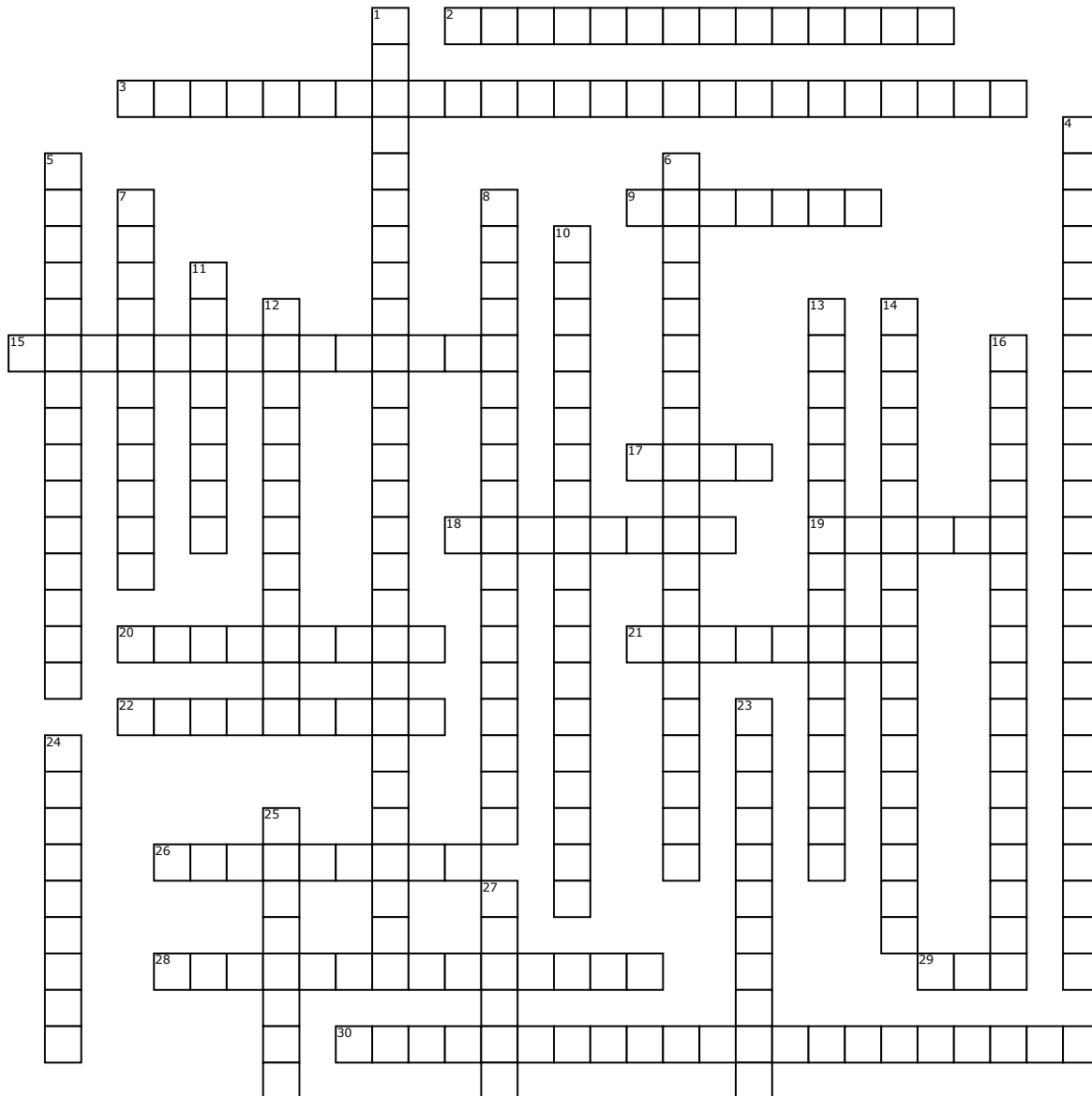


Image Reconstruction



Across

2. now outdated, an arrow processor is a CPU designed frequently used for CT image reconstruction.

3. image reconstruction that is automatically produced during scanning

9. all measurements obtained from the detector array and sitting in the computer waiting to be made into an image

15. applied to the scan data before back projection occurs to minimize artifacts

17. a complete set of ray sums

18. instructions that tell the computer what to do and when to do it

19. the detector senses each arriving ray and senses how much of the beam was attenuated

20. saving studies on auxiliary devices for future viewing.

21. portions of the computer that can be physically touched

22. once the computer has processed the raw data assigning one HU value to each pixel

26. the absolute center of the gantry

28. type of computer memory that is imprinted at the factory and is used to store frequently used instructions such as those required for starting the system

29. the path that the x-ray beam takes from the tube to the detector

30. component that interprets computer program instructions and sequences tasks. It contains the microprocessor, the control unit, and the primary memory.

Down

1. process of using the same raw data to later generate a new image

4. a technique for expressing a waveform as a weighted sum of sines and cosines

5. the area, within the gantry, from which the raw data are acquired.

6. discrete fourier transformer's inverse. FFTs are great importance to a wide variety of applications, including acoustical and image analysis

7. ancillary pieces of computer hardware designed to feed data into the computer.

8. the system accounts for the attenuation properties of each ray sum and correlates it to the position of the ray

10. the simplest type of a mathematical method of estimating the value of an unknown function using the known value on either side of the function.

11. an essential component of all CT system. It saves the thousands of bits of data acquired with each gantry rotation

12. ancillary pieces of computer hardware designed to accept processed data from the computer

13. a method to study waves of many different sort and also to solve several kinds of linear differential equations

14. the section of data selected for display on the image

16. type of computer memory that includes instructions that are frequently changed, such as the data used to reconstruct images.

23. specific area within the SFOV that will be displayed on the center of the image

24. a precise set of steps to be performed in specific order to solve problem.

25. all measurements obtained from the detector array and sitting in the computer waiting to be made into an image

27. device that store data