

Animation Worksheet: Engine Oil Level & Quality Sensor

Name: _____ Date: _____

1. The automotive engine oil sensor uses _____ to monitor oil level, temperature, and quality.
2. This sensor operates based on the principle of how the _____ properties of materials change in response to various factors.
3. Capacitance is defined as the ability of a component to store an _____.
4. The sensor consists of two _____ or plates positioned inside the oil pan or reservoir.
5. The material located between these two conductive plates is called the _____.
6. As engine oil degrades through oxidation or contamination, its _____ increases.
7. A change in the oil's molecular structure makes it less capable of _____ the electric field between the plates.
8. For oil level monitoring, the capacitance directly correlates with how much _____ is in the pan or reservoir.
9. Some advanced systems may combine capacitance data with _____ to determine if a maintenance action is necessary.
10. A _____ in capacitance will trigger a warning light on the vehicle's dashboard to alert the driver of an oil issue.