

Animation Worksheet: Muffler

Name: _____ **Date:** _____

1. An exhaust muffler is a device on a vehicle's exhaust system that reduces the _____ produced by the engine's exhaust gases.
2. To reduce noise, the muffler uses a clever system of _____ and perforations.
3. When the engine runs, it produces _____ sound waves, or noise, along with exhaust gases.
4. The muffler's job is to _____ or reduce these sound waves before they exit the tailpipe.
5. _____ are metal chambers or pathways that direct exhaust gases through a specific route.
6. _____ are small holes in the walls of the tubes that let some sound waves pass through into other chambers.
7. The baffles force exhaust gases and sound waves to _____ multiple times.
8. This design causes sound waves to reflect and _____ with one another.
9. When sound waves collide and cancel each other out, it is a process called _____.
10. By using destructive interference, the muffler significantly lowers the _____ level of the vehicle's exhaust without blocking the flow of gases.