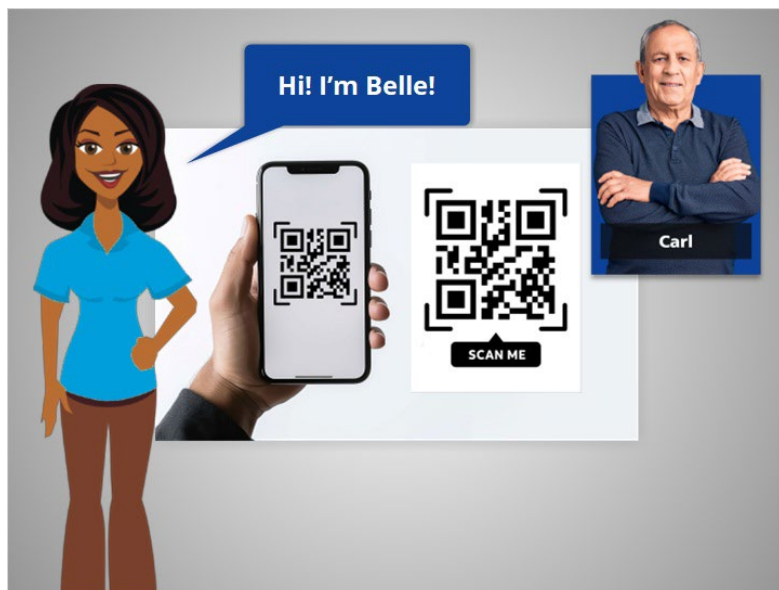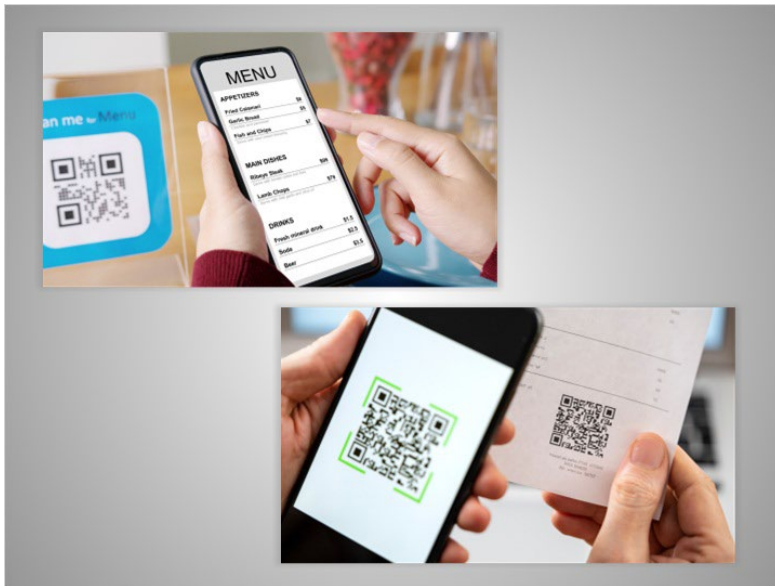# QR Codes Basics
Activity 1: What is a QR Code?

Hi! I'm Belle. Today, we'll be joining Carl as he learns about QR codes.

Carl recently noticed these square patterns showing up everywhere, and he's curious about what they do. Have you noticed them? These square patterns are called QR codes and they are everywhere.

You might see them at a restaurant, so you can view the menu or pay for your meal.

On a billboard, or in a magazine, so you can learn more about the advertised product.

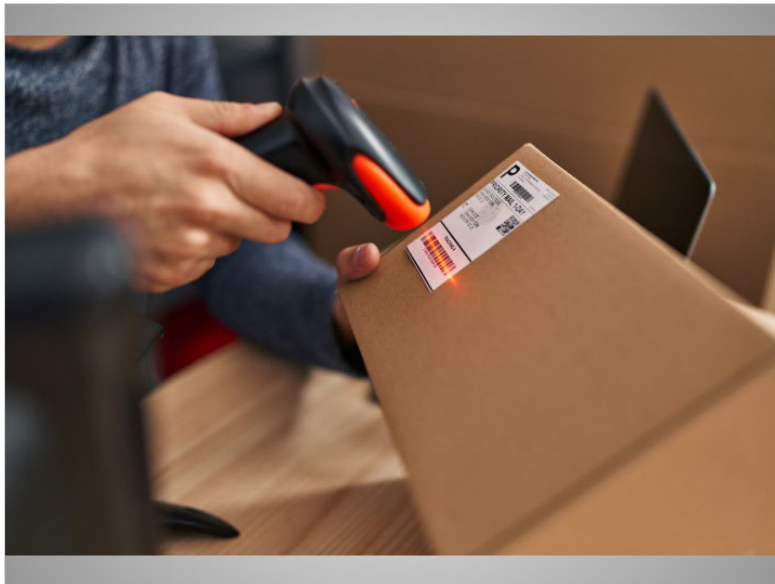At public transit stations, to find your bus or purchase a ticket.

A colleague may use a QR code to share their contact information.

A friend may share a QR code you can use to attend an event or to pay them back.

Or you may receive a QR code in an email or text message.

A QR code is like a barcode. Just like you would scan a barcode for information like a price check or to check out of a store,

you scan the QR code. The difference here is that you use your smartphone or tablet to scan, using the built-in camera app.

Just like you click on a link on a webpage to connect to a website, movie, or music video, the information in the QR code is read by your device, and connects you to a resource on the Internet, like a website with a food menu, or an application to make a payment, and more.
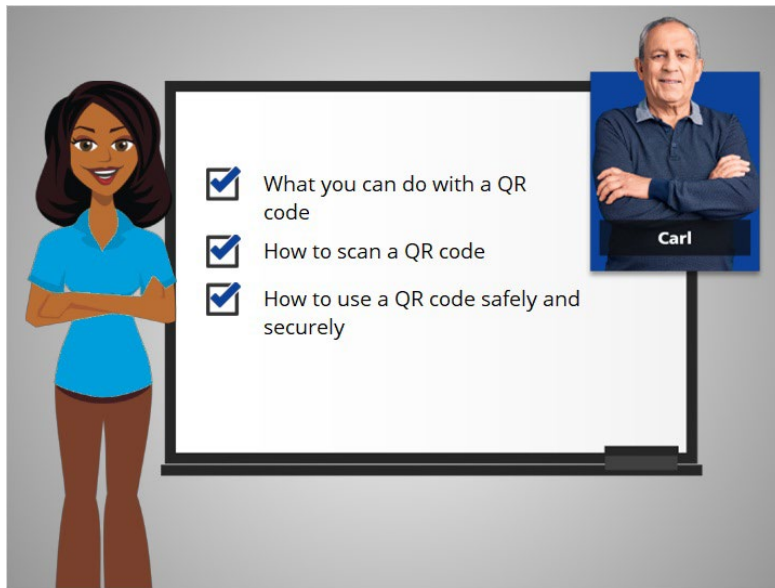
Carl is excited to learn more about QR codes. In the remainder of this course, we'll discuss what you can do with a QR code, how to scan a QR code, and how to use QR codes safely and securely. Join us in the next lesson to learn about all the useful things you can do with QR codes.

