

Name \_\_\_\_\_

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

1) What types of coolant are used in vehicles?

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2) Why is a 50/50 mixture of antifreeze and water commonly used as a coolant?

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3) What are the differences among IAT, OAT, HOAT, and PHOAT coolants?

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4) What are some of the heavy metals that can be present in used coolant?

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5) What is the difference between galvanic activity and electrolysis?

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## Answer Key

Testname: ENGINES9\_SHORT 13

- 1) All factory installed coolant is ethylene-glycol based and currently includes: OAT, HOAT, and PHOAT formulations.  
Page Ref: 152-153
- 2) A 50/50 mixture provides the best combination of freezing protection and heat transfer ability of the coolant.  
Page Ref: 154
- 3) IAT contains silicate and phosphates and is used in vehicles older than 1996. OAT, HOAT, and PHOAT are used in many vehicles and include their own additive package.  
Page Ref: 152-153
- 4) Some of the heavy metals found in used coolant include lead, aluminum, and iron.  
Page Ref: 157
- 5) Galvanic activity is voltage production without an outside source of voltage, whereas electrolysis is created when the vehicle has a poor ground connection.  
Page Ref: 156