

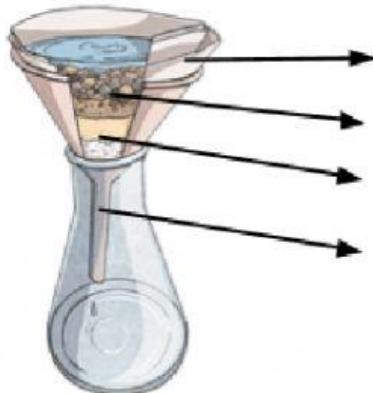
## Unit 2 - Mixing Materials

### Revision for Unit Test (Part 2)

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

#### **Unit 2.4 Filtering**

- A. Parts of a filter.** Identify the parts of the filter in the diagram below and fill out the sentences with the correct answer.



Dirty water is a \_\_\_\_\_ of solid and liquid materials. We can \_\_\_\_\_ the insoluble solids from the liquid by pouring the mixture through a \_\_\_\_\_. A filter has holes that let some of the mixture pass through. Solids in the mixture stay in the filter because the pieces are too big to pass through the holes. Scientists use \_\_\_\_\_ to separate mixtures. Filter paper has very tiny holes and stays strong when it gets wet so it does not tear easily. A \_\_\_\_\_ is a cone-shaped piece of equipment that can be used to support the filter paper. We can make a simple filter at home by using \_\_\_\_\_ and rocks to help filter out the dirt from water.

- B. Can these mixtures be separated using a filter?**

1. a. Water and sugar \_\_\_\_\_

b. How do you know? \_\_\_\_\_

2. a. Vinegar and salt \_\_\_\_\_

b. How do you know? \_\_\_\_\_

3. a. Cooking oil and salt \_\_\_\_\_

b. How do you know? \_\_\_\_\_

## Unit 2.5 Separating materials from rocks

### A. Read the story below about cobalt mining.



Cobalt is a metal used to make batteries for mobile phones and electric cars. Cobalt ore is mined in a country called the Democratic Republic of Congo, in Africa. Many people who live there are very poor. Children work in the mines to make money to live. They are not paid very much for the work. The mines are not safe so the children can get hurt or can become ill. Some children who work in the mine are only seven years old. They break the rocks to separate the cobalt ore from the rock. Some people who make mobile phones and electric cars try not to buy cobalt from mines that use children. Others do not find out where the cobalt they buy comes from.

1. a. What kind of material is cobalt?
- b. What is cobalt used for?
- c. How do they separate the cobalt ore from the rocks?
- d. Why do the children work in the mine?
- e. What could people who buy mobile phones or electric cars do to help?

B. Which of the following are fuels? Put a check mark below it.



© iStockphoto.com



C. Fill out the missing words in the paragraphs below. Use the beginning letters as clues.

Planet E\_\_\_\_\_ is the source of all the materials that we use. All materials that have to be made, like plastic and metal, are made from materials that are n\_\_\_\_\_. Most plastic is made from o\_\_\_\_\_ which is found in the ground. Metals are made from rocks in the ground called o\_\_\_\_\_. The metal ore is heated and melted to separate the metal. This is called s\_\_\_\_\_.

N\_\_\_\_\_ g\_\_\_\_\_ is a gas found underground. We burn it to cook, heat our homes and to make electricity. Oil is a liquid found underground. The oil is heated to make useful liquids and gases. The petrol and d\_\_\_\_\_ we burn in cars and lorries come from this oil.

Materials that we burn are called f\_\_\_\_\_. When we burn these materials the c\_\_\_\_\_ d\_\_\_\_\_ gas is made. Too much carbon dioxide in the air is making the Earth get warmer. This is called g\_\_\_\_\_ w\_\_\_\_\_.