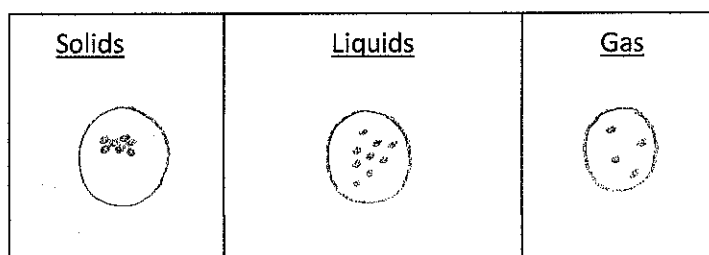


NS and TECH
Grade 6
Mid-year Examination
Memorandum

Question 1

| | | | |
|-----|---|------|---|
| 1.1 | D | 1.6 | G |
| 1.2 | F | 1.7 | J |
| 1.3 | A | 1.8 | E |
| 1.4 | H | 1.9 | C |
| 1.5 | B | 1.10 | I |

Question 2



Question 3

3.1 A habitat is a natural environment where living and non-living organisms live / A natural environment in which animals live.

3.2 A hypothesis is a prediction / a scientific guess of an experiment / practical investigation

3.3 Scientists use the word matter to talk about what everything around you is made of. Even you are made of matter. All materials and substances are made of matter. Matter is made of very small particles.

3.4 Fermenting is a method of food processing that uses yeast or bacteria.

3.5 When a solution has no more space for any more particles of the solute.

Question 4

4.1 Rocky shore, mountain, ocean, desert, grassland, forest, ponds, rivers (any of these)

4.2 Healthy ecosystems are made up of a wide range of plants, animals and habitats that depend on each other. Unhealthy ecosystems have a plant or animal that overpowers the ecosystem.

4.3 The living and non-living things depend on each other in many different ways. Some animals/plants can be part of more than one ecosystem as they provide for more than one animal/plant. They can be part of many feeding relations in various ecosystems.

Question 5

5.1 Sorting by hand, using a sieve, settling and decanting and filtering

5.2 Method 1: Sorting by hand

Hand sorting is physically picking out one material and separating it from the other material. This is best use for mixtures with large solids such as coins, beans, peanuts or sweets. This involves: Pouring the mixture onto newspaper or a piece of plastic. Using your fingers or a pair of tweezers. Picking out one of the materials from the others

Method 2: Using a sieve

This method refers to pouring mixtures through a sieve to separate the smaller solids from the larger ones. This involves: Pouring the mixture through a sieve into a bowl. Shaking the sieve so that the small materials fall through. The larger material will remain in the sieve.

Method 3: Settling and decanting

Settling refers to letting the mixture sit and waiting for it to separate on its own. This is easy to see with oil and water, and sand and water. This involves: Stirring the mixture. Leaving the mixture in its container. Allowing the mixture to stand until the two materials separate. Carefully pouring off the top material from the other material.

Method 4: Filtering

Some mixtures are separated by pouring them through paper or other materials. You can do this with sand and water. This involves: Placing a funnel in a bottle. Placing filter paper in the funnel. Pouring the mixture through the funnel. Allowing the liquid material to flow through the filter. The solid material will remain in the filter or on the filter paper.

5.3 Using a sieve

5.4 A special mixture of a liquid and a solid ✓

5.5 The Dead Sea

Question 6

6.1 Obesity is the condition of being unhealthily overweight. It is caused by eating too much food (especially food high in sugars and fats) as well as doing too little exercise.

Obesity can lead to disease like:

- Diabetes (often caused by eating too much sugar) ✓
- Heart disease (often caused by eating too much fat) ✓
- Hypertension or high blood pressure ✓

Question 7

7.1 True

7.2 False

7.3 True

7.4 True

7.5 True

Question 8

8.1 A wetland is shallow body of water with plants such as reeds. Other names for wetlands are marshes, swamps, seepage areas and flood-plains. The water in a wetland can be salty or fresh water. Wetlands are the habitat for many unique animals and plants.

8.2 Ocean / sea / salt water lakes

8.3 Pel fishing owl and Palm nut vulture

8.4 A

8.5 When a river floods, a wetland provides a place for water to spread out and slow down. Wetlands are filled with plants that slow down the flow of water ✓

8.6 The slow flowing water allows insoluble substances to settle. Sand and silt sink to the bottom of the wetland. The water becomes clear. Plants absorb nutrients from the water. Many of the nutrients are soluble substances that pollute the water. Plants can also absorb the soluble nutrients that cause eutrophication. ✓

8.7 Use as little soap and detergents as possible.

Use as little fertiliser as possible in your garden.

Avoid using pesticides and herbicides in the garden

8.8 People have no access to toilets and sewage is wasted into rivers and lakes, the water is then used for drinking or cooking purposes or children often play in the lakes. As a result, persons develop diarrhoea and many people die from this illness. This cycle is repeated.