# ICND1 Exam Tips

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NETWORK ENGINEER

@bagurdes

# Module Goals

**Prepping for ICND1 exam**
- Learning styles
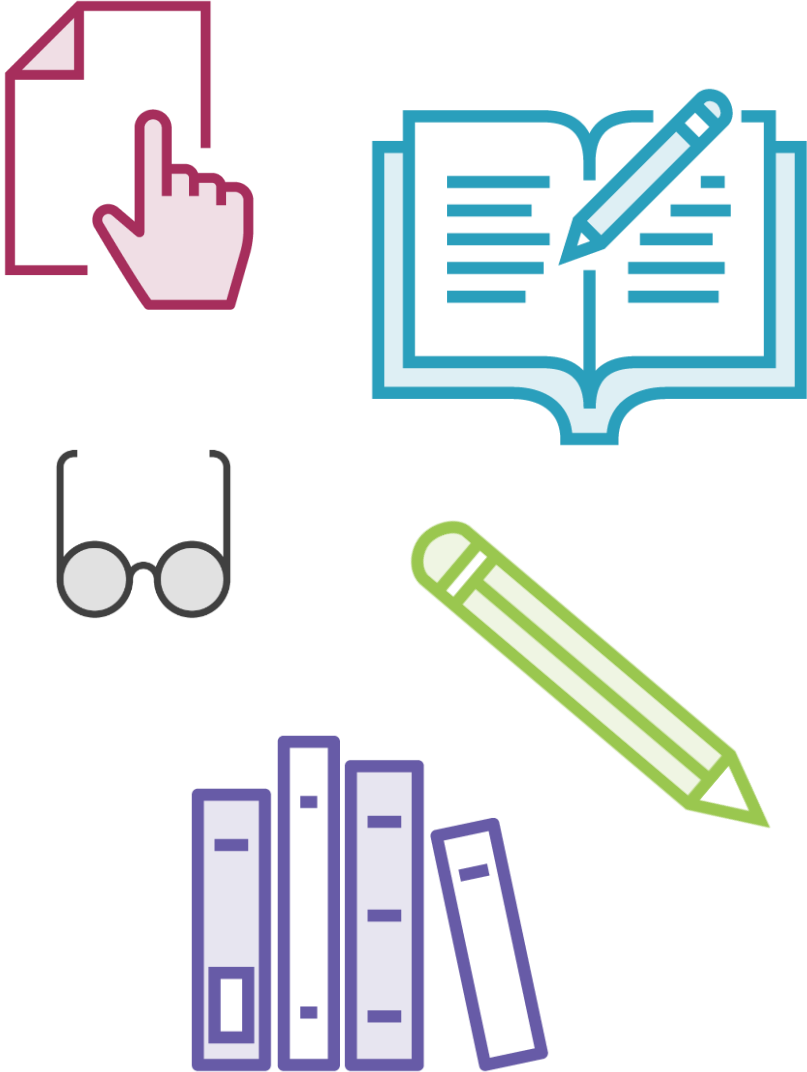
**Scheduling exam**

**Taking exam**
- What to expect
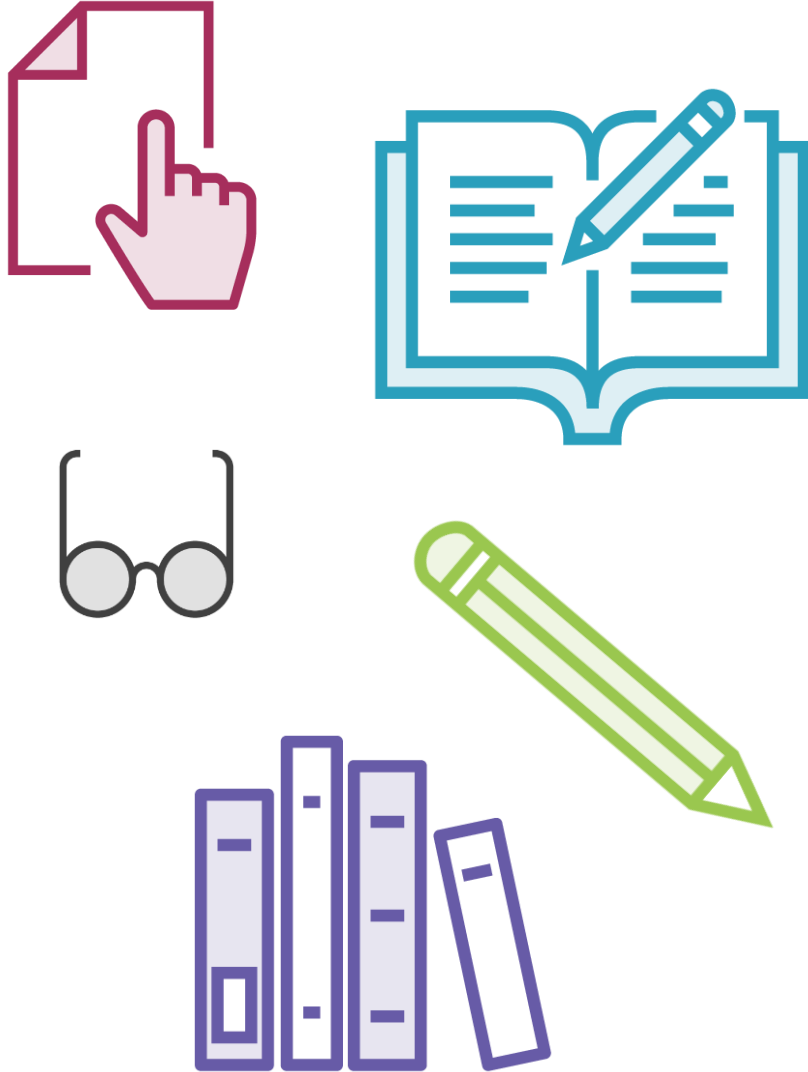- Questions style

# Prepping for ICND1

# Learning Styles - (Flemming's VARK Model)

- Visual
  - Diagrams, charts, pictures, etc.
- Auditory
  - Listening to an explanation
- Read/write
  - Reading a book and/or taking notes
- Kinesthetic
  - Physical activity
  - Router/switch configuration?

# Prepping for ICND1

- Watch videos
  - Pluralsight.com
- Take notes
  - Create your own study sheet
- Read
  - CCNA Routing and Switching Complete Study Guide, Todd Lammle (Sept, 2016)
  - Take notes
- Practice
  - Configuration
  - Questions
    - Boson.com

## Physical

CAT5
RJ45

Single Mode
Multi Mode

Hub
Collision Domain

## Data Link

MAC Address
CSMA/CD
FCS
802.11

Ethernet   MTU
Port Security
Broadcast Domain
VLAN Tag

PPP   DTP
LLDP   ISL
