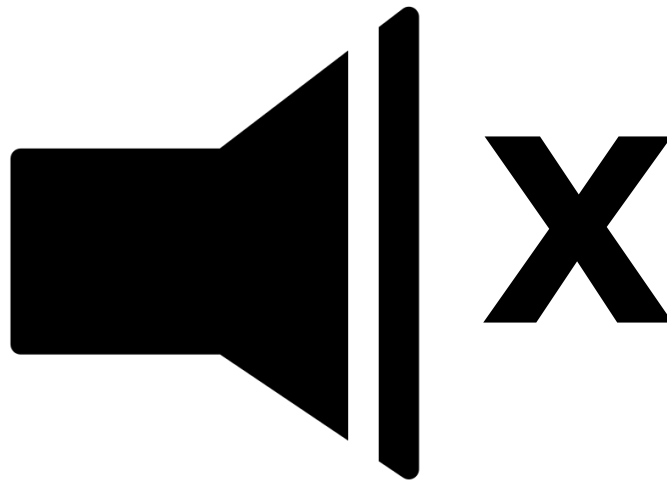
**full
battery**



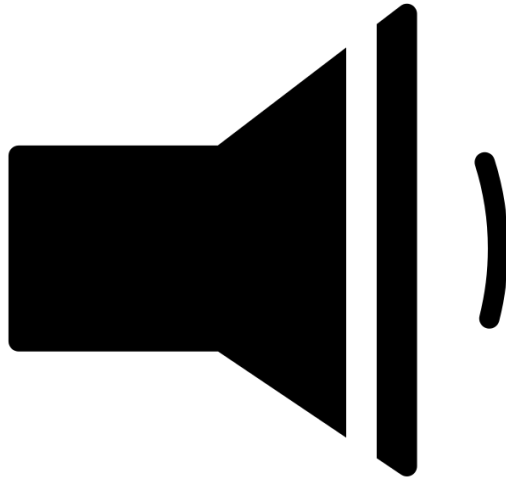
dim



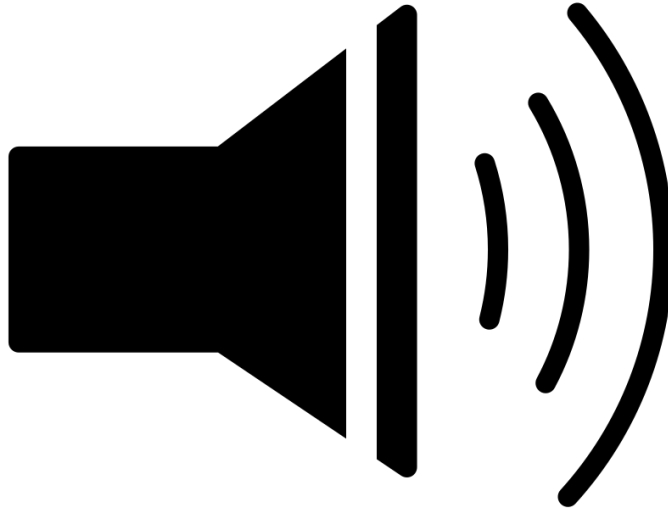
