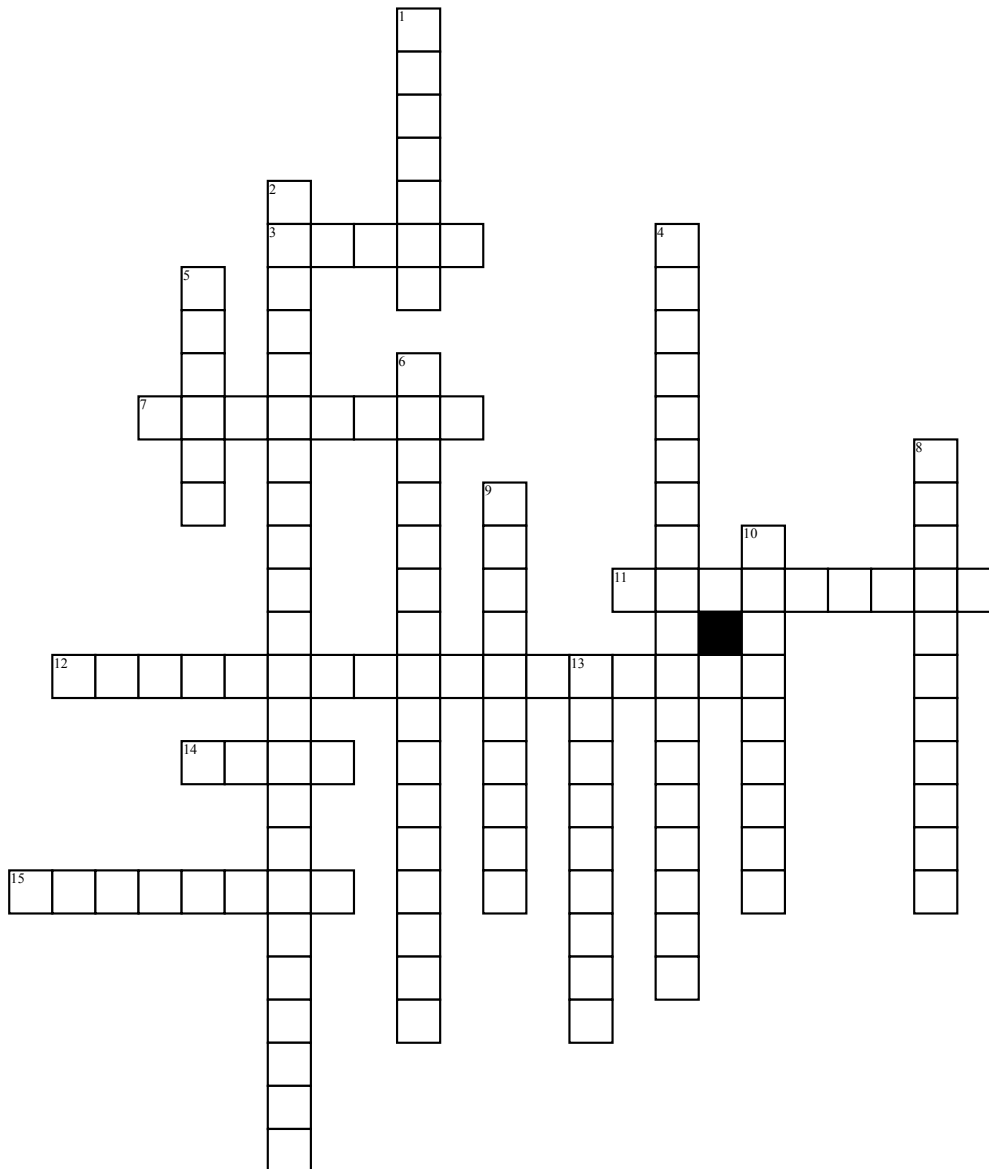


X-RAY TUBES



Across

- 3.** The positive electrode of an x-ray tube
7. The anode is constructed of this material due to its high melting point
11. The principle that spreads heat over a greater area of the anode and allows the effective focal spot to be smaller than the actual focal spot
12. Occurs when no more electrons can be boiled off the filament; limits x-ray tubes to a maximum of 1000 mA
14. How ninety-nine percent of an electrons kinetic energy is converted

15. A coil of wire; source of electrons

Down

- 1.** The negative electrode of an x-ray tube
2. Graph that allows radiographers to determine the maximum technical factor combination that is safe for the x-ray tube
4. The process of boiling off electrons at the filament
5. Environment inside the x-ray tube once all air has been removed

- 6.** Type of radiation emitted outside the tube housing; must be less than 1 mGy/hr at 1 m from the tube
8. Keeps the electron cloud together before they leave the cathode
9. Causes uneven distribution of x-ray intensity between the cathode and anode
10. The product of kVp, mA, and time
13. Area where electrons strike the anode