Computer Science Explorations (CSE)

Intro to Computer Science for Ninth-Grade Students

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What, exactly, is a computer?

Activity - Reflection: What is a Computer?

- Prompts: What is a computer? How is a computer different from other electronic devices?
- My responses:



def: A <u>computer</u> is a digital device that transforms data into information.

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processing—transforming that data into information by using an algorithm

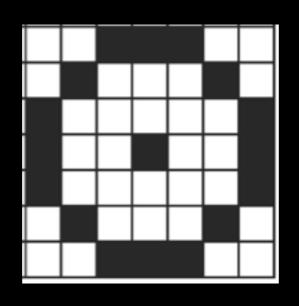


Digital

data—has little

human

meaning



information—
has much human
meaning

def: To be <u>digital</u> means that numbers—digits—are essential and required.

Activity - Video Questions: Bits, Bytes, and Codes

- Glue your small-sheet video paper handout into "Unit 1" of your textbook.
- Divide up the questions, two questions per person.
- Watch the video, listening for the answers to your two questions; write these answers below your small-sheet video paper handout.
- We will watch the video twice.

Small-Sheet Video Questions: Bits, Bytes, and Codes What is contained on a chip in the computer? 2. What is true about the microscopic circuits inside the computer? 3. What numerals does the computer use to stand for ON and OFF? How many 1s and 0s are required to represent any key on the 4. computer's keyboard? 5. What is binary code? 6. Where does the word binary come from? 7. What is a bit? What is a byte?



Activity - Video Questions: Bits, Bytes, and Codes

• Share your answers at your table so that everyone has the opportunity to copy *all* the correct answers to *all* the questions into their textbooks.

