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Network structure and architecture, OSI reference model-2

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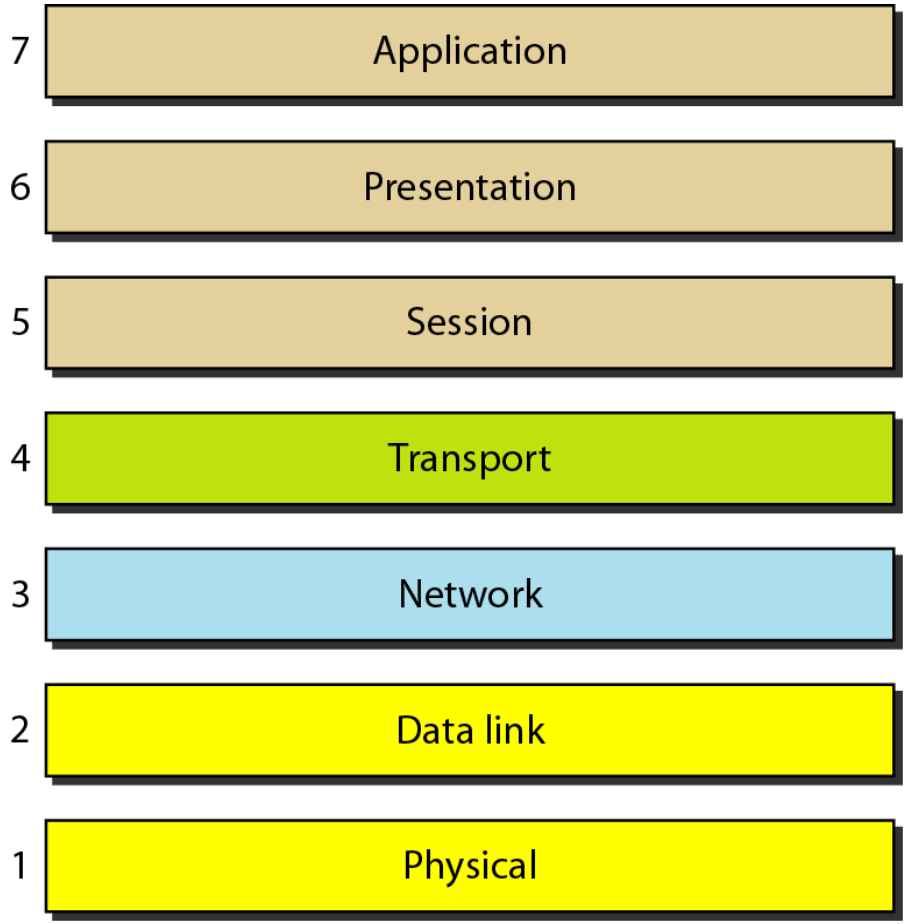
Layers of OSI Model



