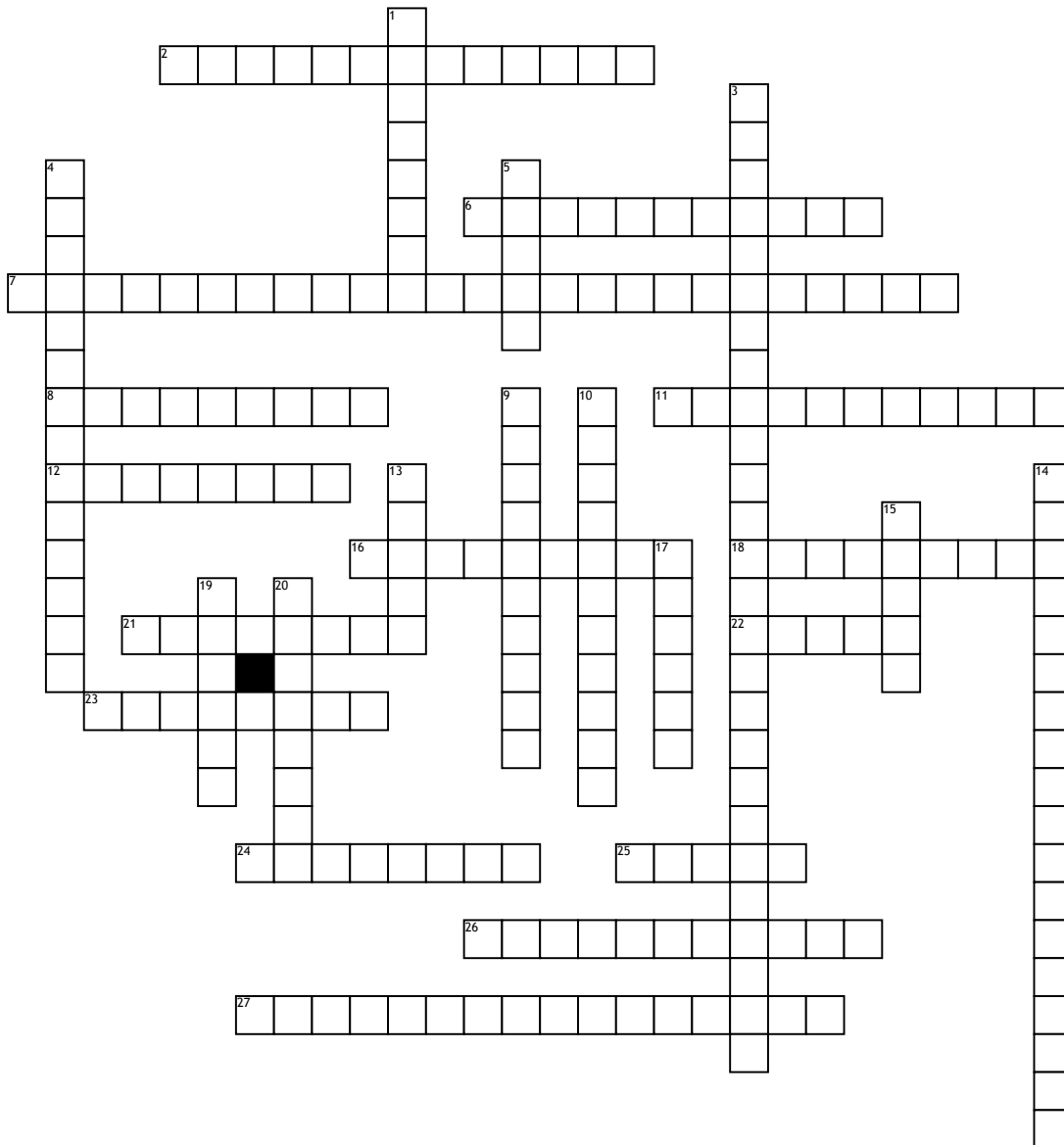


Name: _____

CT Equipment and Reconstruction Terms



Across

- 2. the physical component consisting of multiple detectors that efficiently absorb the transmitted radiation and accurately convert it to an electrical signal for display on a computer workstation.
- 6. controls the gray level of an image (the contrast)
- 7. method by which images acquired in the axial plane may be reconstructed in the coronal or sagittal plane.
- 8. device that transmit electrical energy and allow continuous rotation of the x-ray tube for volumetric acquisition.
- 11. controls the brightness of an image within a certain range.
- 12. undesirable feature or density in an image not representative of anatomy.
- 16. adjustment of the window level and window width (brightness and image contrast) by the user.
- 18. preliminary image of a CT examination that is used to plan the range of the scan; depending on the vendor, it may be called a tomogram or a scout.

- 21. a special diode tube that converts electrical energy into x-rays.
- 22. what the patient lays on when getting a x-ray or CT
- 23. the simplest type of beam restricting device, constructed of a flat piece of lead that has a hole in it
- 24. predetermined procedure; in CT, protocol refers to the parameters of an examination.
- 25. picture element; an individual matrix box; each pixel is assigned a CT number.
- 26. computer that serves as a digital post- processing station or an image review station.
- 27. includes the keyboard, mouse, and multiple monitors.

Down

- 1. what the images are sent to for image reconstruction.
- 3. technique used to view vessels as demonstrated in CT angiography.
- 4. refers to acquisition of a volume of CT data; the patient moves through the gantry with uninterrupted rotation and output of the x-ray tube; also may be referred to as helical or spiral scanning.

- 5. identifies the relationship between slice thickness or beam collimation and the distance the table travels every time the tube rotates.
- 9. hardware and software that allow computers to be connected for the purpose of sharing resources and interacting.
- 10. located immediately below the tube window where the entrance shutters limit the x-ray beam field size.
- 13. section of the object that is being scanned.
- 14. Radiographic examination that displays sectional anatomic images in axial, sagittal, or coronal planes.
- 15. volume element; corresponding to a three-dimensional tissue volume, having height, width, and depth; each pixel represents a voxel when an image is viewed.
- 17. component of a CT system that houses the x-ray tube, detectors, and collimators.
- 19. series of rows and columns (of pixels) that give form to the digital image
- 20. numbers that represents the attenuation value for each pixel, relative to water.