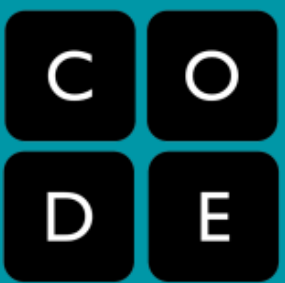
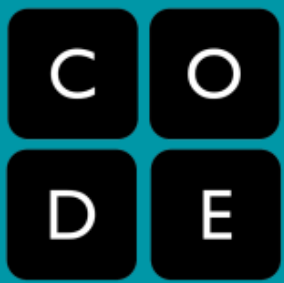


HTTP and Abstraction

Unit 1 Lesson 13 (U1L13)

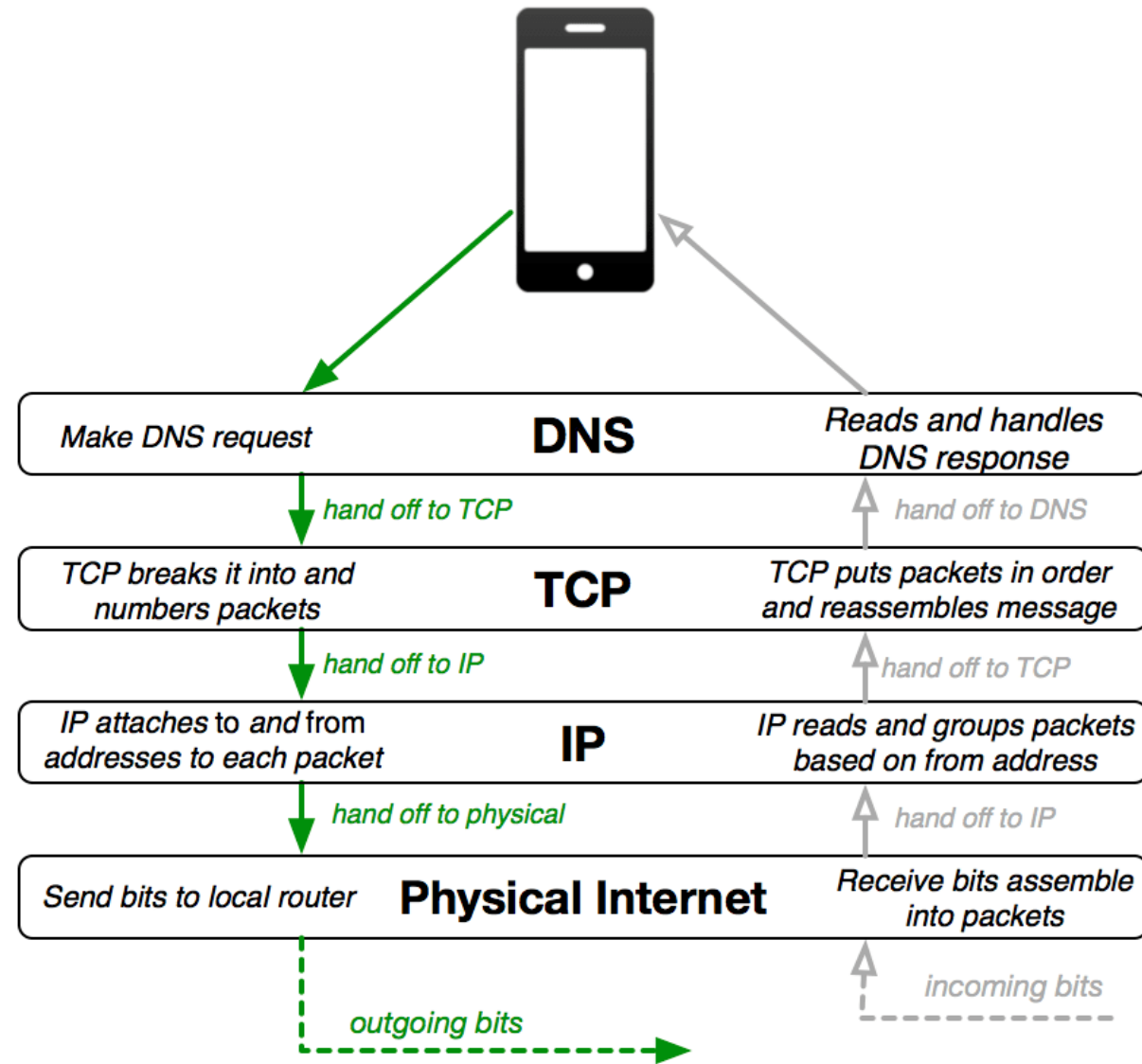


Opening Thoughts

We're rounding out our understanding of how the many protocols and systems of the Internet work together to make the Internet function.

We want to think of the protocols as working in "layers".