Session Layer

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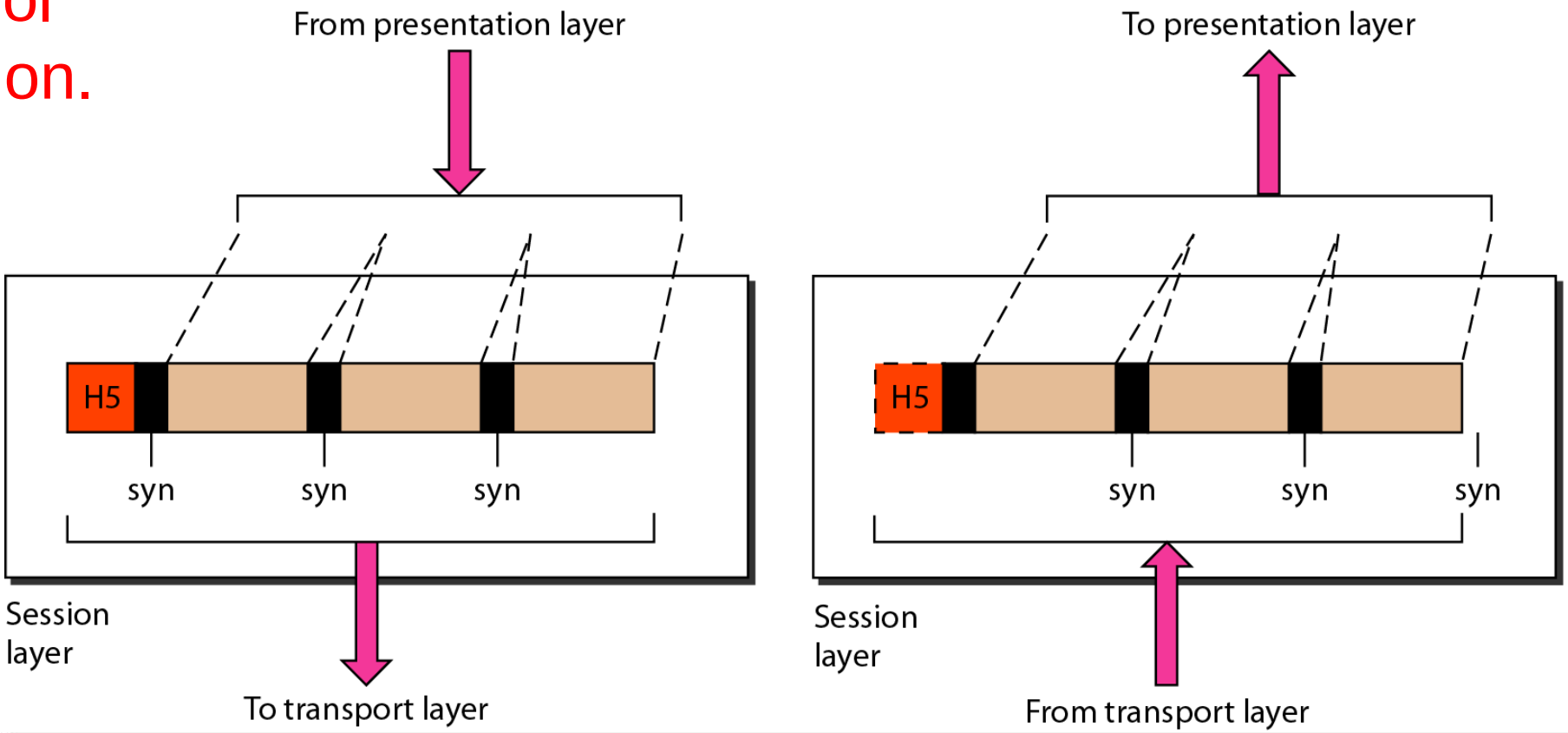
The session layer is responsible for

- Make Session
- Dialog control
- Synchronization.