Activity 2: What You Can Do with a QR Code

In our last activity, Carl learned that QR codes allow him to connect to websites, apps, and other types of online content using his mobile device. Let's follow Carl through his day, where he's able to use QR codes for many different things.
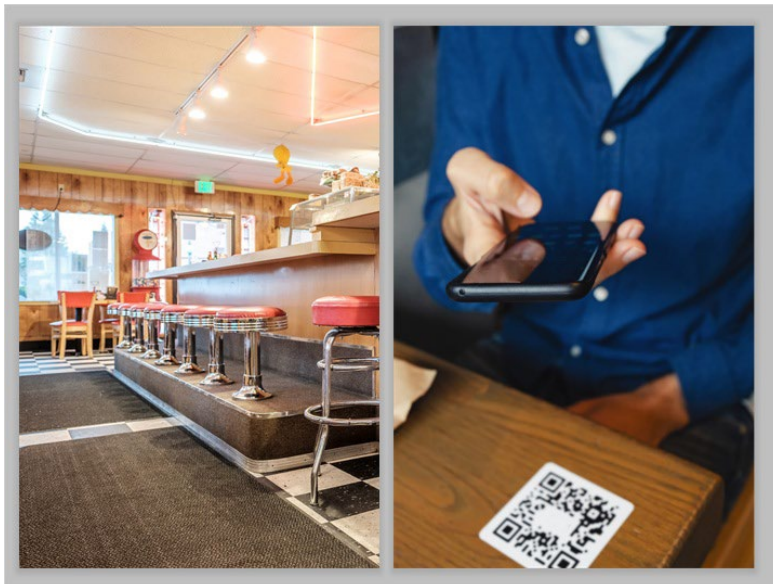
Carl went to his favorite diner for breakfast and noticed something new - instead of paper menus, there was a small sign with a QR code. "You need to scan that to see the menu," the waiter said.
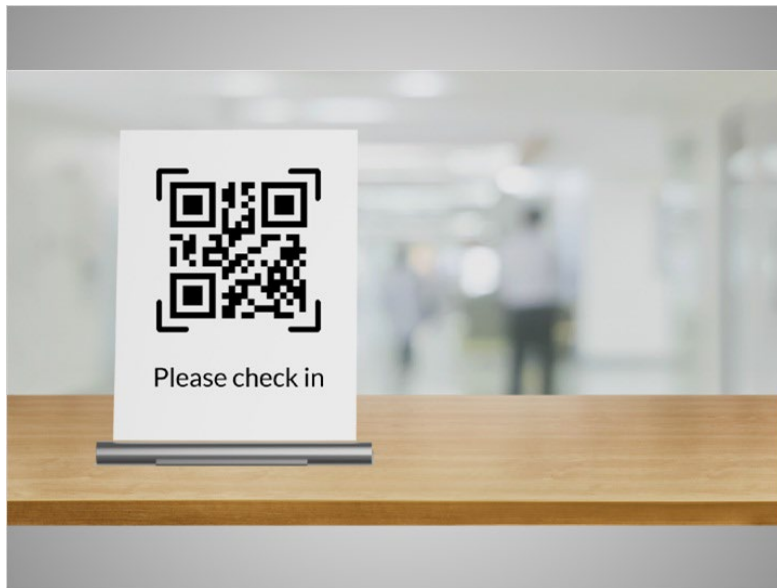
Later in the morning, he went to a doctor's appointment. Instead of waiting in line, Carl scanned a QR code to check in for his appointment.
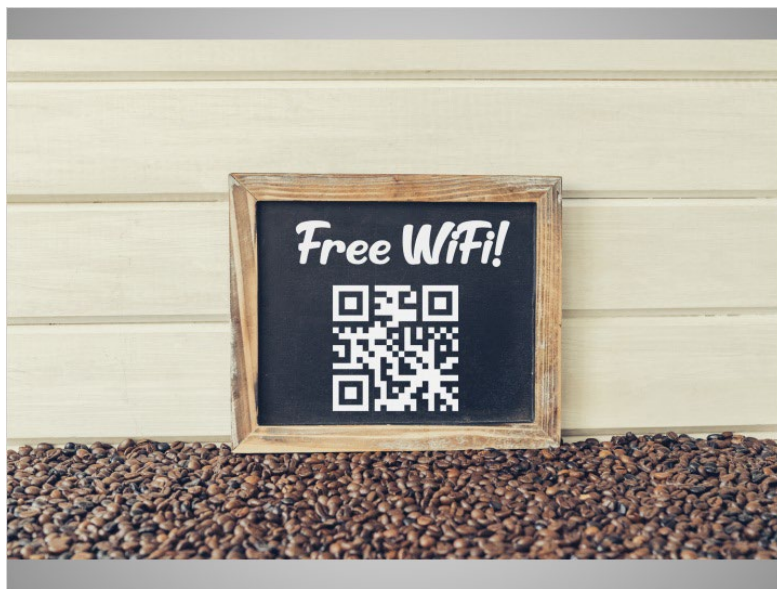

At the coffee shop, Carl spots a sign: "Free Wi-Fi" with a QR code. No more typing in long passwords - one quick scan connects his phone to the coffee shop Wi-Fi.
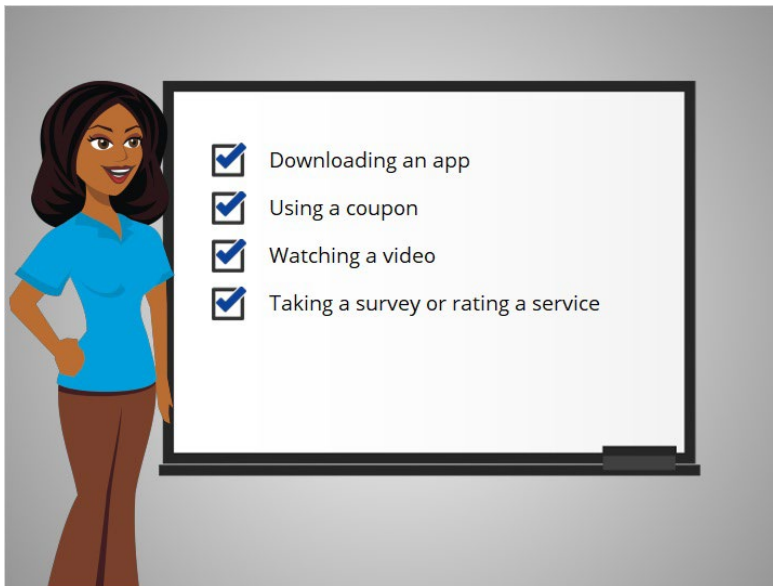
Later, Carl meets a friend for lunch. His friend hands Carl his new business card with a QR code. Carl can just scan it to add the contact information to his phone automatically.


On his way home, Carl needs to run an errand, so he parks in a garage downtown. When it's time to leave the parking lot, he uses the QR code on the parking ticket to pay.
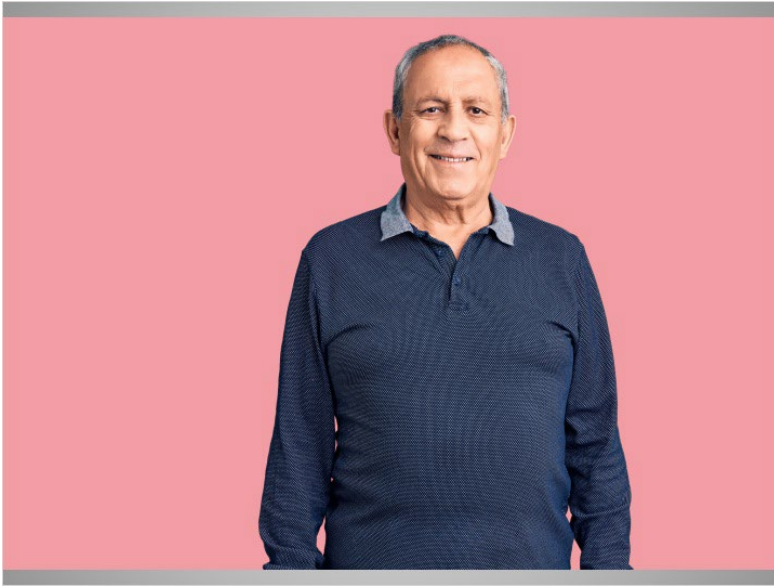
Carl's day has been more efficient with the use of QR codes!

