Name: _____ Date: _____ Class: _____

# Analysis of *RS-25: The Clark Kent of Engines for the Space Launch System* Pre-Assessment Answer Key

***Instructions:*** Use evidence found in the article, *RS-25: The Clark Kent of Engines for the Space Launch System*, to answer the following questions.

1. How many total engines will be used for the Space Launch System, and with which fuels will these engines be powered?

   According to paragraph 2 of the article, four engines will used for the SLS, and they will be powered by liquid hydrogen and liquid oxygen.

2. What is a Space Launch System (SLS)?

   The SLS is the rocket on which the engines will be used.

3. How might one describe the amount of pressure that accompanies the engine when it is in use?

   There will be A LOT of pressure within the engine. The article states that the pressure can be compared to the pressure a submarine feels when it is three miles below sea level.

4. The new SLS will use four, rather than three, engines. What recommendations would you make regarding the mass of each engine?

   I would recommend that the mass of each engine be very low.

5. What recommendations would you make regarding the materials that should be used to create the engine and engine turbines?

   The materials used for the engine should be lightweight, very strong, and not oxidize.