bright



muted



quiet



loud

A

A

A

small

font

A A A

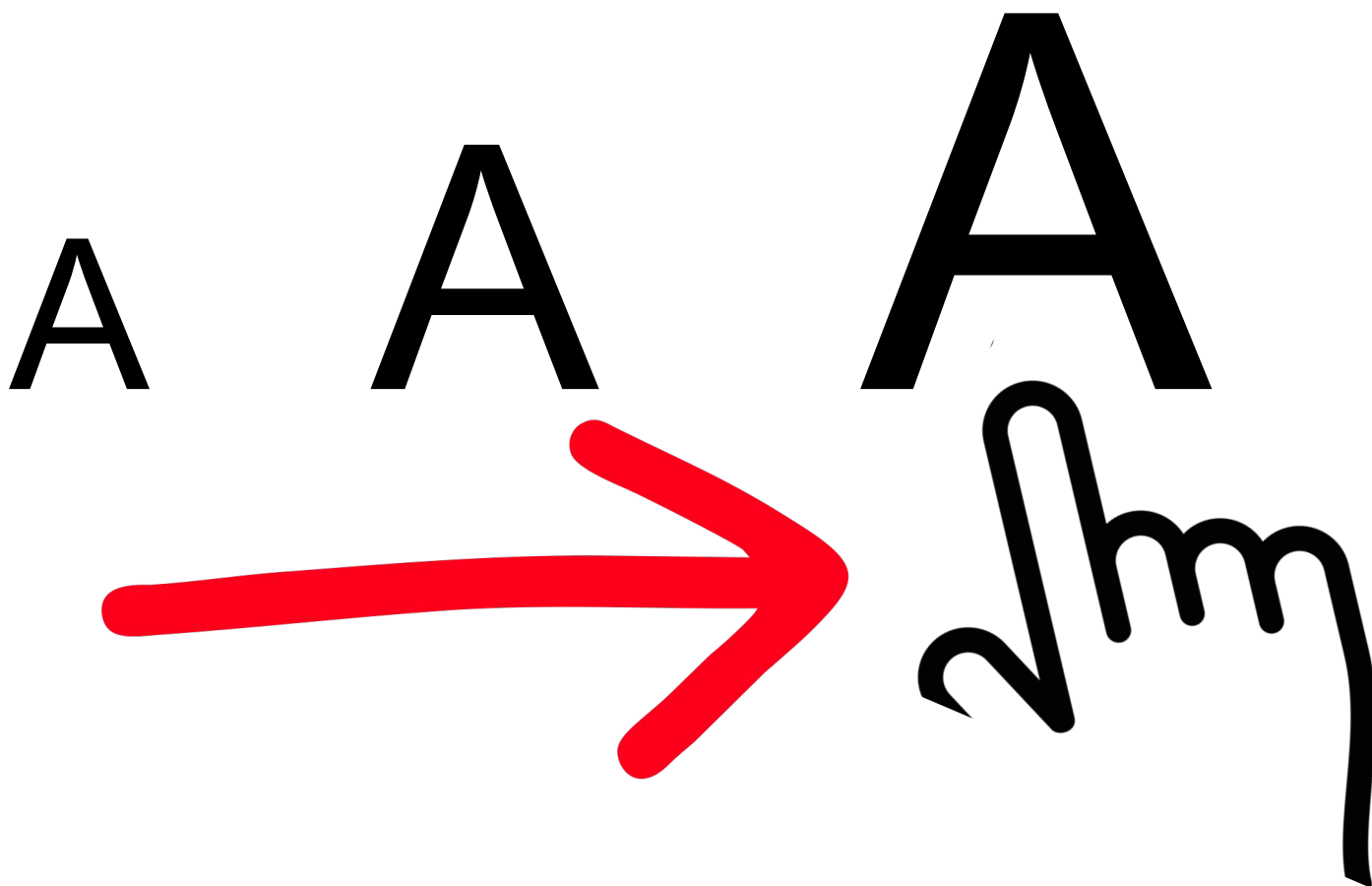
**normal
font**

A

A