- ✓ Downloading an app
- ✓ Using a coupon
- ✓ Watching a video
- ✓ Taking a survey or rating a service

In addition to the QR codes Carl used during his day, QR codes can be used for: downloading an app, using a coupon, watching a video, and taking a survey or rating a service.
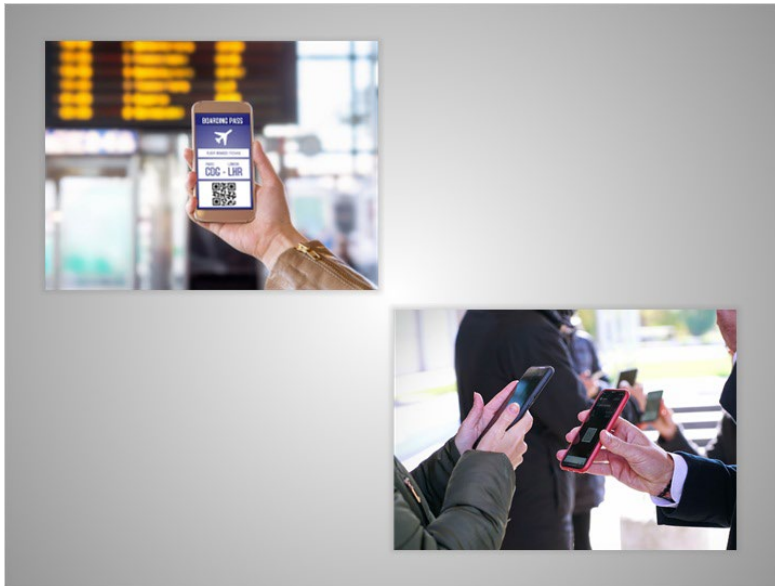
You can also receive a QR code via email, text, or an app which you will be asked to scan to show that you pre-paid for a service or event, like a parking spot, plane ticket, membership card, or ticket to a concert.

Carl is amazed that there are so many ways in which you can use QR codes to complete everyday tasks. In our next lesson, Carl will learn the basics of scanning QR codes on his mobile device.

Activity 3: How to Scan a QR Code
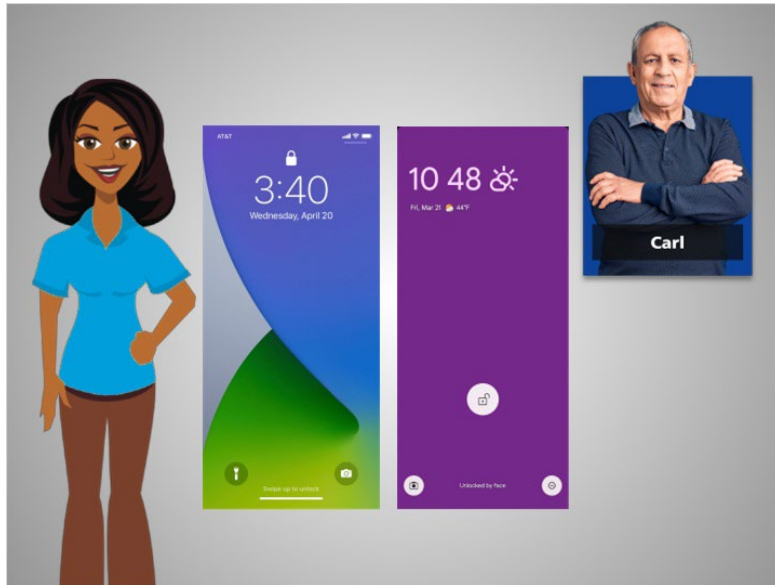
In this lesson, Carl will learn how to scan a QR code using an iPhone and Android mobile device.

You will have a chance to practice scanning a QR code in this lesson if you have a smartphone. If you don't have a smartphone don't worry, you can watch this activity without scanning the code.
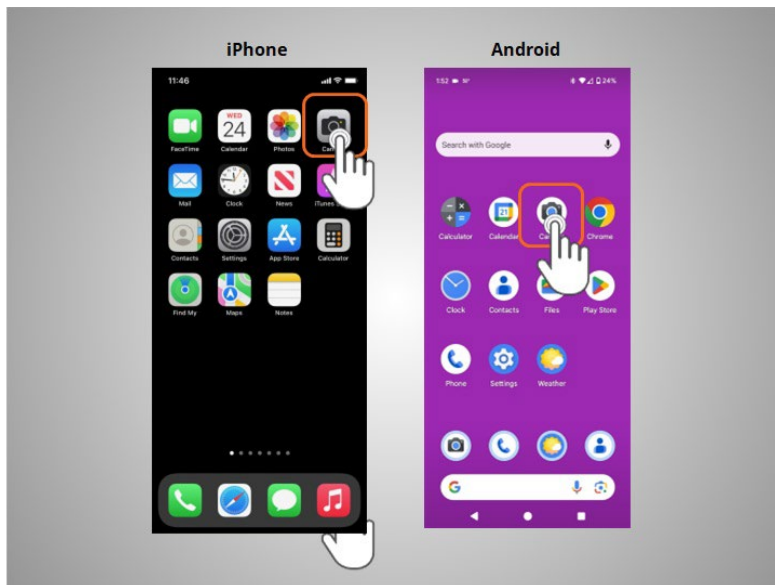
"Help! How do I scan this?" Carl is at the library, looking at a QR code for online training courses.
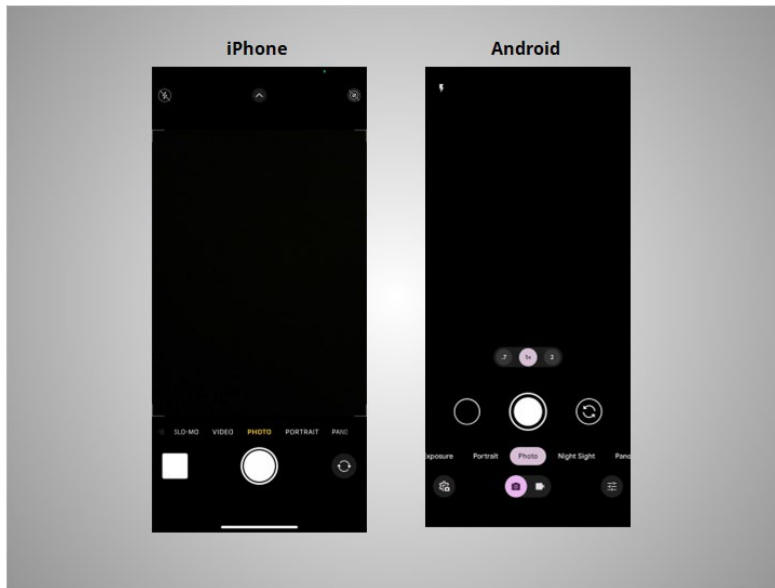