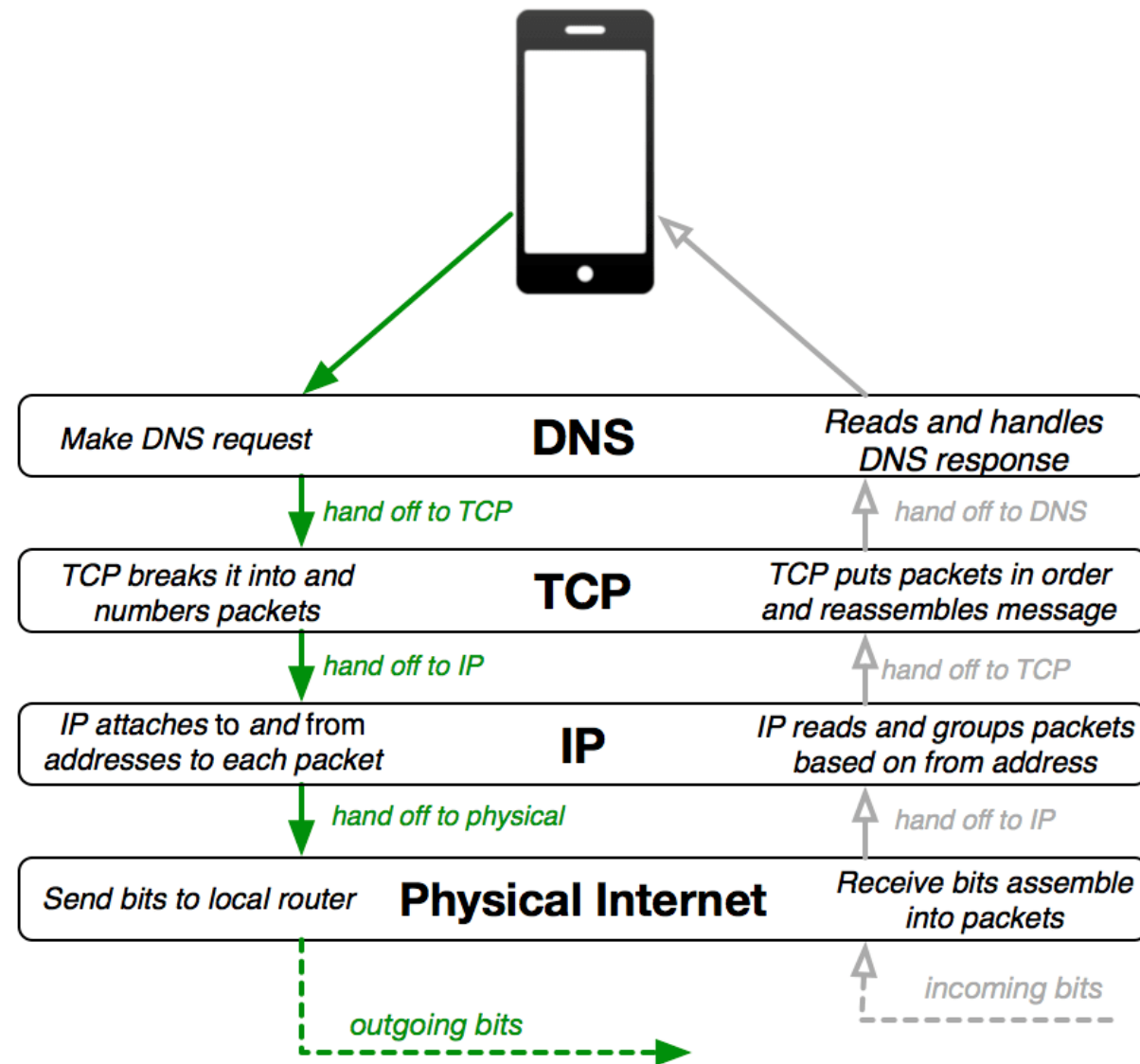
Outgoing information is going **DOWN** the stack, and incoming information is going **UP** the stack



Include this image in your notes

The important takeaway here is to understand that the system was constructed with **layers of abstraction** where each layer only needs to concern itself with its specific job, and then hands it off to another layer.

This makes the very complicated task of digital network communication possible.