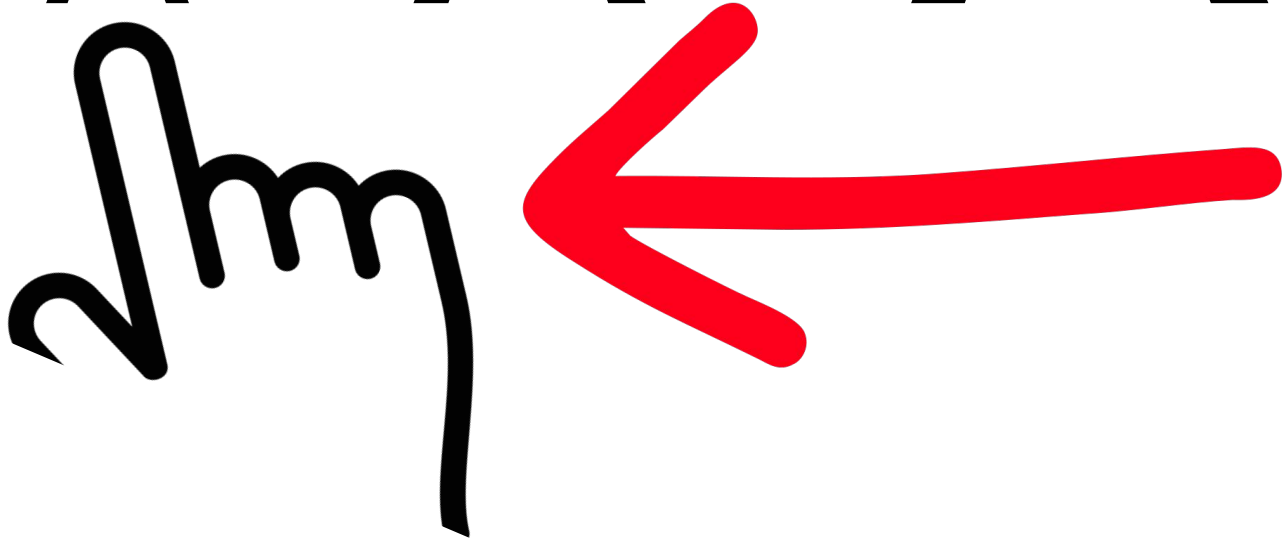
A

**large
font**

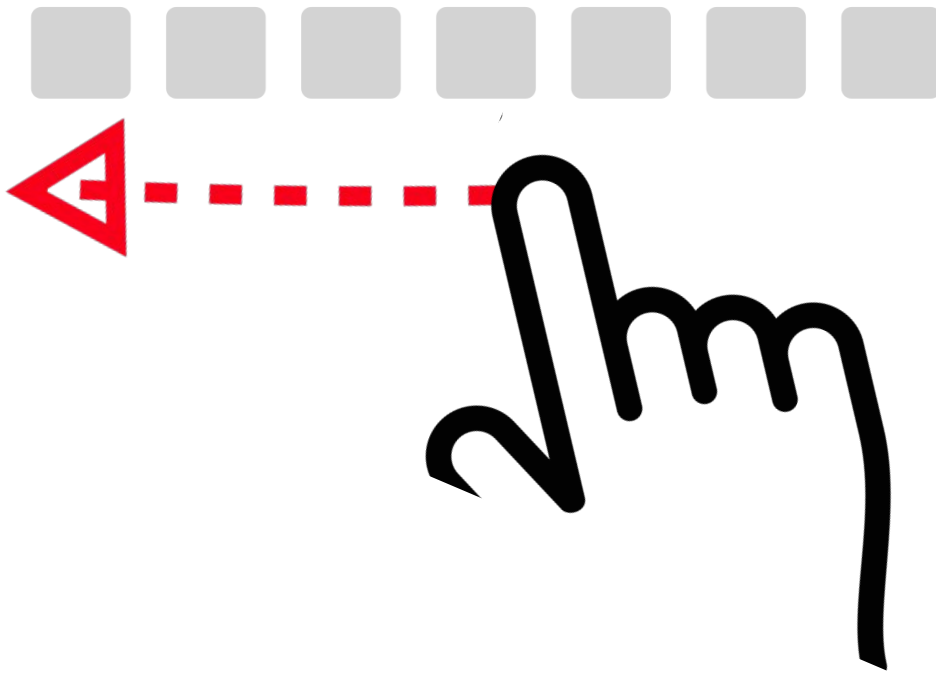
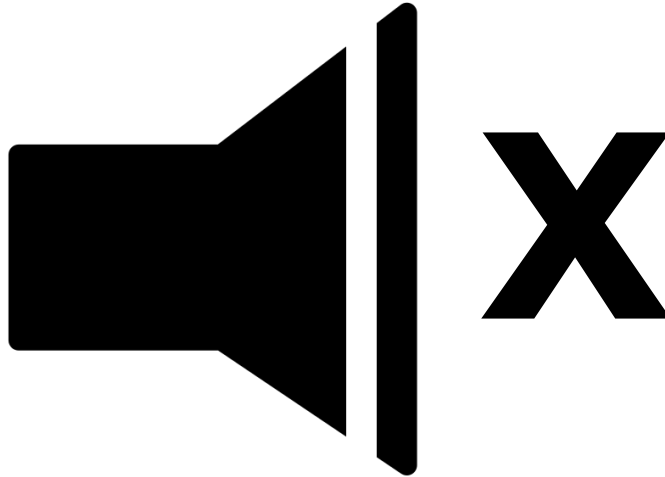