802.1q
Native VLAN

Frame
VLAN
Switch
CDP

## Network

ICMP
EIGRP
No switchport
Subnet Mask

IPv6   TTL
Link State
Layer 3 Switch
IP

LSDb
Router
Packet
SVI   RIP

OSPF
IPv6 NDP
Default Gateway
IP Address

## Transport

Segment           UDP           TCP           Port Number

## Application

TFTP    BGP    SSH

# TCP/IP and OSI Model

| TCP/IP | OSI | Datagram | Device |
|---|---|---|---|
| Application | Application | -- | Firewall |
| | Presentation | -- | -- |
| | Session | -- | -- |
| Transport | Transport | Segment | Firewall |
| Internet | Network | Packet | Router |
| Network Interface | Data Link | Frame | Switch |
| | Physical | Signal | Hub |

# TCP/IP and OSI Model

| TCP/IP | OSI | Protocols |
|---|---|---|
| Application | Application | HTTP, HTTPs, Telnet, SSH, FTP, TFTP, SFTP, SNMP, SMTP, POP3, IMAP |
| | Presentation | |
| | Session | |
| Transport | Transport | TCP and UDP |
| Internet | Network | IP , ICMP |
| Network Interface | Data Link | Ethernet , PPP , 802.11 |
| | Physical | Wires , Glass , RF/Photons |