Presentation Layer

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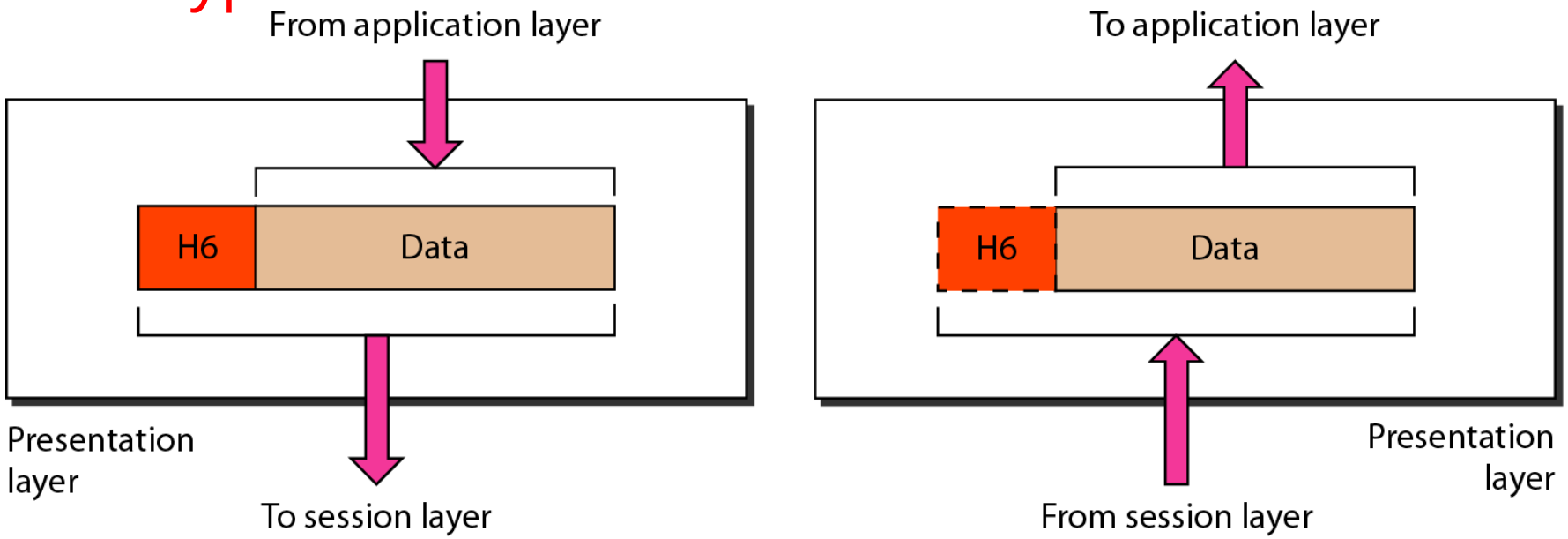
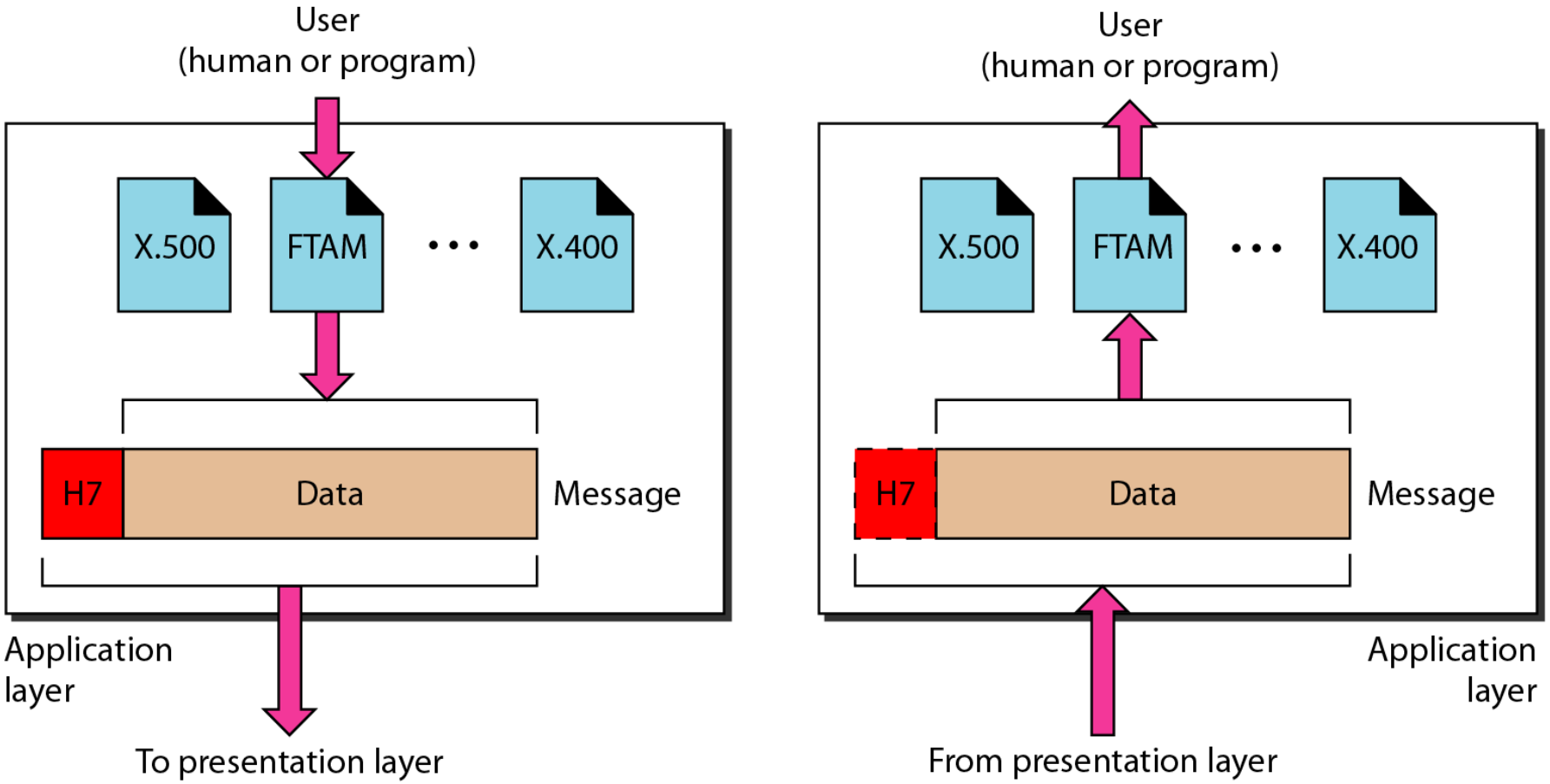
- The presentation layer is responsible for
- Conversion of data from one format to another format
  - Compression/Expansion
    - Encryption/Decryption