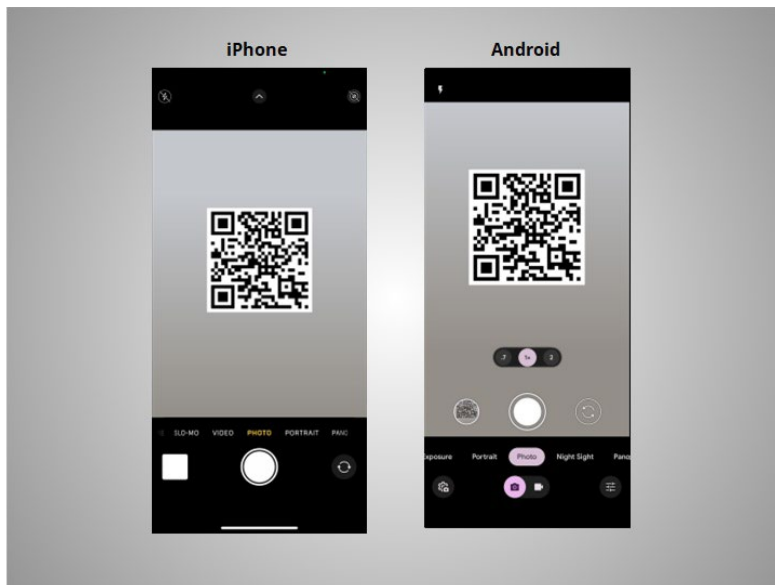He taps the screen of his smartphone to wake it up
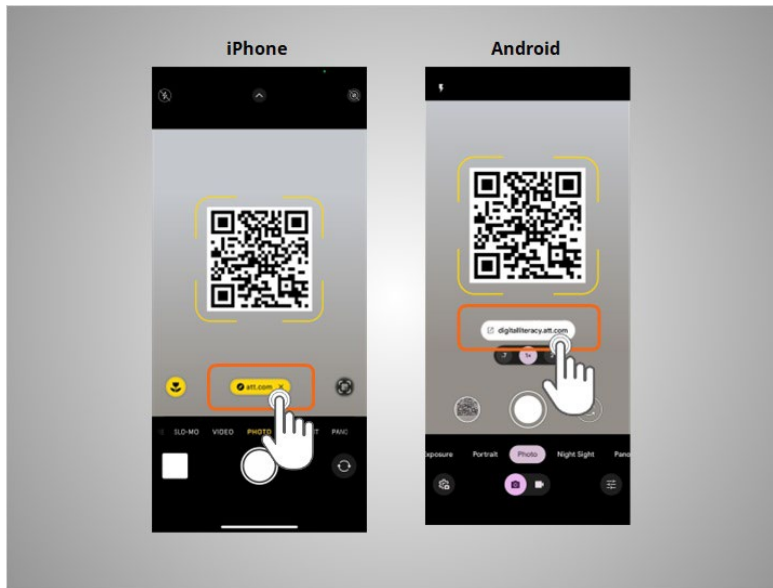
then taps the camera icon with his finger.

Another way to access the camera app is from the home screen. Carl looks for the camera app and taps it,

and the camera app opens.

Carl holds his device so that the QR code appears in the camera's viewfinder, making sure the entire code is visible on the screen. Even if the code is upside down, the camera can read it!
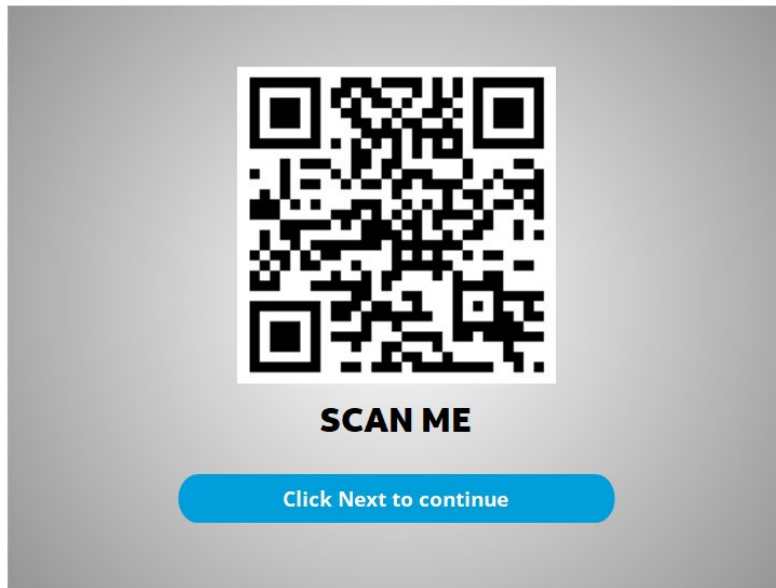
The device automatically detects that it is a QR code and displays a link. Carl will not take a picture of the QR code.
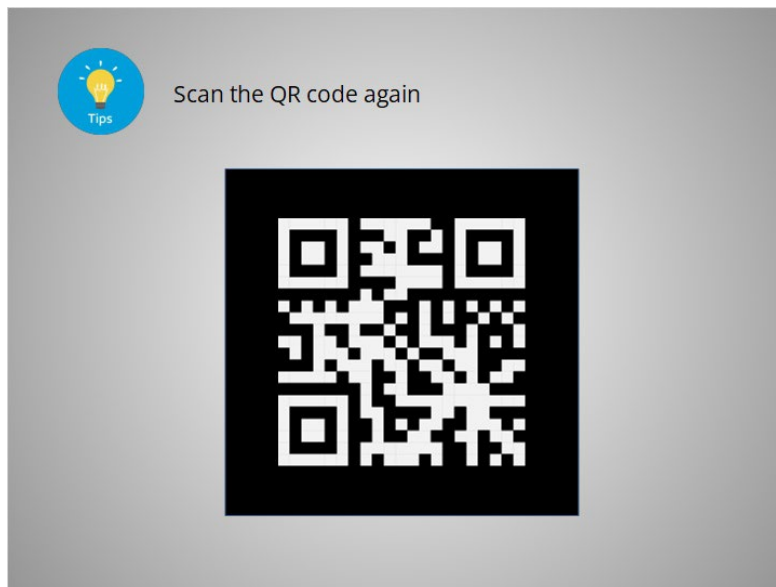
Instead of taking a picture, Carl taps the link on the screen
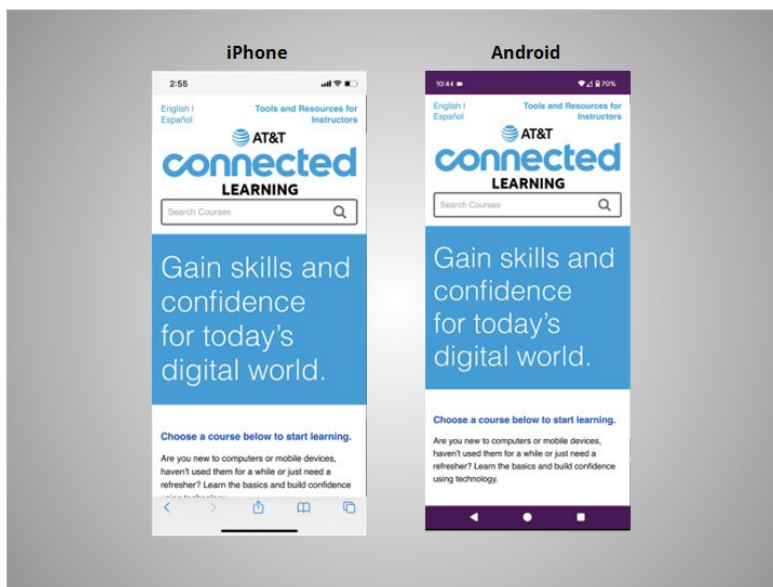
and it takes him to the AT&T Connected Learning website.

SCAN ME

Click Next to continue

Let's practice! Use your mobile device to scan this QR code. Remember: wake your phone, open the camera, point, and tap the link. When you're done, click Next to continue.


Scan the QR code again

Let's review some tips to help you successfully scan a QR code.
If you accidentally take a picture of the code, don't worry. Just scan the code again.

