

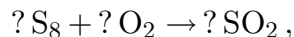
This print-out should have 10 questions. Multiple-choice questions may continue on the next column or page – find all choices before answering. The due time is Central time.

Mlib 01 3037

04:02, general, multiple choice, > 1 min, fixed.

001

Balance the equation



using the smallest possible integers. What is the SUM of the coefficients in the balanced equation?

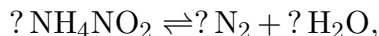
1. 13
2. 14
3. 15
4. 17
5. 19

Mlib 01 3033

04:02, general, multiple choice, > 1 min, fixed.

002

Balance the equation



using the smallest possible integers. The coefficient of H₂O is

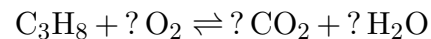
1. 1.
2. 2.
3. 3.
4. 4.
5. 8.

Mlib 01 3015

04:02, general, multiple choice, > 1 min, fixed.

003

Balance the equation



using the smallest possible integers. The coefficient of H₂O is

1. 1.
2. 2.
3. 3.
4. 4.
5. 6.

Msci 03 0102

04:03, general, multiple choice, > 1 min, fixed.

004

Propane (C₃H₈) burns in oxygen to produce carbon dioxide and water. What is the correct form of the chemical equation that describes this reaction?

1. $2C_3H_8 + 7O_2 \rightarrow 6CO + 8H_2O$
2. $C_3H_8 + 5O_2 \rightarrow 3CO_2 + 4H_2O$
3. $C_3H_8 + O \rightarrow CO_2 + 4H_2O$
4. $C_3H_8 + O_2 \rightarrow CO_2 + H_2O$

Msci 03 0124

04:03, general, multiple choice, > 1 min, fixed.

005

When aluminum oxide (Al₂O₃) is formed as the only product from aluminum and molecular oxygen, the sum of the coefficients on the reactant side is

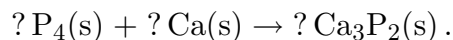
1. 5.
2. 3.
3. 7.
4. 9.

Mlib 01 4003

07:09, general, multiple choice, > 1 min, fixed.

006

Balance the equation and identify the type of reaction for



1. 1; 6; 2 — synthesis
2. 2; 6; 2 — synthesis
3. 1; 6; 2 — decomposition
4. 2; 6; 2 — decomposition
5. 1; 6; 2 — redox
6. 2; 6; 2 — redox

Mlib 01 4007

07:09, general, multiple choice, > 1 min, fixed.

007

Classify the reaction



1. combustion
2. synthesis
3. decomposition
4. water forming

Msci 04 0601

07:12, general, multiple choice, > 1 min, fixed.

008

Select the most active metal in terms of displacement reactions.

1. Ca
2. Zn
3. Cu

4. Al

Mlib 75 0137

07:12, general, multiple choice, > 1 min, fixed.

009

Which of the following metals is most likely to displace magnesium from one of its compounds?

1. Ca
2. Be
3. Al
4. None of the choices is correct.

Mlib 08 0029

07:12, general, multiple choice, > 1 min, fixed.

010

Which one of the following reactions would you predict would not occur?

1. $3 \text{Na} + \text{AlCl}_3 \rightarrow 3 \text{NaCl} + \text{Al}$
2. $\text{Zn} + \text{CuSO}_4 \rightarrow \text{ZnSO}_4 + \text{Cu}$
3. $\text{Pb} + 2 \text{NaCl} \rightarrow \text{PbCl}_2 + 2 \text{Na}$
4. $\text{Fe} + 2 \text{HCl} \rightarrow \text{FeCl}_2 + \text{H}_2$