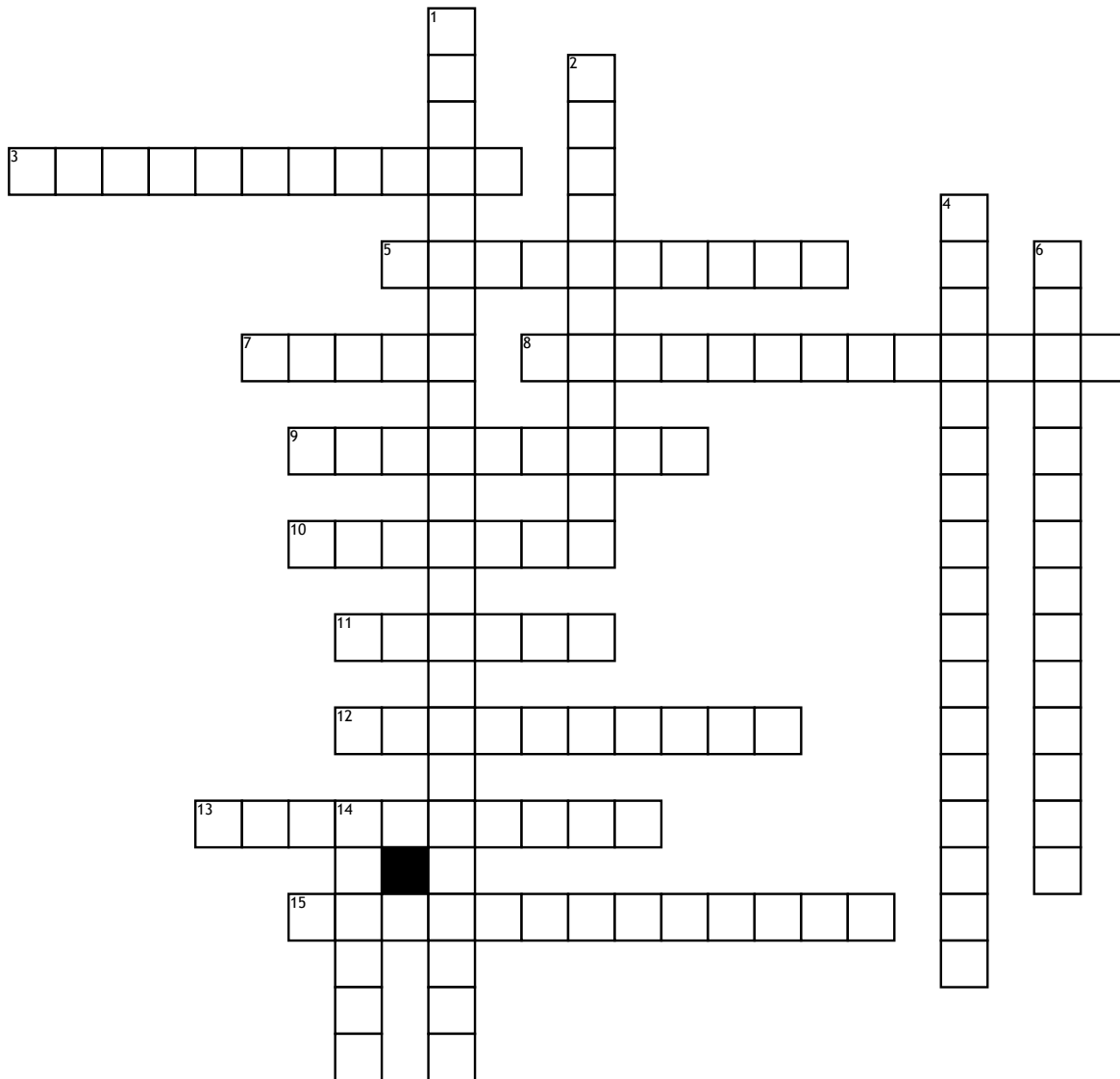


Optics



Across

3. What lies opposite to the refracted ray separated by the line of the two media?

5. The separation of white light into its spectrum is called _____.

7. 3.00×10^{10} m/s represents the speed of _____.

8. The distance from the surface of the water to where the object appears to be (the virtual image) is called the _____.

9. A great deal of incident light undergoes total internal reflection inside the diamond. A light ray can bounce around several times inside the diamond before eventually exiting through a top face of the gem stone. This causes a _____ effect.

10. Light bends _____ the normal when the speed of light in the second medium is less than the speed of light in the first medium.

11. A rainbow would form complete _____ if the ground were not in the way.

12. The bending of light when it travels from one material into another is called _____.

13. This can happen on a lake surface when light travelling at slightly different speeds through air layers of different temperatures.

15. The angle of incidence that produces a refracted angle of 90 degrees is called the _____.

Down

1. If you increase the angle of incidence past the critical angle, the refracted ray will no longer exit the medium. Instead, it will reflect back into the medium. This is called _____.

2. Technology that use light to transmit information along a glass cable.

4. The ratio of the speed of light in a vacuum to the speed of light in that medium is known as _____.

6. A _____ is an optical device that returns any incident light back in exactly the same direction from which it came.

14. This can appear when light is travelling from cool air into warmer air.