Keep the camera steady
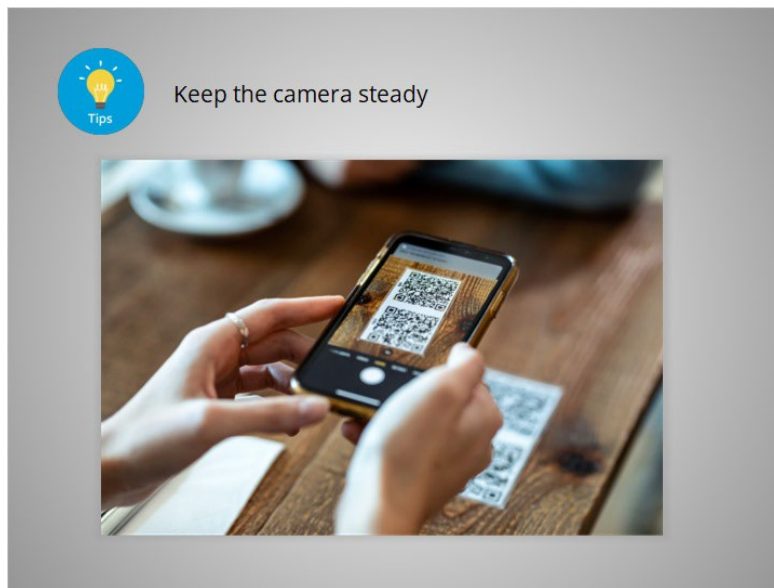
Keep the camera steady. The camera can't read the code if the image is moving or blurry.

Check your browser

iPhone   Android
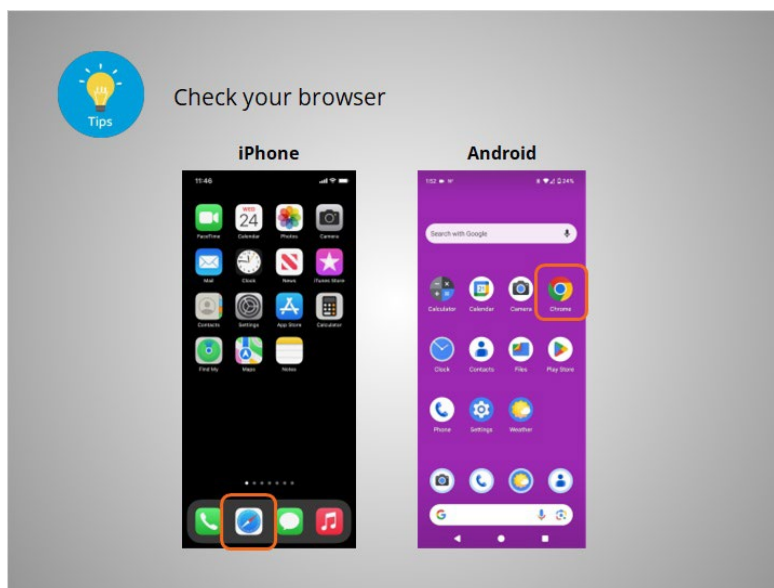
If you click the link and nothing happens, check your device's web browser for the web page. In this example, the browsers are Apple Safari and Google Chrome. If you still can't find it, scan the code again.
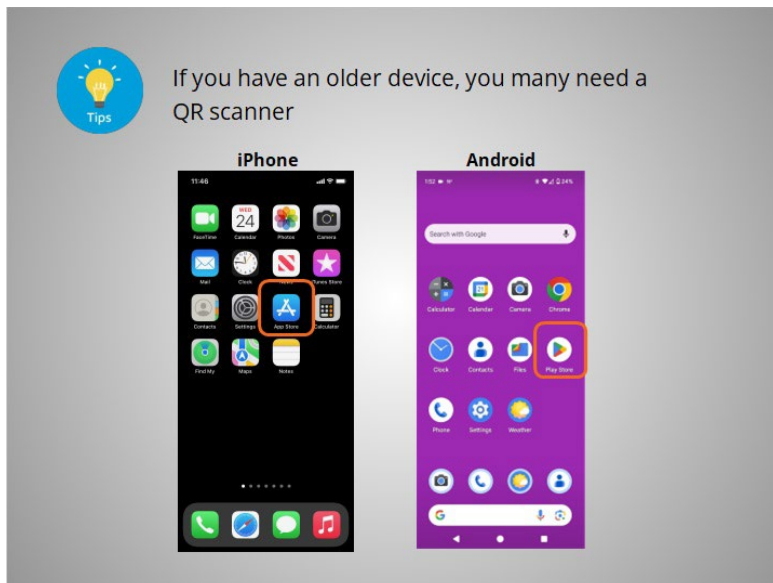
Clean your camera lens
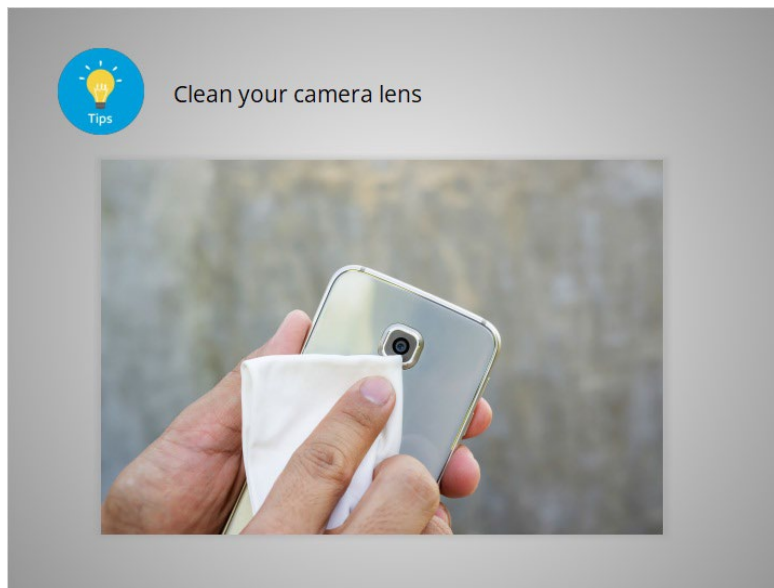
Make sure the camera lens is clean.

Make sure the code is fully visible
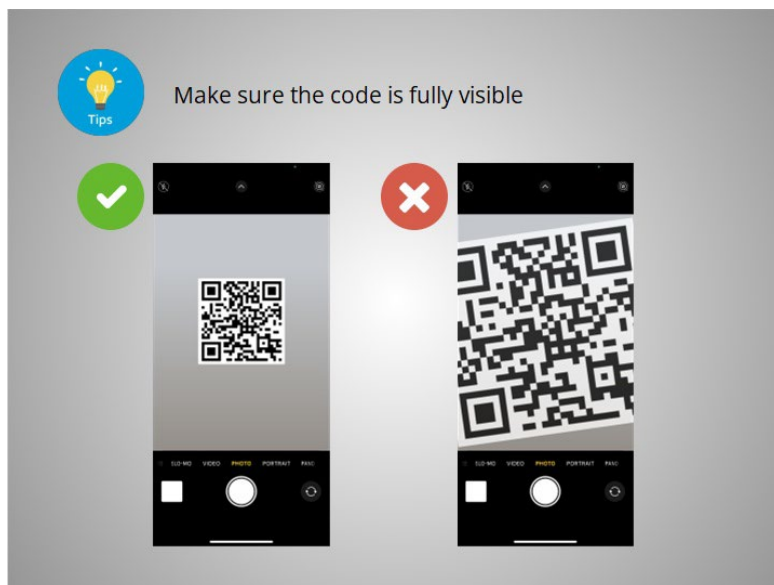
Make sure the entire code fits in the screen with a little space between the code and the edge of the camera screen.

