

Grade 10: Acme Chemical Items

7 A scientist at Acme Chemical found an unlabeled container. He knew the contents were HCl, NaOH, or NaCl. Using Chart A on page 40:

- Describe **four** tests that can be used to determine which chemical was in the container.
- For **each** test, tell how it would help him determine which chemical is in the container.

Test 1:
Explain how it will determine the chemical:
Test 2:
Explain how it will determine the chemical:
Test 3:
Explain how it will determine the chemical:
Test 4:
Explain how it will determine the chemical:
Note: Students have almost two pages for their response in the actual test booklet

Item information:

Score Points: 4
EALR Strand: IP Inquiry and Problem Solving in Science and Technology
Learning Target: IP07 2.2.2 Designing and Testing Solutions
Research, model, stimulate, and test alternative solution to a problem.
Item Characteristic: e: Given a problem and a proposed scientific solution, item may ask students to design a test to determine the identification for an unknown item or substance.