Include this image in your notes

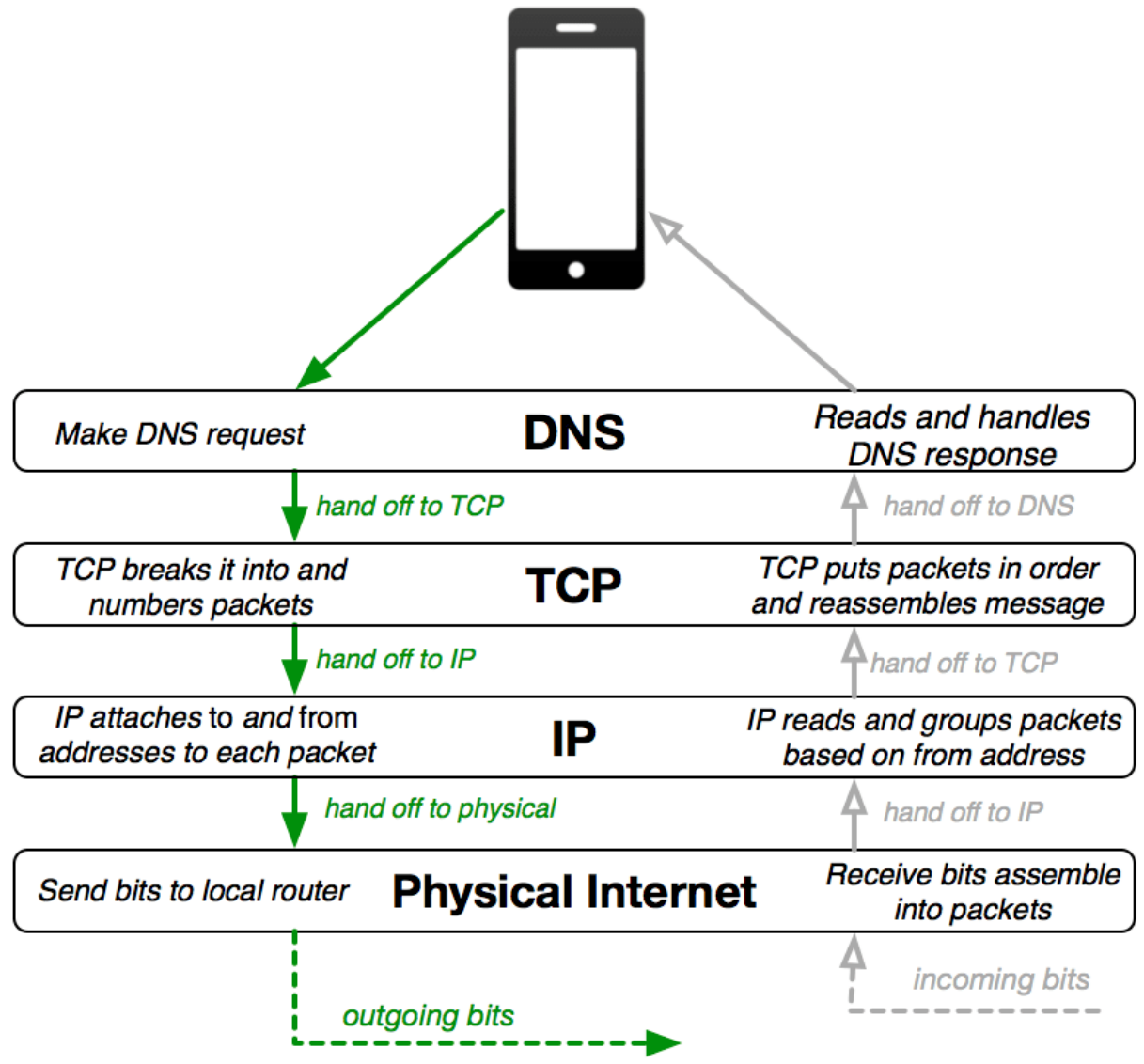
Have you ever seen the letters “HTTP” anywhere while using the internet?



Hyper**T**ext **T**ransfer **P**rotocol **S**ecure

HTTPS →

This protocol sits at the same “layer” as DNS – right above TCP



Include this image in your notes

Thoughts:

- HTTP is an ASCII text based protocol.
- It's somewhat remarkable to note that many "high level" protocols, like HTTP, are just computers sending ASCII text messages back and forth. Each protocol simply defines the rules of the "conversation" between two machines.
- In the case of HTTP it is the protocol used for sending and receiving web pages and other web content.
- Today we'll look under the hood and see HTTP in action.

The Internet:
HTTP &
HTML
(7:06)



Pay particular attention to the portions about HTTP.

Let's Investigate the HTTP traffic on your computer:

You can view the HTTP traffic on your computer through tools in the web browser

Ex: How to view the traffic (while in Chrome)

- Option 1: CTRL – Shift – I
- Option 2: Settings – More tools – Developer Tools

Task – In pairs:

Visit each of the following 5 sites (or type of sites)

- 1) www.example.com
- 2) A “static” website – ex: Wikipedia
- 3) A news website – ex: ESPN, cnn, BuzzFeed
- 4) A streaming site – ex: Youtube, Spotify
- 5) A site that accepts user input – ex: Facebook, email, google docs

IN YOUR NOTES, write down observations about each site and the type of data it receives.

Example:

| Site | Observations |
|--|---|
| www.example.com | This site was awesome! I was surprised that |

▼ Lesson 13: HTTP and Abstraction



Lesson Overview



The Internet: HTTP and HTML



Check Your Understanding