Turn on the camera's flash
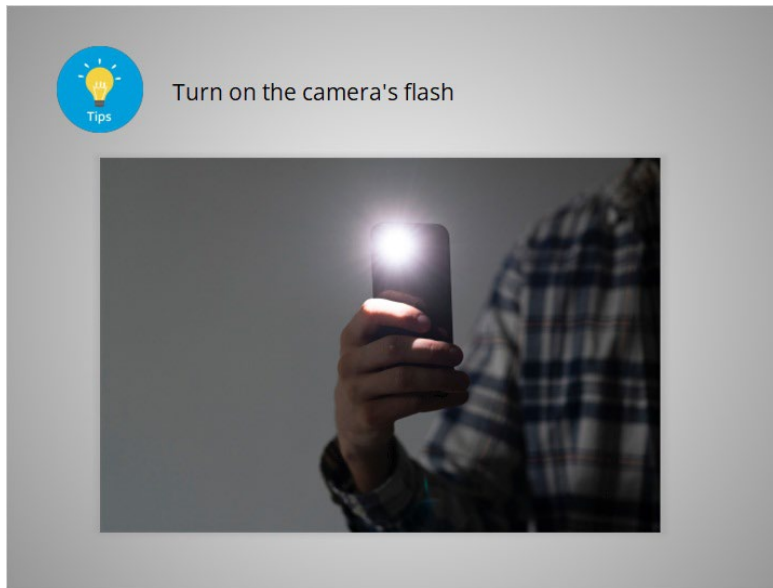
If you are in a location with little light, turn on the camera's flash!

If you have an older device, you many need a QR scanner

Most modern smartphones can scan QR codes directly using the camera app. However, some older devices might require a separate QR code scanning app. If your device isn't scanning the QR code with the camera, you can find a scanning app on your device's app store.
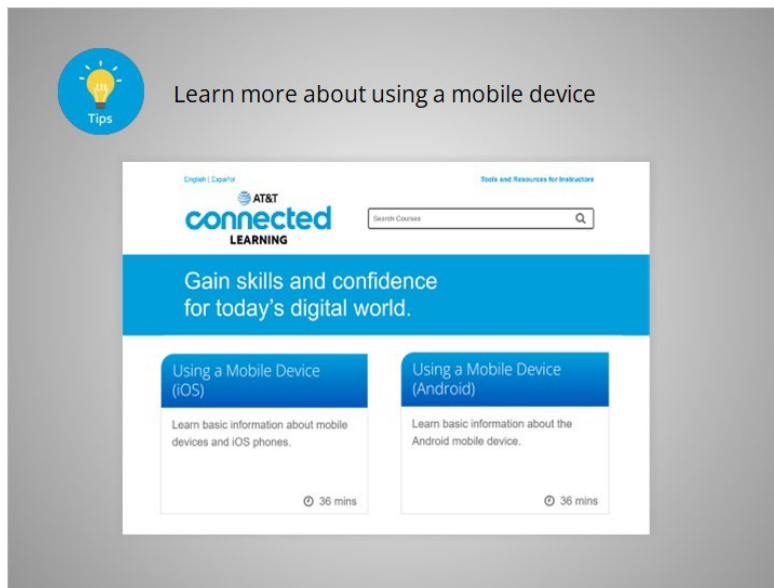
You can learn more about how to use your mobile device by watching the course Using a Mobile Device.
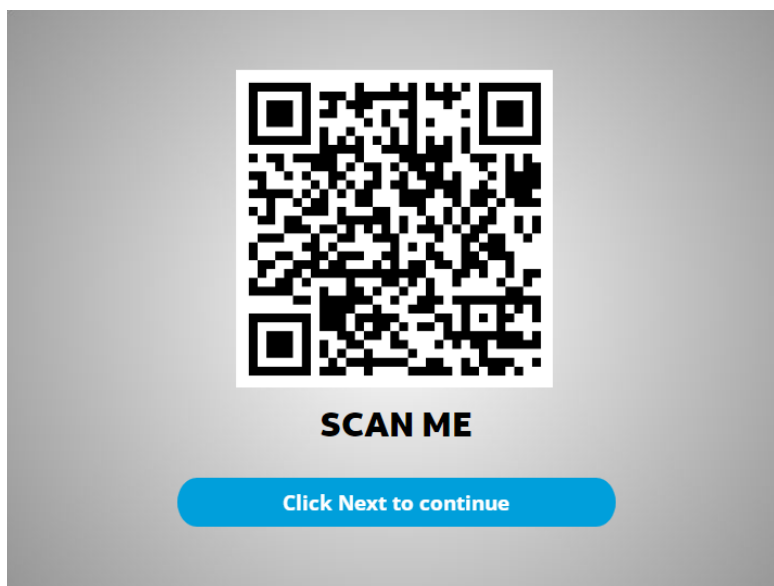
Why not practice by scanning a few codes? Wake your phone, open the camera, point, and tap the link. When you're done, click Next to continue.

Carl now has lots of tips for scanning a QR code with his mobile device. In the next lesson, he'll learn to use a QR code safely and securely.

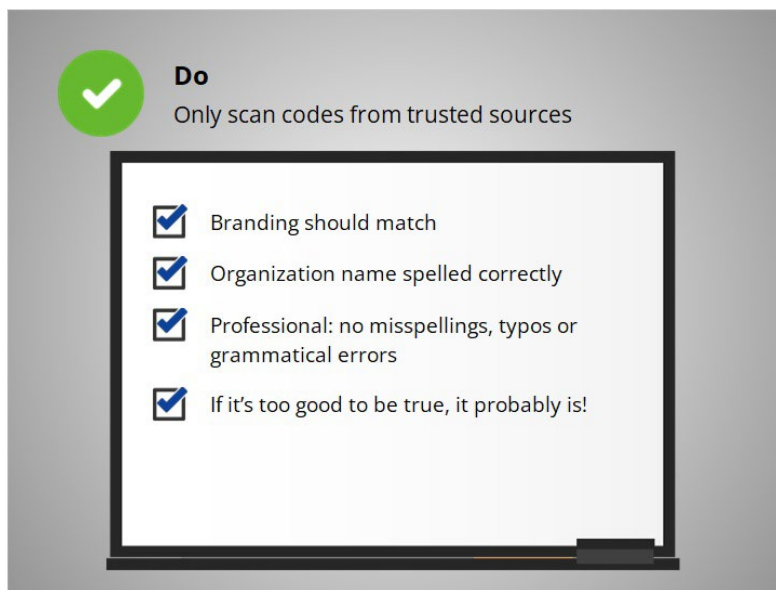# Activity 4: Using a QR Code Safely and Securely

Now that Carl can scan a QR code, he will learn to use it safely and securely.

While many QR codes you encounter are made by organizations you trust, bad actors may try to scam you.

So how can Carl use QR codes safely and securely?

Do
Only scan codes from trusted sources

☑ Branding should match

☑ Organization name spelled correctly

☑ Professional: no misspellings, typos or grammatical errors

☑ If it's too good to be true, it probably is!

Only scan codes from trusted sources. The item that opens after scanning the code should match the organization promoting the QR code. How can you tell?

The branding should match.

Check to make sure the organizational name in the URL or logo is spelled correctly — if it's not, be suspicious.

The item the QR code opens should look professional, this means no misspellings, typos, or grammatical errors.

If it is too good to be true, it probably is!

