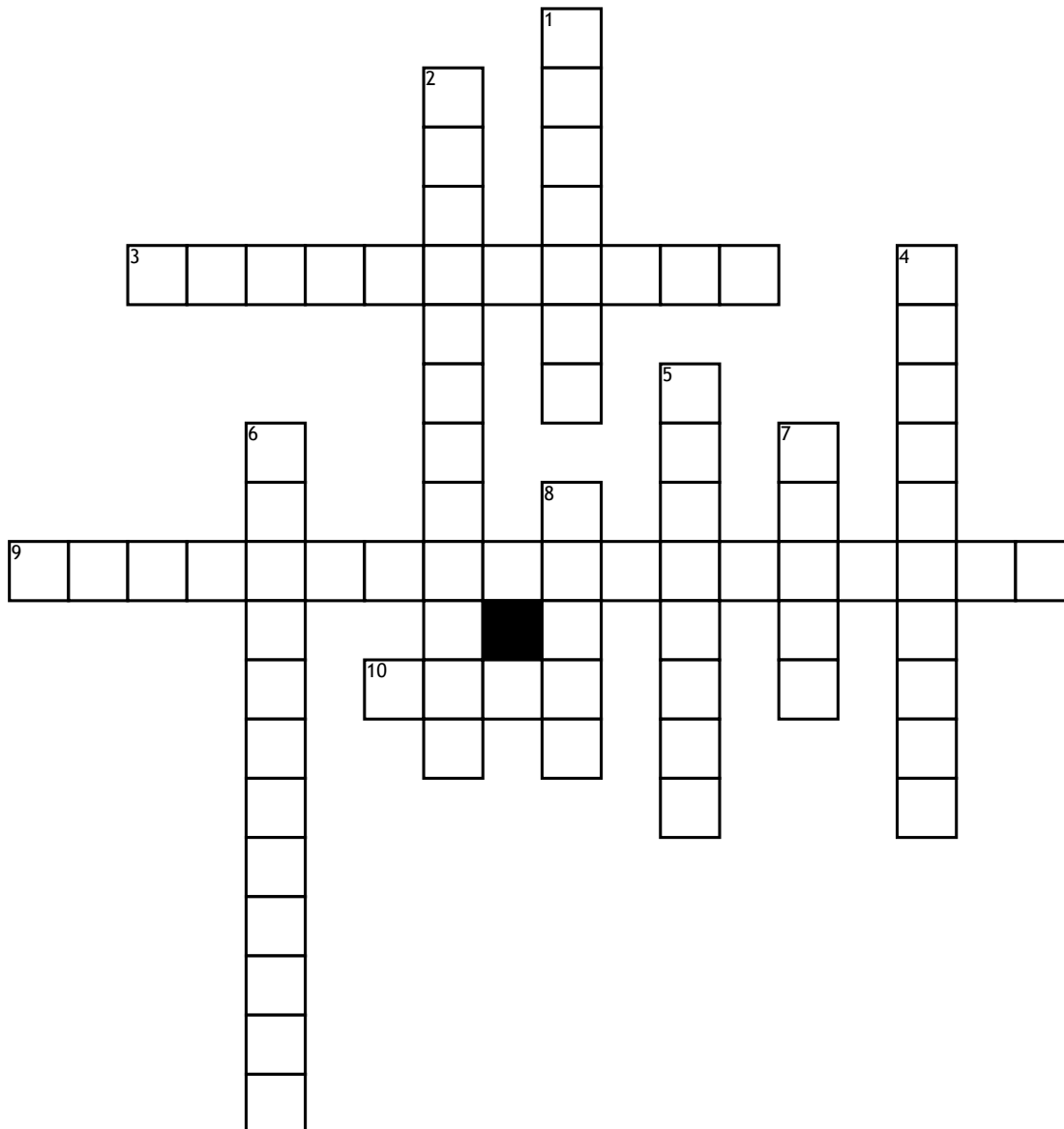


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# MRI



**Across**

- 3. stray magnetic field that exists outside one imager.
- 9. ability of an imaging process to distinguish adjacent soft tissues from one another. This is the principal advantage of MRI
- 10. Single or multiple loops of wire designed to produce a magnetic field from current flowing through the wire or to detect a changing magnetic field by voltage induced in the wire.

**Down**

- 1. MRI technique used to minimize motion artifacts, in which conventional electrocardiography or photopulse sensing is used to trigger the acquisition of the image data. Gating times the data acquisition with physiologic motion.
- 2. spin-spin, or transverse, relaxation time; characteristic time constant for loss of phase coherence among spins oriented at an angle to the main magnetic field owing to interactions between the spins; never exceeds T1

- 4. Contrast medium base used in MRI. toxic to the body but deemed safe by pharmaceutical companies through the use of chelates that surround the molecule, allowing the body to excrete the metal post-injection.
- 5. Atmospheric gases such as nitrogen and helium that have been cooled sufficiently to condense into a liquid.
- 6. spin-lattice, or longitudinal, relaxation time; characteristic time constant for spins to tend to align themselves with the external magnetic field.
- 7. unit of magnetic flux density in the older CGS system. Currently preferred unit in tells; 1 equals 10,000G
- 8. preferred (SI) unit of magnetic flux density or magnetic field intensity; 1 T is equal to 10,000G (gauss, the older (CGS) unit; 1 T also equals 1 newton/amp-m