



ES Science Grade 8

Smith ES Science, 8 Unit_2

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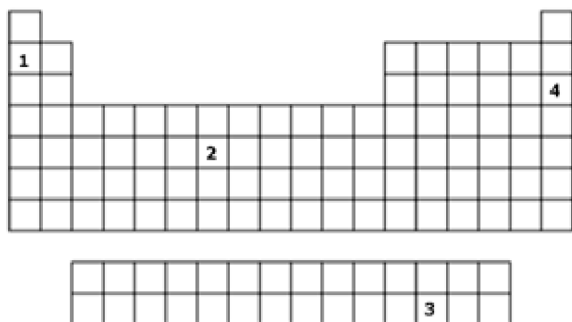
WAKE COUNTY SCHOOLS

2013 - 2014

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1. Use the blank periodic table to answer the question.



Which characteristic would *best* describe the element in the box numbered "4"?

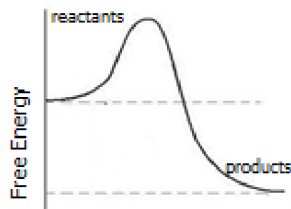
- A. malleable
 B. poor conductor
 C. solid
 D. synthetic chemical
2. Review the table below.

Substance	Melting Point (°C)	Boiling Point (°C)
Water	0	100
Ethanol	-117	79
Propane	-190	-42
Table salt	801	1,465

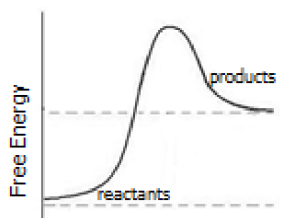
At room temperature (approximately 20°C), what *best* describes propane's state of matter?

- A. gas
 B. liquid
 C. plasma
 D. solid

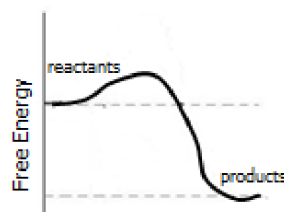
3. All chemical reactions require energy. One type uses up energy as it progresses from reactants to products and the other type produces energy as it progresses from reactants to products. The diagrams show chemical reactions in a graph form with the amount of energy on the y-axis. Which graph shows the type of chemical reaction that uses up energy as it progresses?



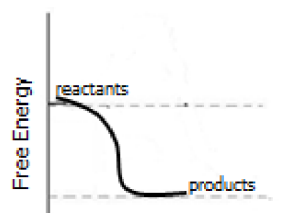
A. Reaction time



B. Reaction time

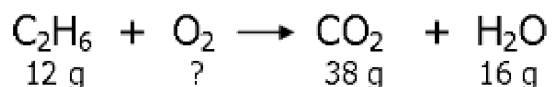


C. Reaction time



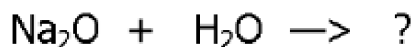
D. Reaction time

4. Review the chemical reaction shown.



The reaction shows the reactants and products as well as some of their masses. Which number *most accurately* shows the mass (in grams) of oxygen (O_2) that is required for this reaction to occur?

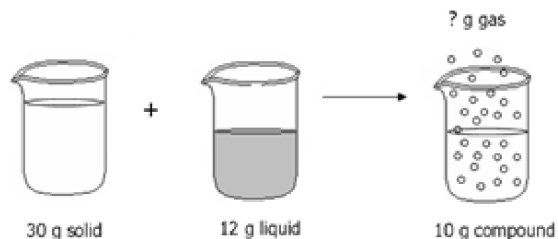
- A. 12
B. 36
C. 42
D. 54
5. Review the reactants in the chemical reaction shown.



How many atoms of oxygen must be present in the product of this reaction?

- A. 1
B. 2
C. 4
D. 6

6. Review the chemical reaction shown below.



In the reaction, 30 g of a solid reacts with 12 g of a liquid to produce a gas and a compound with a mass of 10 g. Which value *most accurately* shows the mass of the gas produced in this reaction?

- A. 10 g
B. 12 g
C. 30 g
D. 32 g

#	Answer	Objective
1.	B	Obj : 8.P.1.2. Explain how the physical properties of...
2.	A	Obj : 8.P.1.3. Compare physical changes such as size,...
3.	B	Obj : 8.P.1.3. Compare physical changes such as size,...

#	Answer	Objective
4.	C	Obj : 8.P.1.4. Explain how the idea of atoms and a ba...
5.	B	Obj : 8.P.1.4. Explain how the idea of atoms and a ba...
6.	D	Obj : 8.P.1.4. Explain how the idea of atoms and a ba...

Objectives Measured:	Items	Questions measuring this objective
Obj : 8.P.1.2. Explain how the physical properties of...	1	1
Obj : 8.P.1.3. Compare physical changes such as size,...	2	2, 3
Obj : 8.P.1.4. Explain how the idea of atoms and a ba...	3	4, 5, 6

#	Key	Item ID
1.	B	MC 35130
2.	A	MC 35124
3.	B	MC 125830

#	Key	Item ID
4.	C	MC 35138
5.	B	MC 35137
6.	D	MC 35139