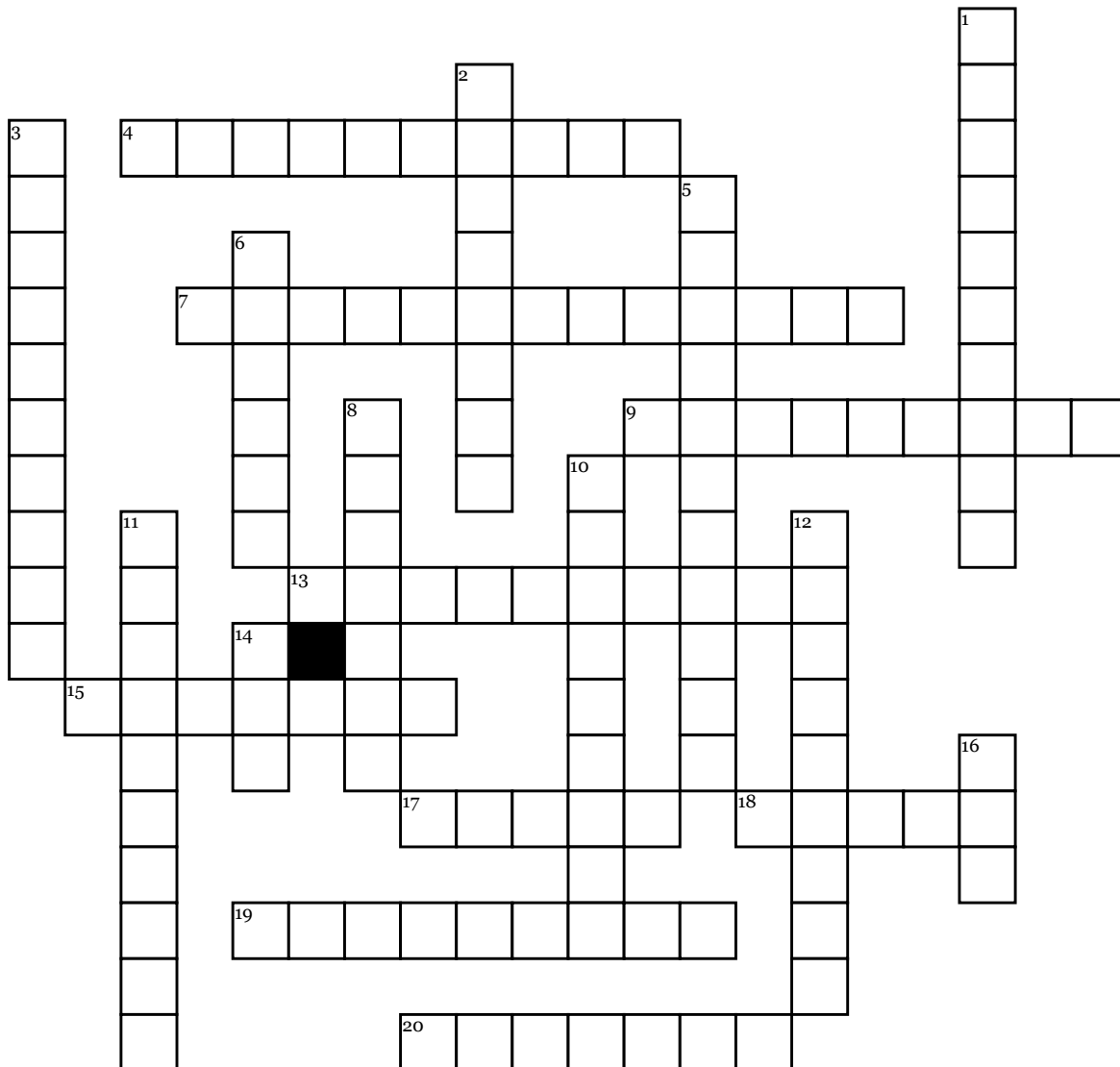


Ultrasound Physics



Across

- 4.** Part of an imaging instrument that provides the pulse-delay sequences for transmit focusing and for dynamic receive focusing
- 7.** Converts all negative voltages into positive voltages
- 9.** Power divided by area equals
- 13.** The fraction of time that the transducer is actively producing sound energy
- 15.** Data in discrete units
- 17.** Smallest building block of a digital picture

18. Unit for frequency

- 19.** The science of identifying and measuring the characteristics of an ultrasound beam relevant to its potential to cause bioeffects
- 20.** Units for pressure

Down

- 1.** Conversion of acoustic energy into heat
- 2.** Any echo signal whose displayed position does not correspond to the actual position of a reflector in the body
- 3.** Less than 20Hz

- 5.** Reduction in the amplitude and intensity of a sound wave as it propagates through a medium
- 6.** The duration of a single cycle
- 8.** A transducer array consisting of ring-shaped piezoelectric elements arranged concentrically, along a central disk
- 10.** Type of "bubble-bursting" cavitation
- 11.** Temperature a PZT element becomes depolarized
- 12.** Number of cycles per second
- 14.** Acronym for "binary digit"
- 16.** Abbreviation for lead zirconate titanate