**to make
larger**

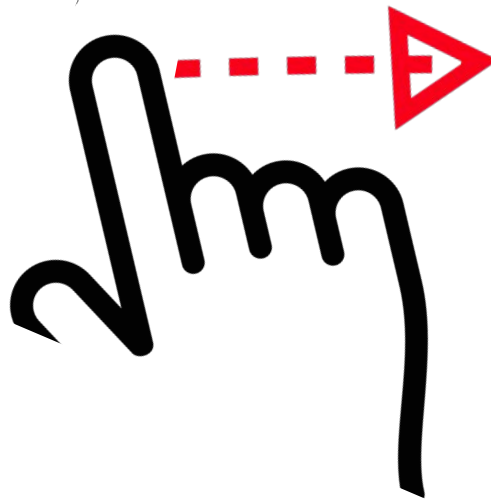
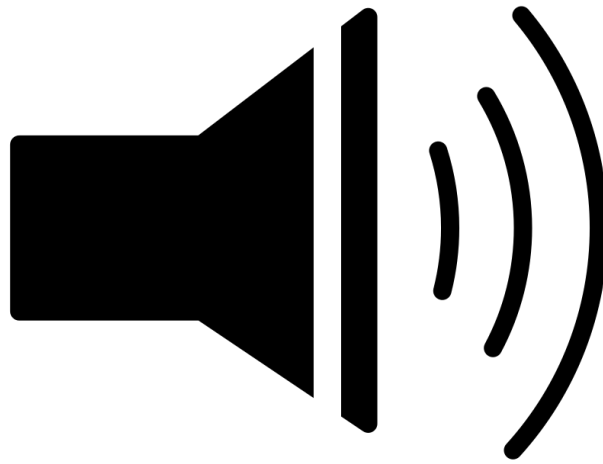
A A A



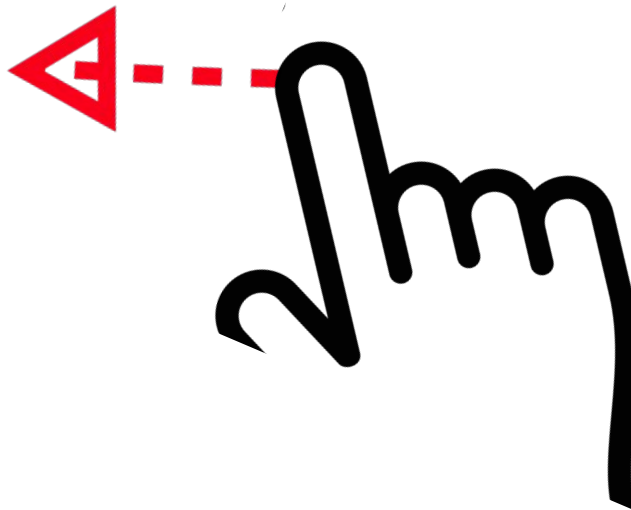
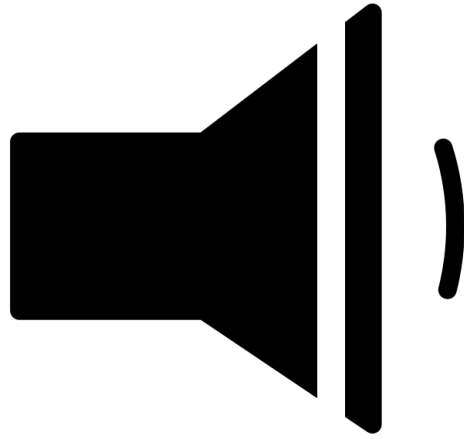
**to make
smaller**