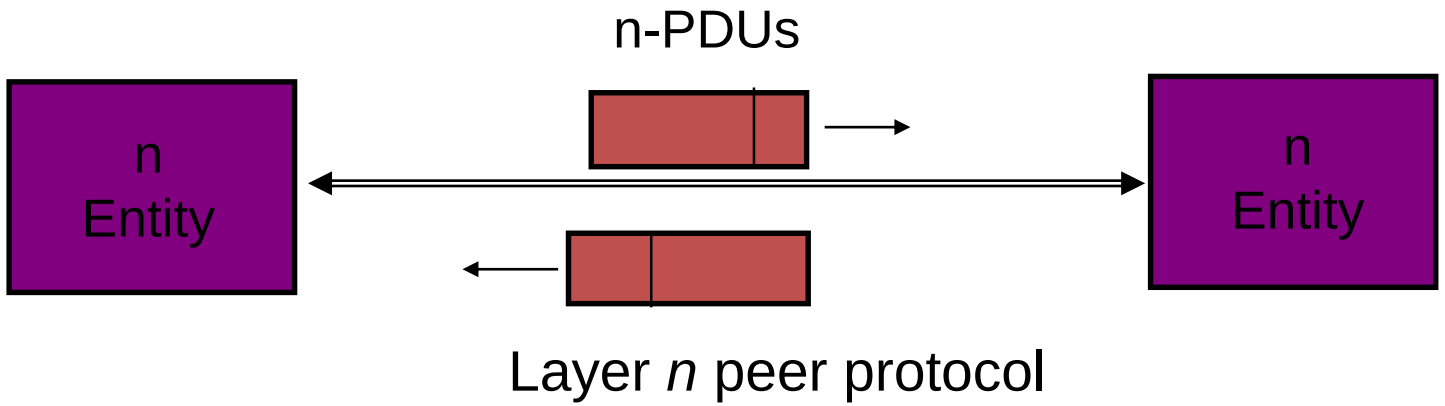
Application layer

The application layer is responsible for providing services to the user.
File Transfer; Mail'; Remote Login