Do
Go directly to the organization's website address
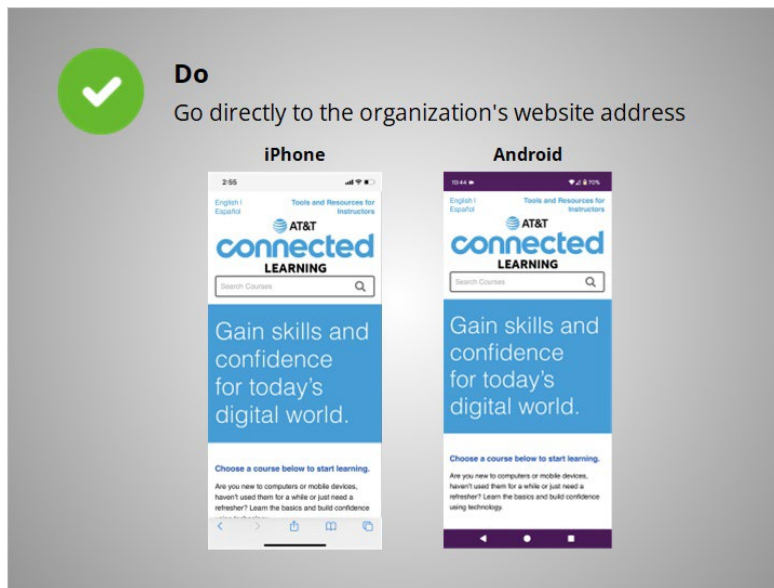
When in doubt, skip scanning the QR code. Instead, use your device's web browser to go directly to the organization's website and find the information promoted by the QR code.

Don't
Scan QR codes that are damaged or covered by a sticker
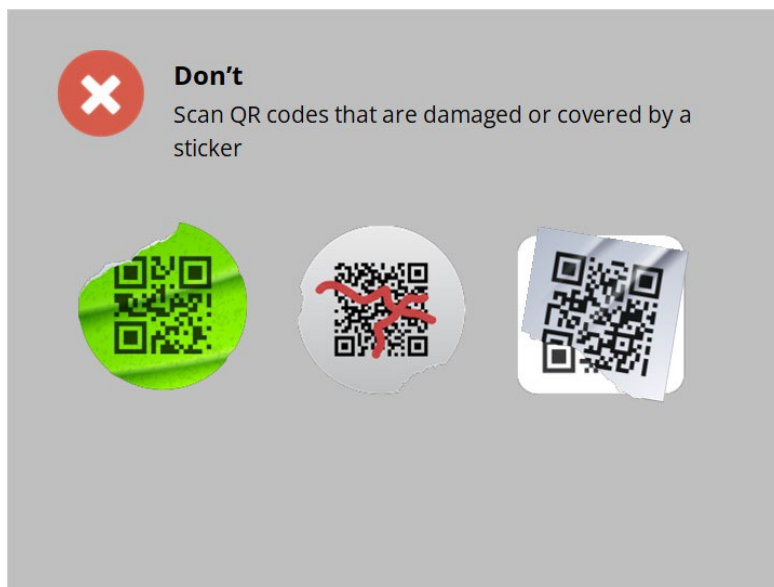
Avoid scanning codes that are damaged or covered by a sticker, including a sticker of a QR code pasted over the original QR code. Someone may be trying to trick you by directing you to a different website.
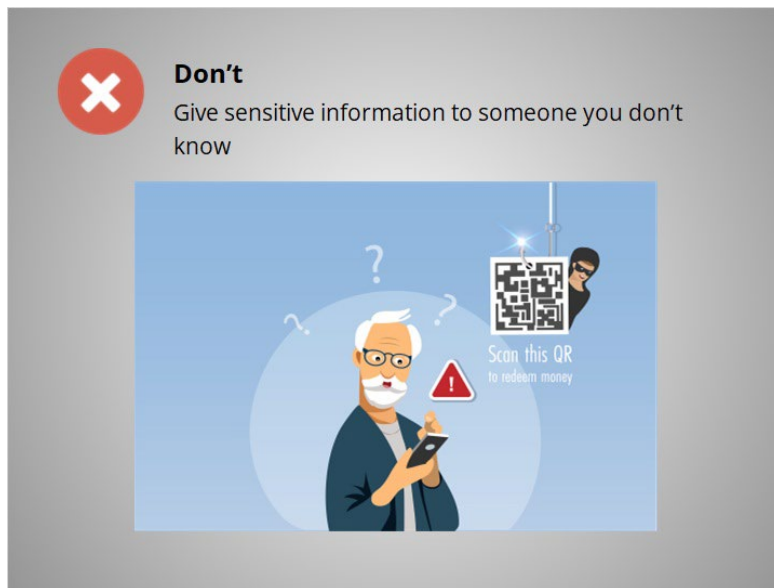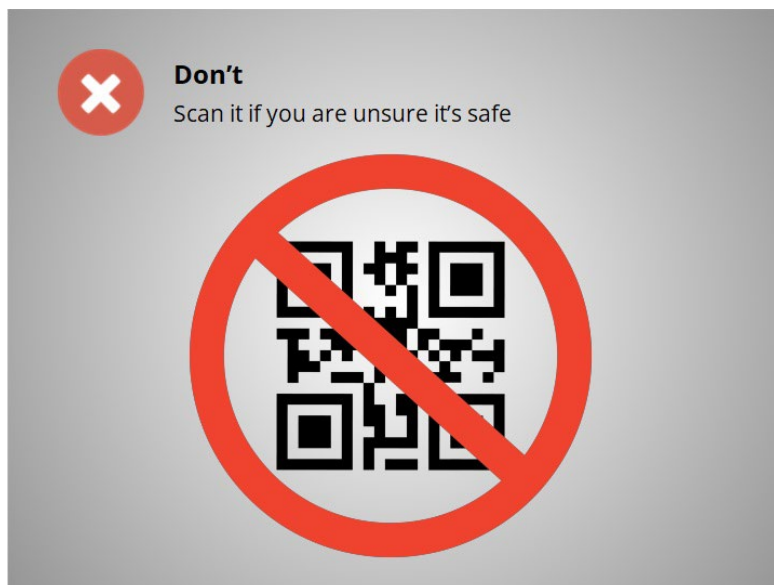
Be cautious about providing sensitive information like your Social Security number, credit card, bank information, and passwords.
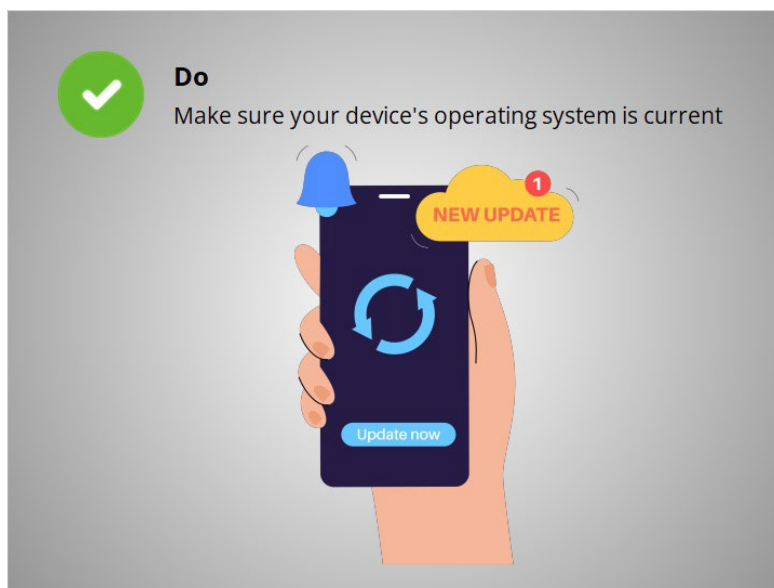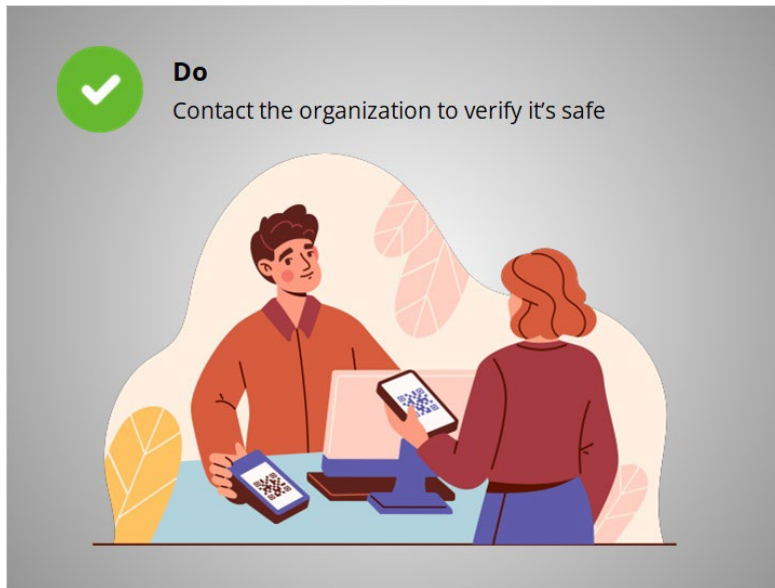

Make sure your device's operating system is up to date to ensure you have the most recent security updates installed on your device.

