Lab – The Cybersecurity Cube Scatter Quizlet (Instructor Version)

**Instructor Note**: Red font color or gray highlights indicate text that appears in the instructor copy only.

1. Objectives

Identify the three dimensions of the Cybersecurity Cube and the elements of each dimension.

1. Required Resources

* PC or mobile device with Internet access

1. Background / Scenario

The Cybersecurity Cube, also called the McCumber Cube, was developed by John McCumber in 1992. It is a framework or model used to establish and evaluate information and information systems security. The framework relies on the cybersecurity professional to identify information assets with a focus on the core principles of cybersecurity; confidentiality, integrity, and availability. The model is based on three dimensions, each having three elements.

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| Dimension One: **Cybersecurity Principles CIA** |
| * **Confidentiality:** assurance that sensitive information is not intentionally or accidentally disclosed to unauthorized individuals * **Integrity:** assurance that information is not intentionally or accidentally modified in such a way as to call into question its trustworthiness or reliability * **Availability:** ensuring that authorized individuals have both timely and reliable access to information and information systems |
| Dimension Two: **Information (data) States** |
| * **Storage:** data at rest (stored in memory, on a drive, or USB flash drive) * **Transmission:** transferring data between systems * **Processing:** performing operations on data like modification, backup, corrections |
| Dimension Three: **Security Countermeasures or Safeguards** |
| * **Policy and practices:** administrative controls, such as information security policies, procedures, guidelines, and management directives * **Human factors:** ensuring that the users of information systems are aware of their roles and responsibilities. Requires awareness and education programs. * **Technology:** software- and hardware-based solutions designed to protect information systems, like anti-virus, firewalls, and IDS/IPS systems. |

Quizlet Review

Click on the [Quizlet](https://quizlet.com/135368588/cybersecurity-essentials-flash-cards/) website and review the Cybersecurity Essentials - Cybersecurity Cube. You do not need to create an account on the site.

* + 1. Review the list of terms and definitions.
    2. Select the Flashcards icon. Test your knowledge by going through all ten flashcards.
    3. Click the Scatter option in the menu. When prompted, click to start the game.
    4. Drag each term to its definition.