

Gr. 9 Chemical and Physical Change Homework

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1. In a physical change, no new substance is made. There may be a change of state or form, but no new substances. Also, none of the original substances change.

In a chemical change, there are new substances formed. There may also be heat changes.

2. a) chemical

d) chemical

b) physical

e) physical

c) chemical

3. a) physical

d) chemical

b) chemical

e) physical

c) physical

4. a) chemical

d) chemical

b) physical

e) physical

c) physical

5. a) physical

d) physical

b) physical

e) physical

c) chemical

f) chemical

- 6) a) chemical
 b) chemical
 c) ~~chemical~~ physical
 d) physical

- e) chemical
 f) chemical.

7. - no new substance was formed (i.e. in a change of state from ice to water, the water molecules are still water molecules.

- form may change (i.e. paper cut into small pieces are still paper)

- you can still see all the original substances (i.e. soil and sand mixed together are still visible)

8. • New substances are formed (i.e. ~~mold~~ mold growing on cheese. Mold has formed)

• There are new sets of molecular properties. ~~When~~ (i.e. when iron rusts, iron is oxidized. In other words, the original iron molecules now have some oxygen molecules)

• Energy change may occur. This energy may be visible in the form of heat or light.

9. Physical Changes

- Clouds forming
- mixing sugar in tea
- When ice melts in my drink
- Bending a paper clip
- Condensation on a glass

Chemical changes

- cooking vegetables
- digesting food
- mixing yeast, sugar, and water to make bread (watch it bubble)
- burning incense