OSI Unified View: Protocols

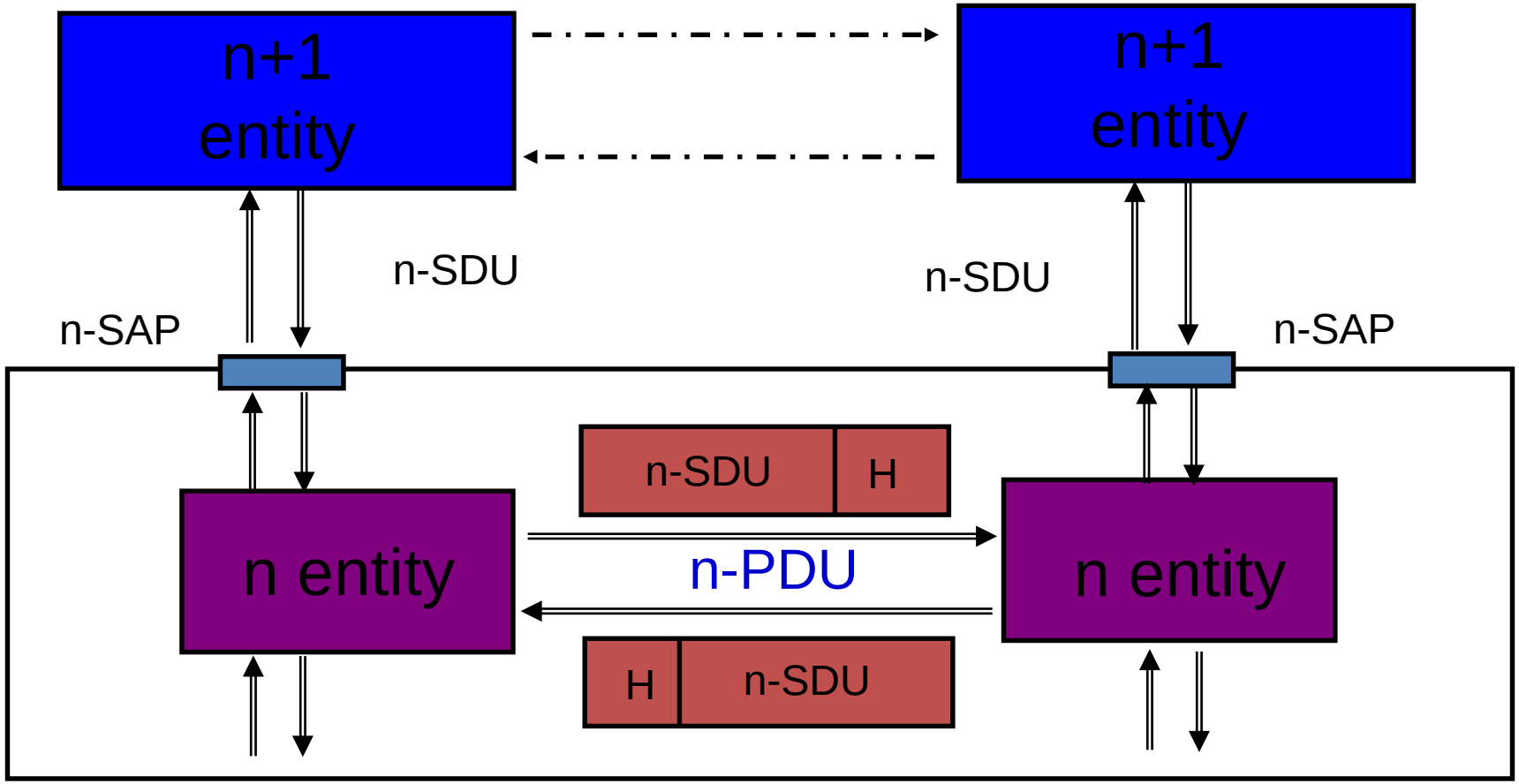
- The processes at layer *n* are referred to as layer *n* entities
- The machines at the same layer use a set of precise and unambiguous rules called the *layer-n protocol*.
- Layer-*n* peer processes communicate by exchanging *Protocol Data Units* (PDUs)



