

المعلومات العامة

الأسئلة المعلنه للعام الدراسي 2010

8

1

Which of these changes occurs in the lungs as a result of smoking?

- Gases are exchanged more efficiently.
- Gases are exchanged less efficiently.
- Bronchioles dilate and allow more oxygen to enter the lungs.
- Blood vessels dilate and increase the blood flow to the lungs.

Key: 2

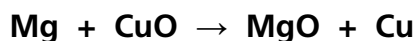
Strand: Life science

Standard: 07.4 Know that smoking damages the lungs and reduces the efficiency of gas exchange.

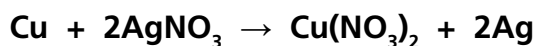
DOK: 01 Understanding

2

Magnesium (Mg) reacts with copper oxide (CuO) as shown below.



Copper (Cu) reacts with silver nitrate (AgNO₃) as shown below.



Which of these shows copper, magnesium, and silver listed from most active to least active?

- silver, copper, magnesium
- silver, magnesium, copper
- copper, silver, magnesium
- magnesium, copper, silver

Key: 4

Strand: Materials

Standard: 13.4 Correctly place a metal in the reactivity series based on experimental evidence.

DOK: 02 Application

3

Which of these planets has a reddish color and can be seen in the night sky with the naked eye?

- Mars
- Saturn
- Jupiter
- Venus

Key: 1

Strand: Earth and space

Standard: 15.3 Be able to identify some planets in the night sky; know that we can see them and the Moon because they reflect light from the Sun.

DOK: 01 Understanding

Energy from the sun heats the Earth unevenly.

What happens to the air above the Earth when it is heated unevenly?

Answer: _____

Explain why sea breezes occur.

Answer: _____

Key Elements

A. The uneven heating of the Earth causes winds / air to move / convection currents in the air / warm air to rise, cool air to sink.

B. A response indicating one of the following:

- During the day, the Sun warms the land more than the water. Thus, the air over the land is hotter and it rises, and the cooler air over the water moves inland.
- The heated air becomes less dense and is forced upward by cooler, denser air moving inland from the ocean.

2 key elements	2 pts
1 key element	1 pt
Incorrect answer	0 pts
No answer	Blank

Points: 2

Strand: Physical processes

Standard: 17.6 Show how convection currents in air cause weather features.

DOK: 02 Application

5

Explain the difference between an element and a compound.

Answer: _____

Key Elements

A. An element is made of all the same kind of atoms.

AND

A compound is made of different kinds of atoms joined chemically.

(Scoring Note: Accept any reasonable answer that indicates elements are composed of all the same atoms and compounds have different kinds of atoms.)

1 key element	1 pt
Incorrect answer	0 pts
No answer	Blank

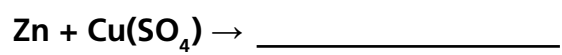
Points: 1

Strand: Materials

Standard: 12.2 Know that elements join together chemically to form compounds, that the smallest particle of a compound is a molecule, and that all molecules of a compound are made up of the same fixed number of atoms of the constituent elements.

DOK: 01 Understanding

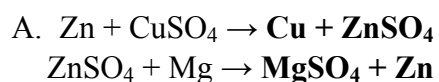
Complete the reactions below.



Explain why the reactions occur.

Answer: _____

Key Elements



(Scoring Note: student must complete both reactions correctly to receive credit for this key element.)

B. An answer indicating that reactive metals can displace less reactive metals from their compounds OR Zn is more reactive than Cu and Mg is more reactive than Zn.

2 key elements	2 pts
1 key element	1 pt
Incorrect answer	0 pts
No answer	Blank

Points: 2

Strand: Materials

Standard: 13.7 Understand that reactive metals can displace less reactive ones from their compounds.

DOK: 02 Application