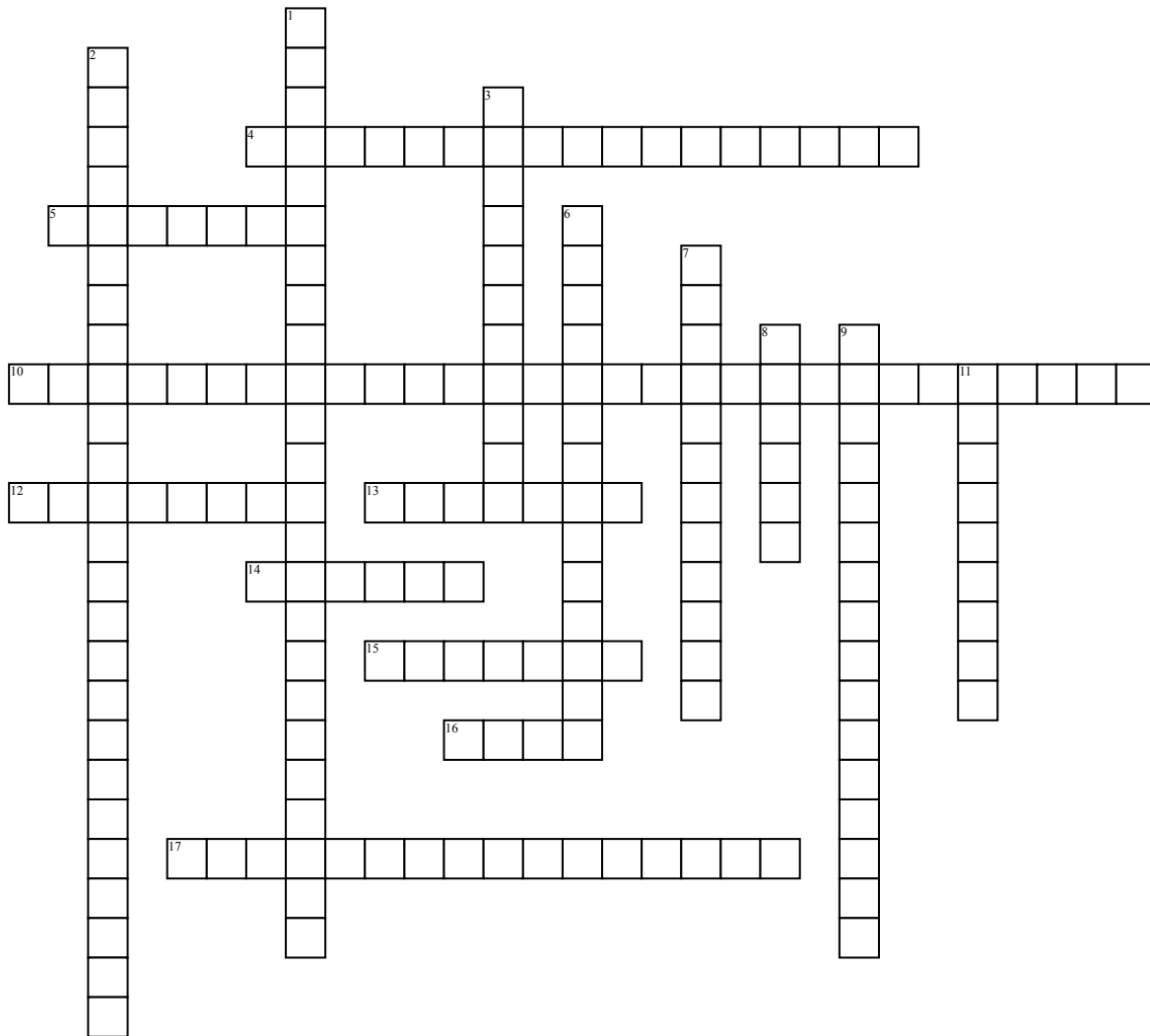


# introduction and basic concepts to thermodynamics



## Across

4. what are the types of equilibrium in thermodynamics  
 5. The temperature scale used in the SI scale today is the..... scale?  
 10. One of the most fundamental laws of nature is..?  
 12. What is the surface that separates the system from its surroundings called?  
 13. Any change that a system undergoes from one equilibrium state to another is called a  
 14. one example of derived dimensions is...?

15. what relationship is the SI system is based on/

16. The difference between the absolute pressure and the local pressure is called ..... pressure?  
 17. The actual pressure given at a given position is called the

## Down

1. when every term in the equation have the same unit it means that the equation is ...?  
 2. what is the direction of the actual process that occur in the second law of thermodynamics?  
 3. what kind of approach is the static thermodynamic approach?

6. The number of properties required to fix the state of a system is given by the....?

7. what is the region outside the system called?  
 8. The quantity of matter or a region in space chosen for studies called ?  
 9. The first step to solve a thermodynamics problem is by writing the ....?  
 11. What is the macroscopic approach of thermodynamics that does not require knowledge of the behavior of individual particles ?