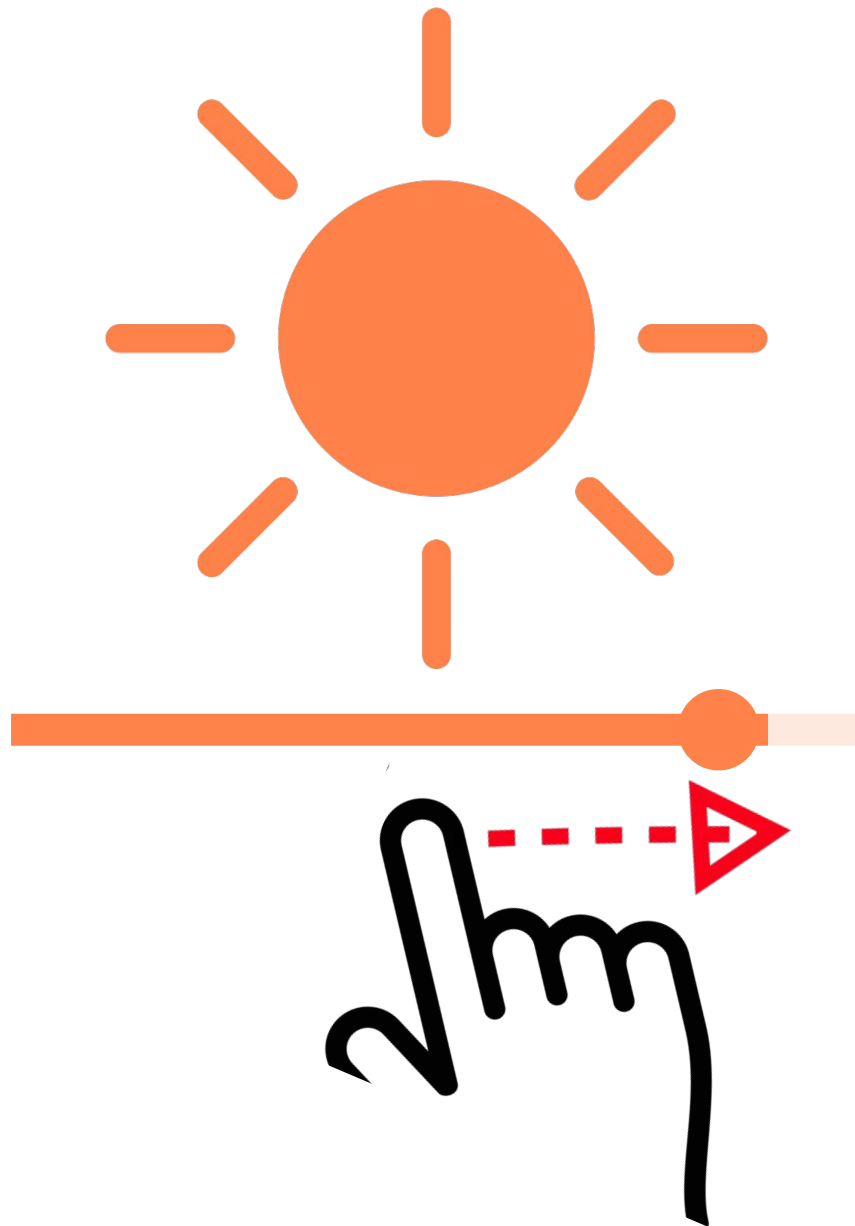
to mute



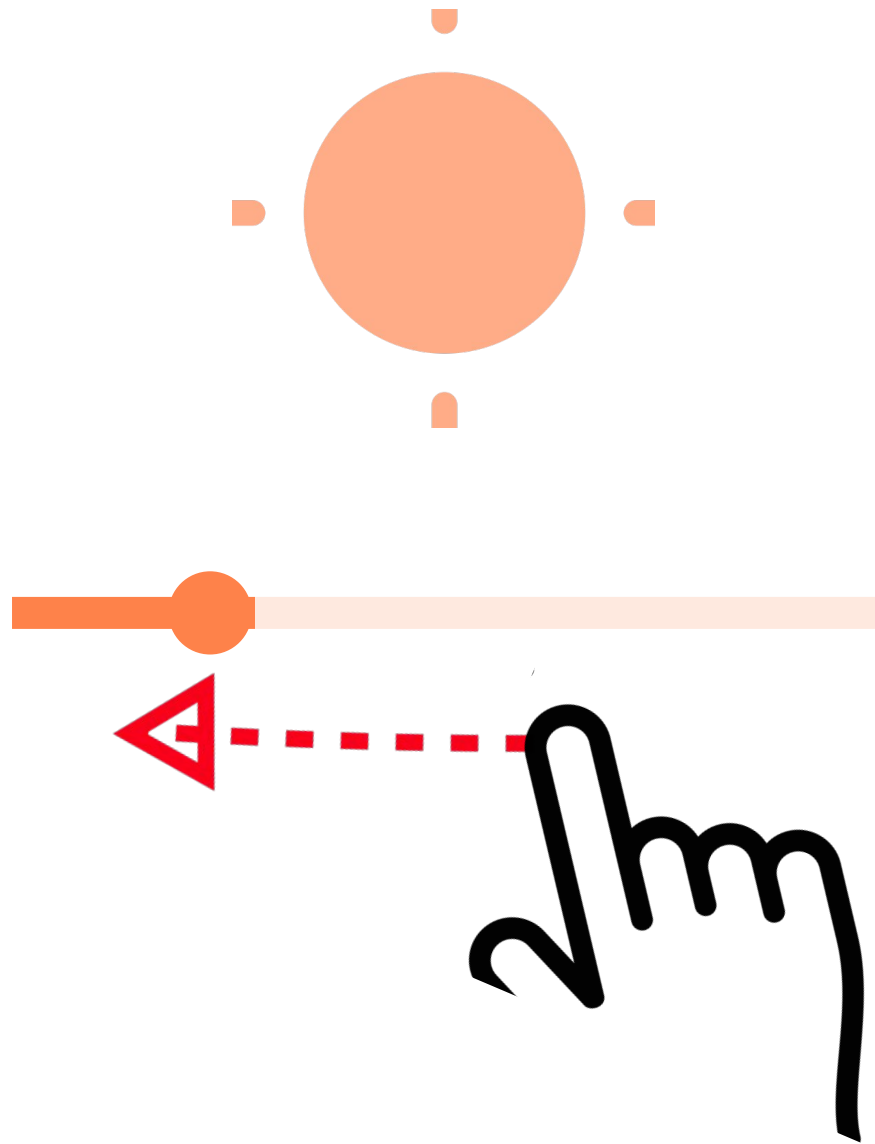
**to make
louder**



**to make
quieter**



**to make
brighter**