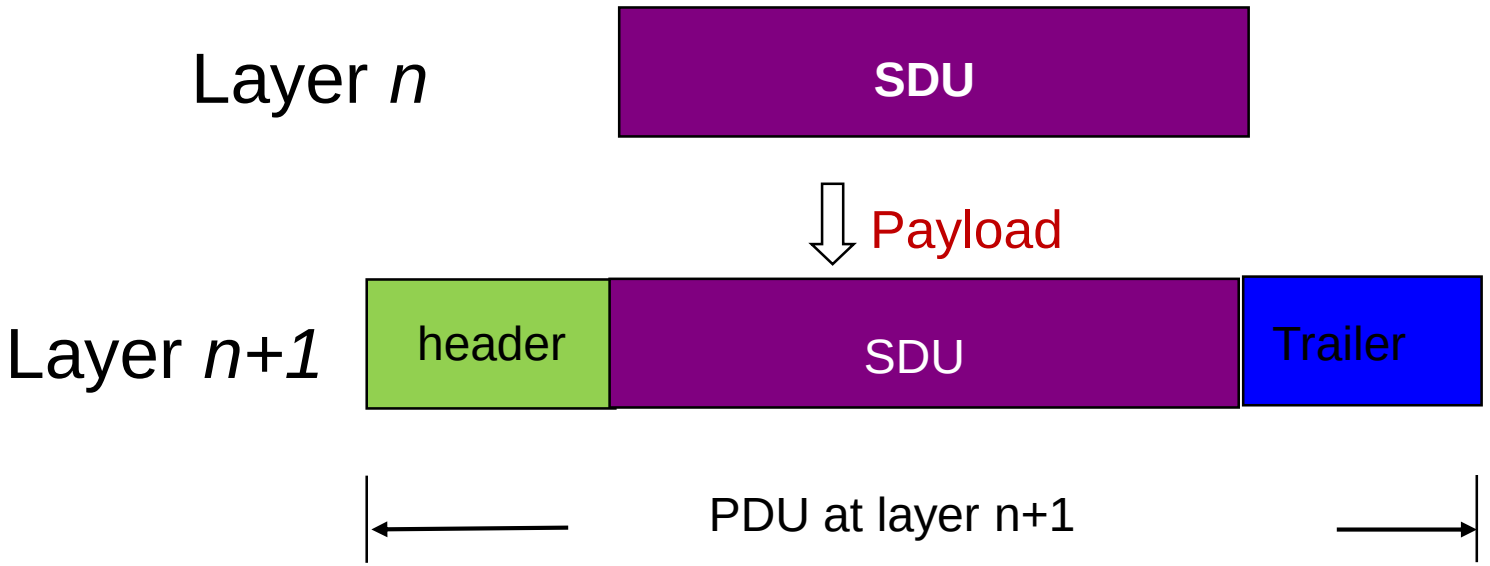
OSI Unified View: Services

- Layer *n+1* transfers information by invoking the services provided by layer *n*
- Services are available at *Service Access Points (*SAP's)
- Each layer passes data & control information to the layer below it until the physical layer is reached and transfer occurs
- The data passed to the layer below is called a *Service Data Unit* (SDU); SDU's are *encapsulated* in PDU's

