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<http://www.codeschool.org>

Compare this worksheet to the posted document, read the Intro document, watch the videos and review the lecture slides. Review the Notes. Using a word processing program, create a digital notebook and take quality notes. Send a copy of your notes to Mr. Amerikaner: [eamerikaner@opusd.org](mailto:eamerikaner@opusd.org) AND ASK ANY questions.

**TONIGHT: SEND MR. AMERIKANER**

**AN EMAIL FROM YOUR MAIN ADDRESS. SUBJECT LINE—YOUR COMPLETE NAME APCS2018. I WILL CREATE A GROUP LIST TO SEND ADDITIONAL INFORMATION.**

**[EAMERIKANER@OPUSD.ORG](mailto:EAMERIKANER@OPUSD.ORG)**

## introduction: learning to program

- Video: [Youtube](#) (18 min.)

## numbers as bits

How numbers are represented as bits.

- Intro: [html](#)
- Lecture video: [Youtube](#) (46 min.)
- Lecture slides: [pdf](#), [pptx](#)
- Notes: [html](#)

## bits and text

Terminology for talking about bits and discussion of how text is represented as bits.

- Intro: [html](#)
- Lecture video: [Youtube](#) (33 min.)
- Lecture slides: [pdf](#), [pptx](#)
- Notes: [html](#)

## Object-Oriented Programming (OOP)

Object-Oriented Programming is a paradigm of programming in contrast to the more obvious “procedural” programming. Many popular languages, including Python and Java, explicitly favor the Object-Oriented style.

- Intro: [html](#)
- Lecture video: [Youtube](#) (28 min)

## the Java language

Unlike Javascript and C, the Java language heavily emphasizes Object-Oriented Programming. Since the late 1990's, Java has been the most commonly used programming language. Java's success has spawned an imitator from Microsoft called C# (“C sharp”), which differs in many details but is fundamentally similar. We cover Java instead of C# mainly because Java is somewhat simpler and still more popular. Some features of the language are only discussed in the supplement “Java miscellany”.

- Lecture video (part 1): [Youtube](#) (109 min.)
- Lecture slides: [pdf](#), [pptx](#)

YOU DO NOT HAVE TO WATCH THE VIDEOS IN ONE SESSION. WATCH AND TAKE NOTES AS YOU HAVE TIME.