**to make
dimmer**

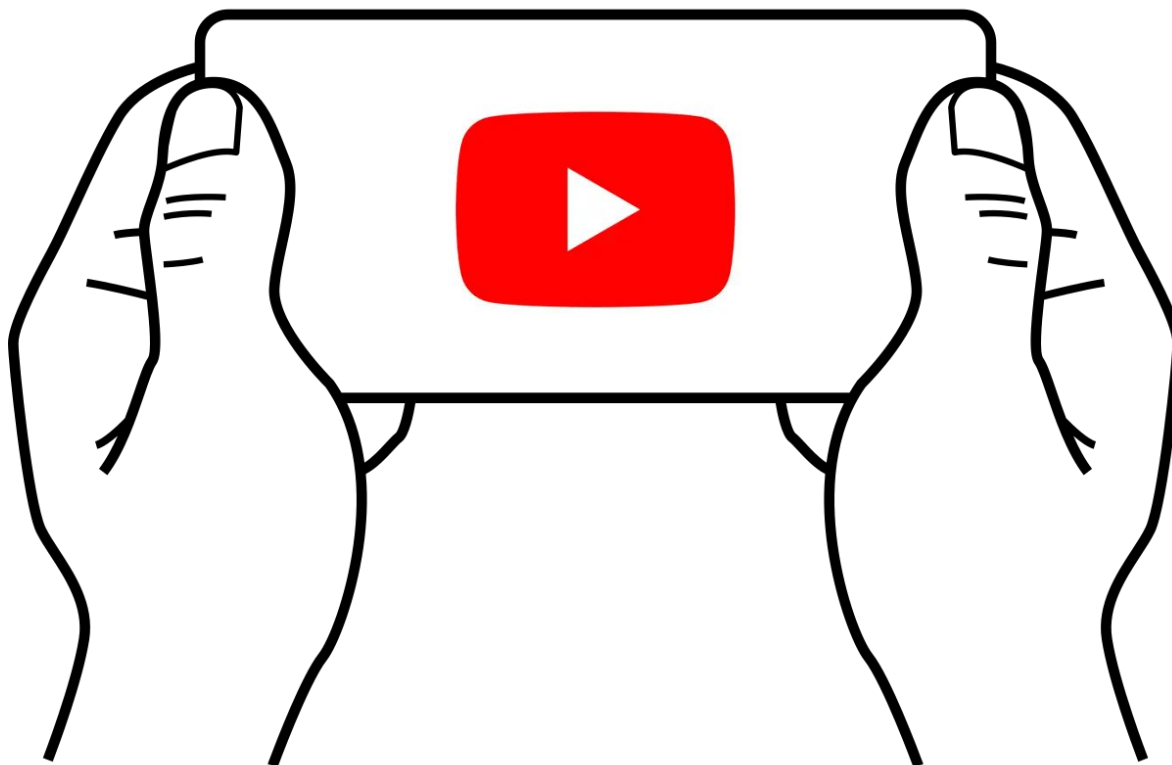
Adverbs of Frequency

Frequency adverbs describe **how often** an action occurs.

