Recall that representations are used to store, communicate, and process information.

Provide examples of how different representations are appropriate for different tasks.

Measure the size of a representation as the number of symbols that it contains.

Convert between different units of representation size.

Recall that characters can be represented as sequences of other symbols.

Describe how characters are represented as sequences of binary digits.

Recall that binary digits represent all information that is stored, transmitted, and processed by computers.

Measure the size of a bit sequence as the number of binary digits that it contains.

Convert a decimal number to binary and vice versa.

Describe how natural numbers are represented as sequences of binary digits.

Follow-up unit: binary representations of images and sounds.

Provide examples of how symbols are carried on physical media.

Convert between different units of representation size.

Provide examples of how binary digits are physically represented in digital devices.

Recall that characters can be represented as sequences of binary digits.