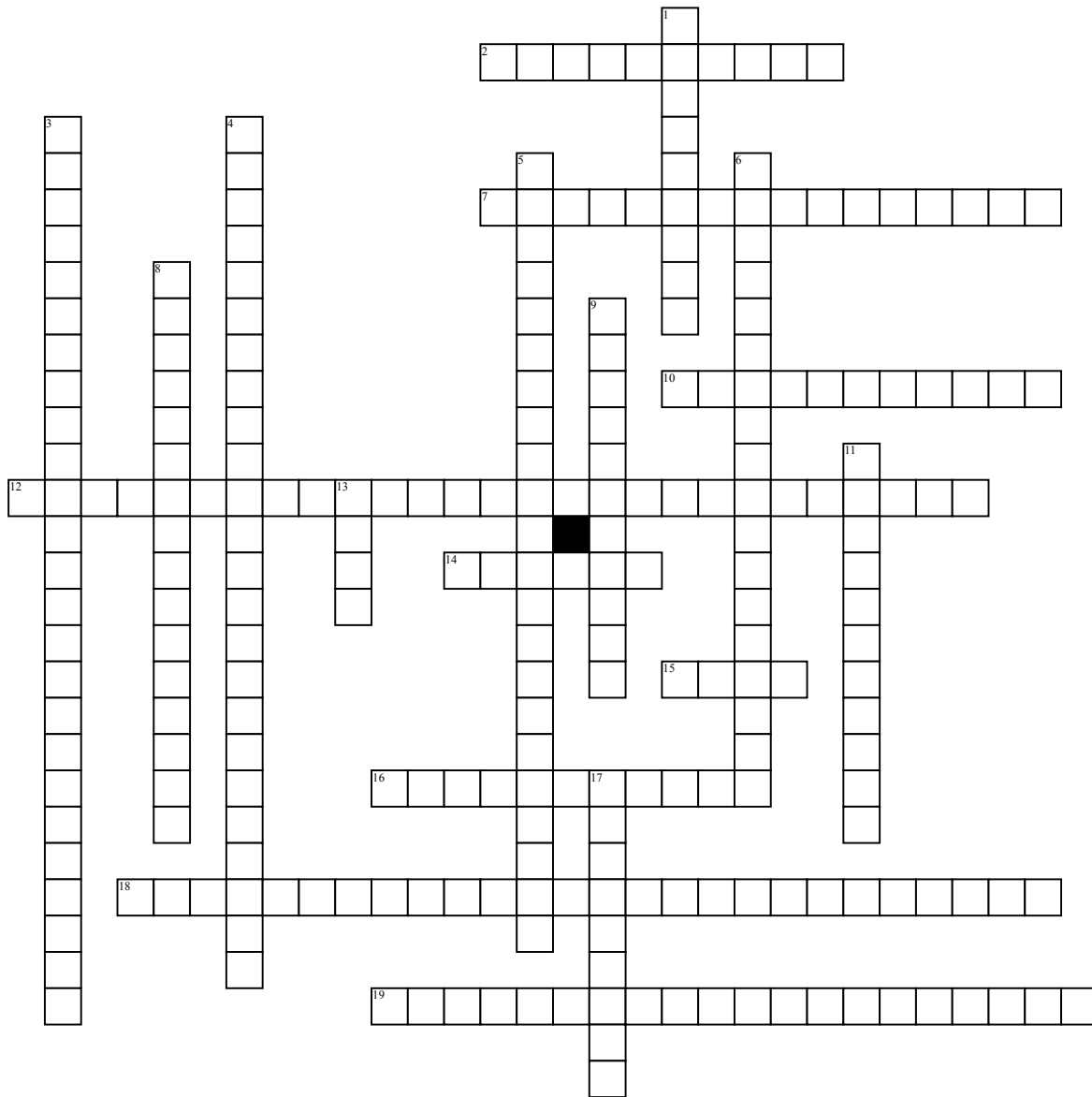


Chapter 1: Introduction to Imaging and Radiologic Sciences



Across

2. Any process by which a neutral atom gains or loses an electron, acquiring net charge
7. Branch of radiology involved in the treatment of disease by means of x-rays/radioactive substances
10. Synonym for x-ray
12. Visualization of deep structures of the body by recording the reflections of pulses of ultrasonic waves directed into the tissue.
14. Capacity to operate or work
15. Electromagnetic radiation of short wavelength that is produced when electrons moving at high velocity are suddenly stopped
16. Making of records of internal structures of the body by passing x-rays/gamma rays through the body to act on specially sensitized film or an imaging plate/system

18. The creation of sectional images of the body that demonstrate the physiologic function of various organs and system

19. An advanced-level radiographer who extends the capacity of the radiologist in the diagnostic imaging environment, enhancing patient care

Down

1. Energy transmitted by waves through space or through a medium
3. Branch of radiology that involves the introduction of radioactive substances into the body for both diagnostic/therapeutic purposes
4. Process of using a magnetic field and radiofrequencies to create sectional images of the body
5. Term applied to an individual who performs radiography, radiation therapy, or nuclear medicine technology.

6. Recording of a predetermined plane in the body using an x-ray beam that is measured, recorded, and then processed by a computer for display on a monitor.

8. Measurement of bone density using dual-energy x-ray absorptiometry (DEXA or DXA) to detect osteoporosis.

9. Physician who specializes in the use of x-rays and other forms of both ionizing and nonionizing radiation in the diagnosis and treatment of disease

11. Radiography of the breast

13. Radiologic procedures for the diagnosis and treatment of disease of the cardiovascular system.

17. Branch of the health sciences dealing with radioactive substances and radiant energy and with the diagnosis and treatment of disease by means of both ionizing and nonionizing radiation