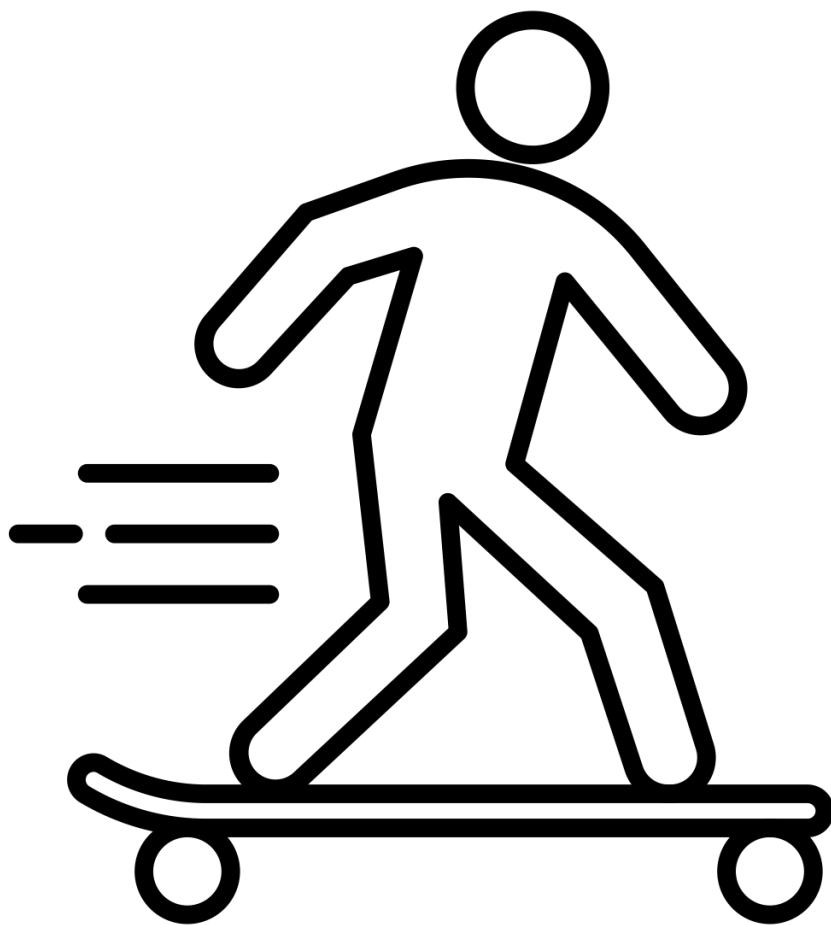
Frequency	Word
100%	always
	usually
50%	sometimes
	rarely
0%	never