Do
Make sure the URL starts with HTTPS
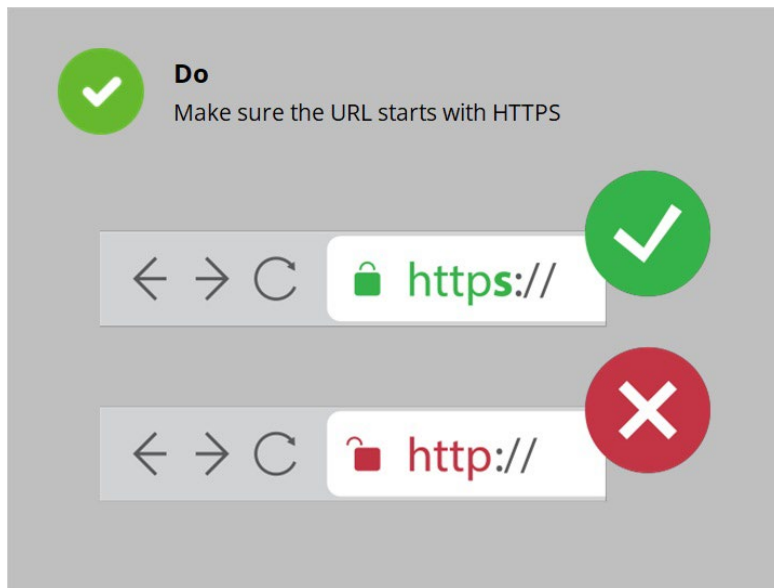
https://

http://

If it opens a website, it should be a secure HTTPS site.

Don't
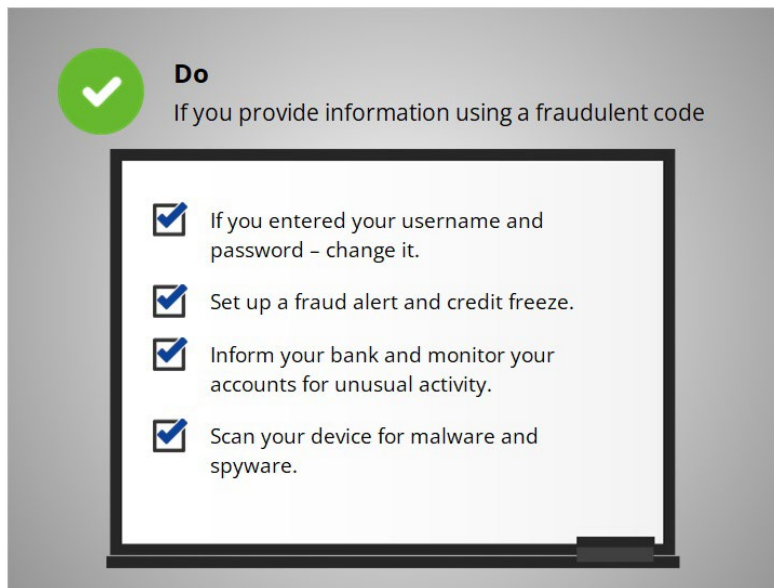Scan it if you are unsure it's safe

If you are unsure about a QR code, don't scan it.

Do
Contact the organization to verify it's safe

If you are at a store or restaurant and you are not sure the QR code is safe ask the staff to verify it is safe.

Do
If you provide information using a fraudulent code

- ☑ If you entered your username and password – change it.
- ☑ Set up a fraud alert and credit freeze.
- ☑ Inform your bank and monitor your accounts for unusual activity.
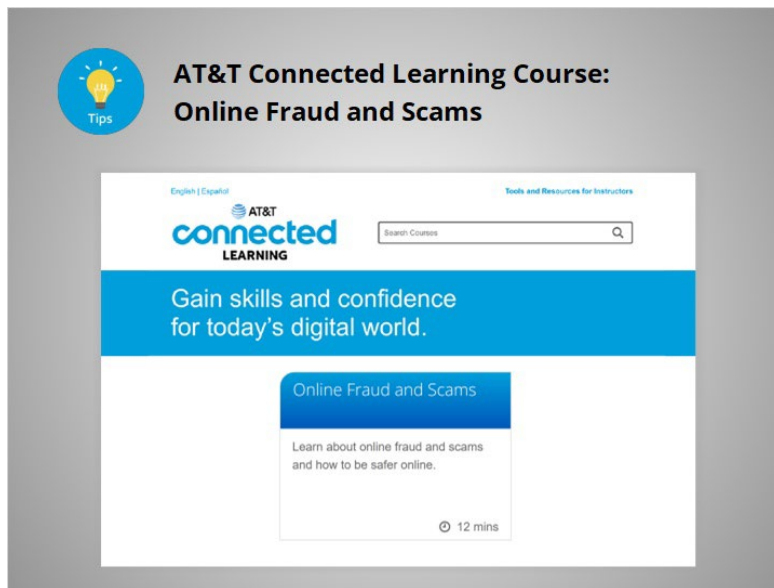- ☑ Scan your device for malware and spyware.

What should you do if you provide sensitive information using a fraudulent QR code?

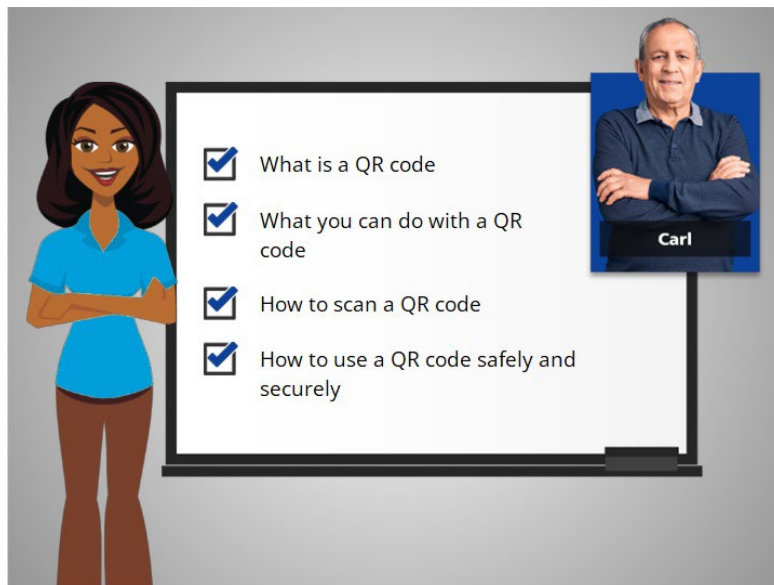If you entered your username and password – change it.

Set up a fraud alert and credit freeze.

Inform your bank and monitor your accounts for unusual activity.

Scan your device for malware and spyware.

To learn more, watch the AT&T Connected Learning course Online Fraud and Scams.

In this course, we followed along with Carl as he learned how to use QR codes, including what a QR code is, what you can do with it, how to scan it, and how to use it safely and securely. Why don't you try exploring QR codes on your own!