
Deposition Terminology Activity

Participant Guide

Description and Estimated Time to Complete

In this activity you demonstrate your understanding of the terminology of deposition for microsystems. This activity consists of a

- **Crossword puzzle** that tests your knowledge of the terminology and acronyms associated with deposition processes.

If you have not reviewed the unit *Deposition Overview for Microsystems*, you should do so before completing this activity.

Estimated Time to Complete

Allow at least 30 minutes to complete this activity.

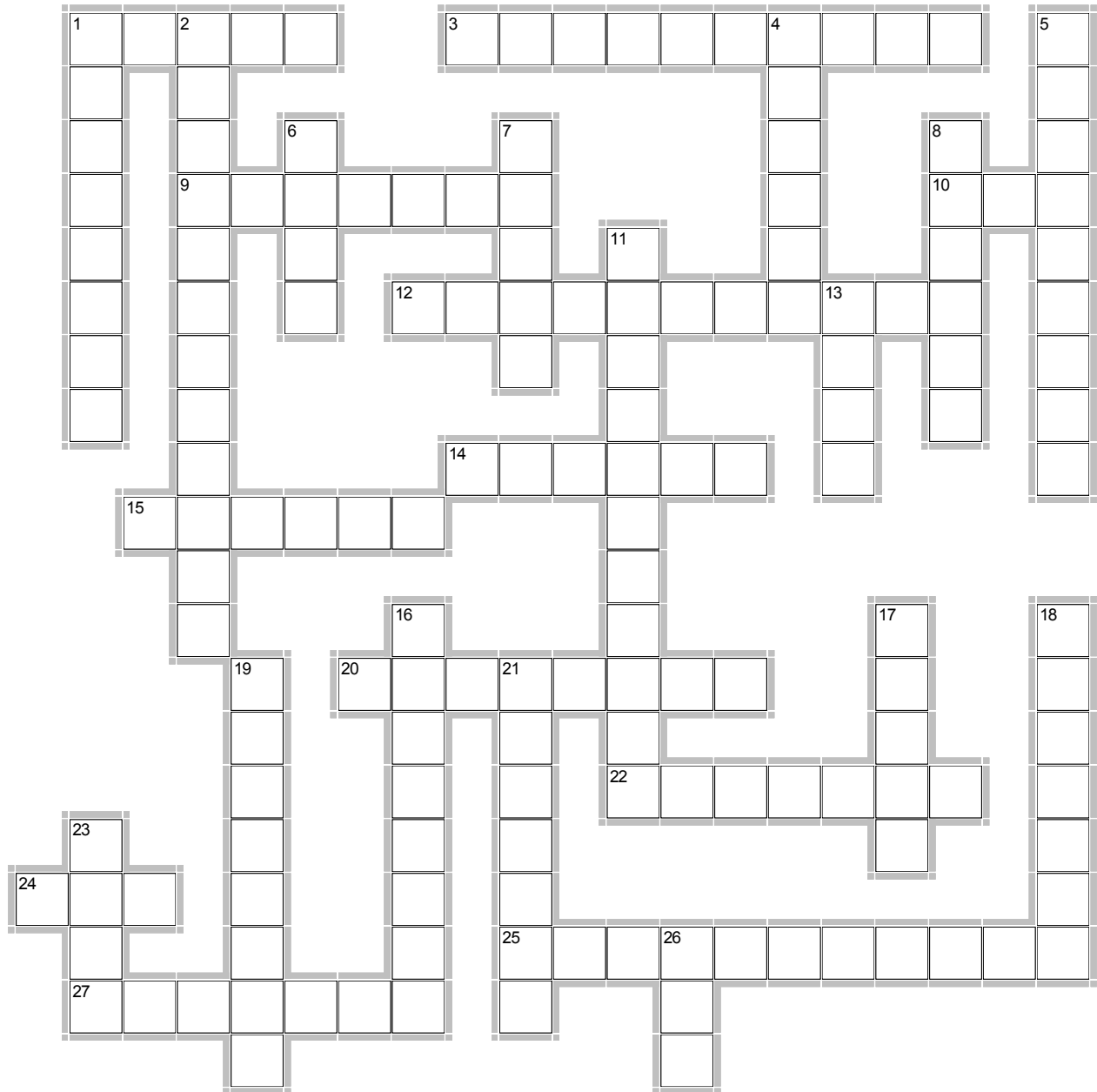
Activity Objective

- Identify the correct terms used for several definitions or statements related to deposition processes.

Activity: Deposition Terminology

Procedure:

Complete the crossword puzzle using the clues on the following page.



EclipseCrossword.com

ACROSS	ANSWERS
1. To heat the source in an evaporation process a(n) _____ or resistive component is used.	
3. A process that deposits a thin film of material onto an object.	
9. In electroplating, the _____ is the electrode that is coated.	
10. Normally used for the deposition of metals and metal alloys.	
12. A deposition process used to deposit a thin film of metal through the use of metal vapors.	
14. The fourth state of matter.	
15. PVD processes require a high _____ to prevent contamination within the deposited film.	
20. Deposition processes in which the desired film material is vaporized either through heat or sputtering, and deposited on the substrate.	
22. A thin film used for isolation, masking, protection and structural purposes.	
24. In CVD processing, a homogeneous reaction occurs in the _____ phase.	
25. A solution through which an electric current may be carried by the motion of ions.	
27. Oxidation process that uses heat to grow silicon dioxide.	

DOWN	ANSWERS
1. Plasma-_____ CVD process (PECVD)	
2. To use an electric current to coat an electrically conductive object with metal.	
4. In a sputtering system, the source material is called the _____.	
5. The process that grows a uniform layer of silicon dioxide on a silicon substrate.	
6. Deposition occurs before photolithography and _____.	
7. A thin film used for conductive and reflective material.	
8. A type of deposition process used primarily to deposit photoresist and SOG.	
11. A structural and piezoresistive thin film.	
13. Plasma consists of electrons, radicals and _____.	
16. The type of reaction that takes place in a CVD process.	
17. A thin film grown to be used as a mask or sacrificial layer.	
18. In CVD processing, a heterogeneous reaction takes place at the _____ of the wafer.	
19. In CVD, _____, temperature and the reactant's concentration control the film thickness.	
21. A PVD process by which atoms are ejected from a source material.	
23. In electroplating, the metallic ions of the _____ in the electrolyte carry a positive charge.	
26. Chemical Vapor Deposition	

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