# Protocol Hierarchy

| HTTP | HTTPs | Telnet | SSH | FTP | SFTP | POP3 | IMAP | SMTP | DNS | SNMP | TFTP |
|------|-------|--------|-----|-----|------|------|------|------|-----|------|------|
| 80 | 443 | 23 | 22 | 20, 21 | 22 | 110/ 995 | 143/ 993 | 25/ 587 | 53 | 161 | 69 |
| TCP | | | | | | | | | TCP / UDP | | UDP |
| IP | | | | | | | | | | | |
| Ethernet , PPP , 802.11 | | | | | | | | | | | |
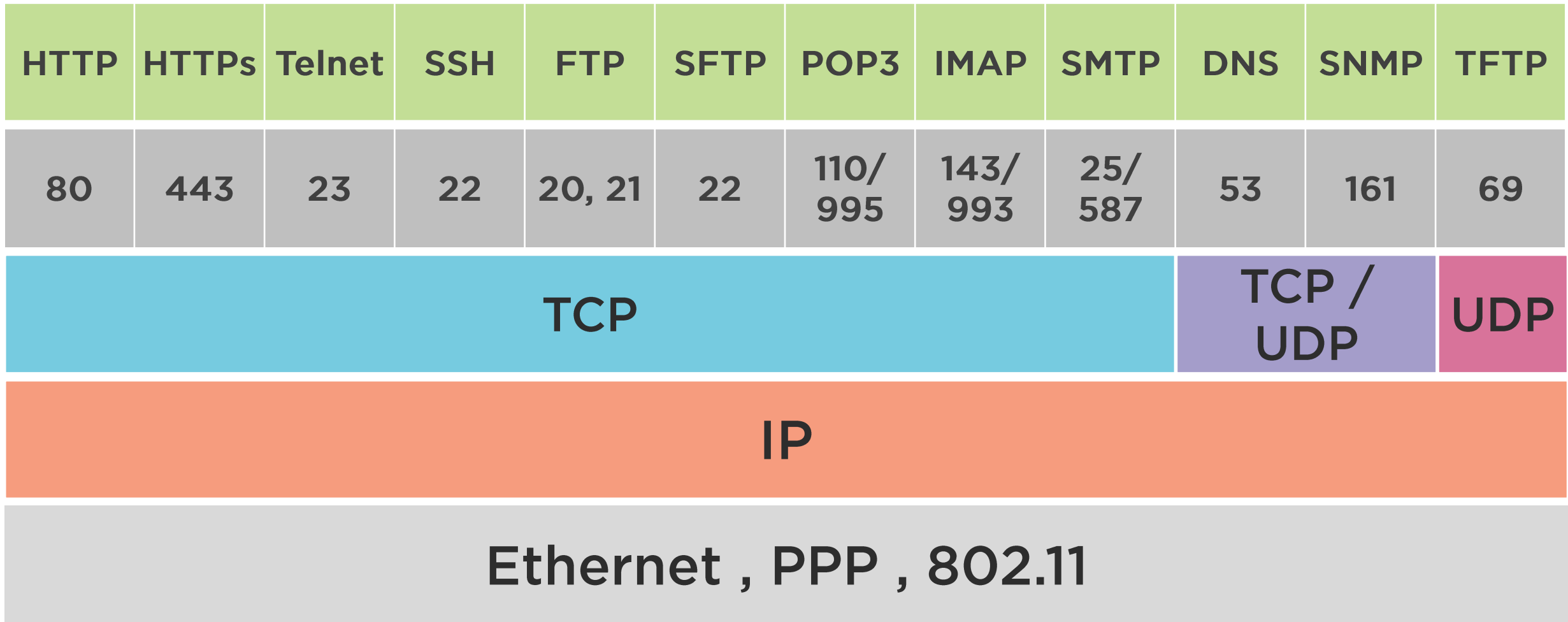
Scheduling Exam

- Scheduling ICND1 Exam
- www.pearsonvue.com
  - Click 'For test takers'
  - Search for "Cisco Systems"
  - Create an account (or sign in)
  - Click Proctored Exam
  - Select ICND1
  - Select preferred Language
  - Choose testing center
  - Choose date and time
  - Pay ($150)

**Pre-exam Tips**

- Schedule the exam with ample time to study
- Don't cram or stay up all night study, even if you think it helps
  - http://newsroom.ucla.edu/releases/cramming-for-a-test-don-t-do-it-237733
- Reschedule exam if needed
  - 24 hours notice required
- Review your study sheets you created before exam
  - This is different than cramming

# Taking the Exam

# ICND1 Exam

**Technical Skills**

- Protocol knowledge

- Configuration knowledge

- "Cisco knowledge"

**Problem Solving Skills**

- Technical/network related

- Non-technical

- Strange questions/answers

# Beginning the Exam

Write down any notes you might easily forget

Relax

Don't panic!

# Answering Questions

**Read all instructions carefully!**

**Questions are intentionally tricky**

**Correct answer is not always apparent**

**Incorrect answers are often easier to spot**

**For long questions, read answers first**

# Read Instructions

**Read all instructions carefully!**

**A single 'question' may have multiple sub-questions**

# Questions

**Of the following, which is related to verifying that the data sent is the same as the data received, and does not request a retransmit should the data verification fail? (Choose 4)**

A. UDP

B. IP

C. FCS

D. SSH

E. TCP

F. CSMA/CD

G. 802.3

H. ICMP

I. HTTP

J. CRC

K. Telnet

L. NTP

# Sample Question 1 (Easy)

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# Sample Question 2 (Harder)

**What is used in a modern network to connect 2 devices together?
(Choose 2)**

A. 100BaseT
B. Switch
C. RJ-45 Connector
D. Cat6 Patch Cable
E. RFC 791
F. TCP/IP Stack

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# Sample Question 3 (Absurd)

**What is a sweet fizzy beverage called?
(Choose 1)**

A. Soda
B. Cola
C. Coke
D. Pop
E. Carbonated Drink

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B. ~~IP~~

C. ~~TCP~~

D. UDP

E. ~~HTTP~~

# Summary

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- Learning styles

**Scheduling exam**

**Taking exam**
- What to expect
- Questions style