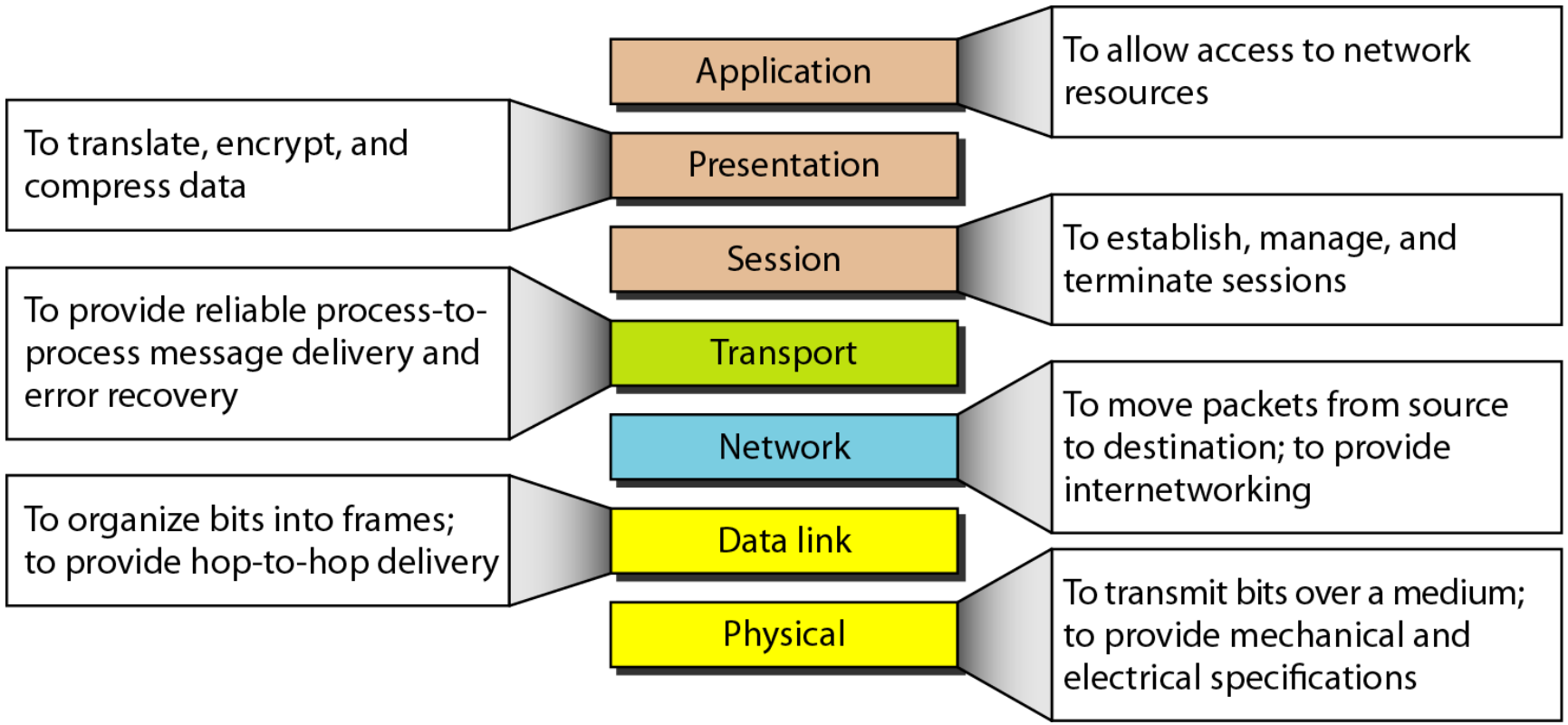
Layers, Services & Protocols

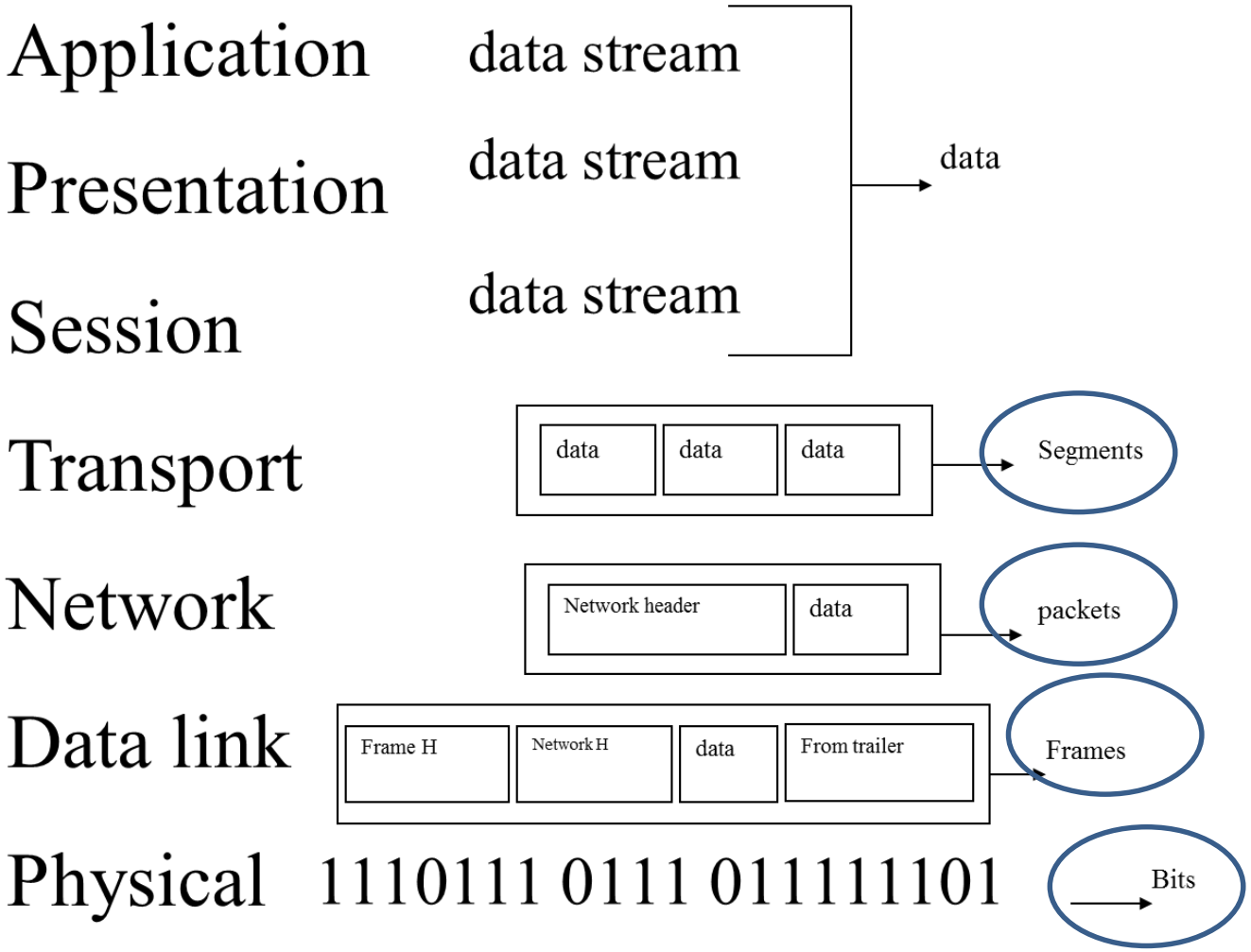


Encapsulation



Summary of layers




Application
data stream
Presentation
data stream
Session
data stream
data
Transport
data
data
data
Segments
Network
Network header
data
packets
Data link
Frame H
Network H
data
From trailer
Frames
Physical
1110111 0111 011111101
Bits

Q1. In the layer hierarchy as the data packet moves from the upper to the lower layers, headers are

a) Removed

b) Rearranged

c) Added

d) Modified