to walk



**to watch
YouTube**

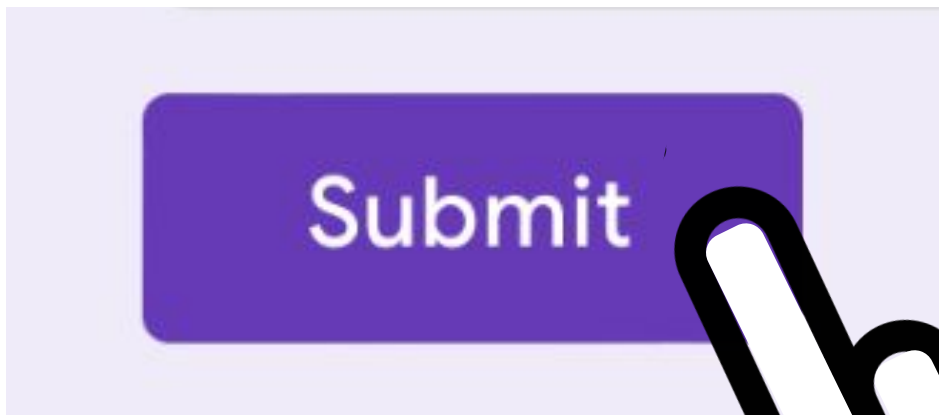


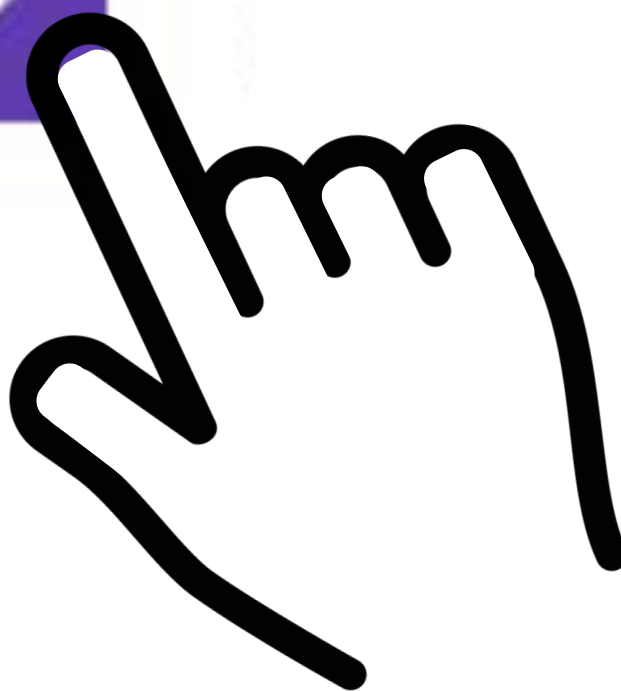
to
skateboard



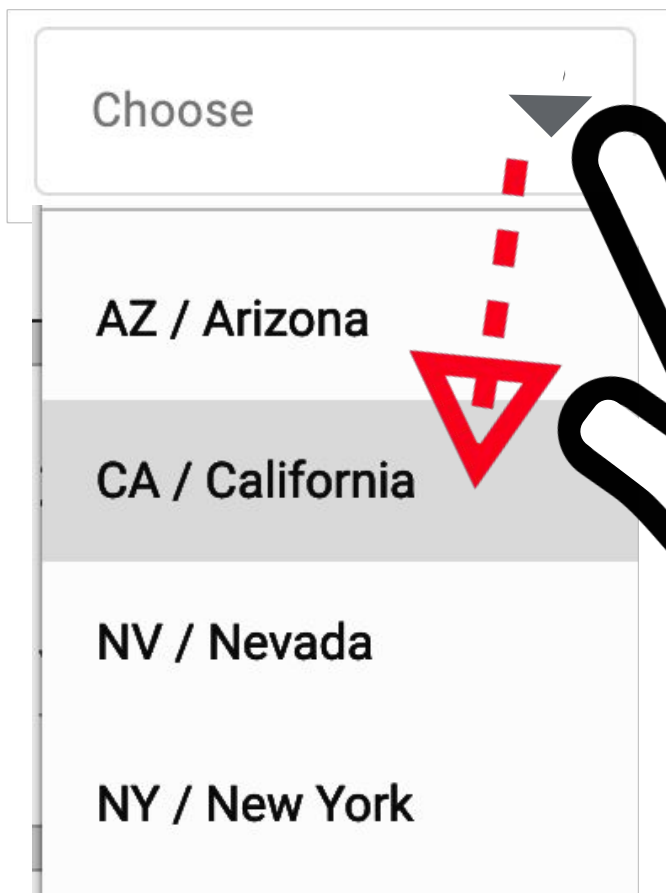
**to
scan the
QR Code**

**to tap
the button**





**to check
the box**



**to select
from the
drop-down**



**to move
the
cursor**

Crarruso

Caruso



**to fix
a mistake**

Author's note: Images and Icons

Author's note about the use and creation of images and icons.

Be consistent in the use of icons and what they represent.
Before creating new imagery and icons, **review and reuse available resources**.

IMAGE AND ICON RESOURCES

Noun Project: www.nounproject.com

This site is a large repository of searchable icons.

The subscription to this site is low (\$3.33/month as of March 2024)

Citations are required, but no additional licensing costs are needed if used for educational purposes. See the "Image and Icon Credits" in the pages that follow for examples on how to cite.

Google Slides: slides.google.com

If a word or concept is not well-encapsulated by available icons, for example the verb "to swipe up," try using a combination of icons and shapes explain the term.

I used Google Slides as my canvas for creating composite images used in this material.

Company Logos:

Be careful with using company logos - where you get them and how you use them.

Look up the name of the company and the words "brand kit" to find the official ones.

Also, read the material and follow guidelines to ensure your creation will not unintentionally violate any of the guidelines for use.

Have questions or suggestions? Join the **Digital ESL community on LinkedIn** to share resources related to teaching Digital Literacy to learners of English - we'd love to learn about your work!

<https://www.linkedin.com/company/digital-esl>

Feedback, suggestions, or questions?

Email Talley at info@digital-esl.org or talley.hsu@gmail.com

Image and Icon Credits

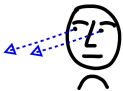


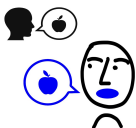










IMAGE	SOURCE
	Transformed, composite image created using a combination of Noun Project icons - "Face look right Icon #1504693" by Margaret Hagan https://thenounproject.com/icon/look-right-1504693/ licensed under CC BY 3.0 https://thenounproject.com/talley0/settings/icon-history/700495245/ - Cropped version of "Arrow Icon #3763437" by 4B Icons https://thenounproject.com/icon/arrow-3763437/ licensed under CC BY 3.0 https://thenounproject.com/talley0/settings/icon-history/700497754/
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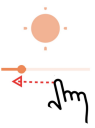












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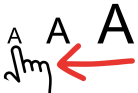











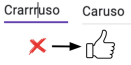
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Contact me with any feedback or questions at talley.hsu@gmail.com or info@digital-esl.org

Warmly,
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