

# **DISNEY KINDERGARTEN AND PRIMARY SCHOOL**

**MONDAY 30<sup>TH</sup> March, 2020**

**Name:** \_\_\_\_\_

**Characteristics of different types of soil.**

## **Loam soil**

- It has a lot of humus.
- It has balanced particles of clay and sand.
- It is well aerated.
- It is very dark and loose.

## **Sand soil**

- It has large and rough particles
- It drains easily
- It has no loam soil, clay soil, Sand soil and humus

## **Clay soil**

- It retains a lot of water
- It has fine, smooth and compact particles
- It is slippery and sticky when wet
- It is poorly aerated

**Soil texture** is the roughness or smoothness of the soil.

It can be felt by touching soil.

## **Exercise**

**1. Name three types of soil.**

i) \_\_\_\_\_ ii) \_\_\_\_\_ iii) \_\_\_\_\_

**2. Why is loam soil said to be good for crop growing?**

\_\_\_\_\_

**3. Which type of soil is difficult for plough and why?**

\_\_\_\_\_

**4. Which type of soil is used for modelling?**

\_\_\_\_\_

**5. Name the best soil for crop growing.**

\_\_\_\_\_

**6. Circle the odd man out:**

Clay                      humus                      sand                      loam

**7. Give a reason why sand soil allows water to pass through easily.**

\_\_\_\_\_

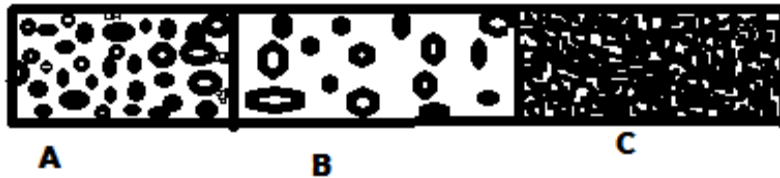
**8. Which type of soil holds water for a long time?**

\_\_\_\_\_

**9. Which type of soil is good for building and construction?**

\_\_\_\_\_

10. Mention the types of soil shown below.



A \_\_\_\_\_  
B \_\_\_\_\_  
C \_\_\_\_\_

**Tuesday 31st March 2020**

### **Uses of soil to people**

- Loam soil used for growing crops.
- Soil is used for building.
- Clay soil is used for modelling or pottery.
- Sand soil is used for making glasses.

### **Other uses of soil to plants and animals**

- Soil supports plant growth.
- Soil acts as a home of some animals e.g. earthworms, porcupines, moles

### **Soil profile**

#### **What is soil profile?**

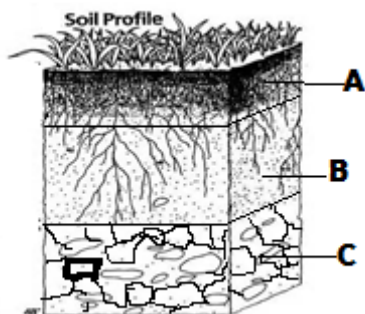
**Soil profile** is the vertical arrangement of soil layers.

#### **Where can one easily see the different soil layers?**

- When digging a pit latrine.
- On a road side cutting.
- On a railway line cutting.
- When digging a compost pit.

#### **Layers of soil**

- a) Top soil
- b) Sub soil
- c) Parent rock



Top soil supports plant growth because it has a lot of humus.

Sub soil and parent rocks do not support plant growth because they have no humus.

### **Exercise**

1. Give any two uses of soil
  - i) \_\_\_\_\_
  - ii) \_\_\_\_\_
2. Name two examples of living organisms found in soil
  - i) \_\_\_\_\_
  - ii) \_\_\_\_\_
3. In which way are the living organisms found in soil useful?  
\_\_\_\_\_
4. What do you understand by the term soil profile?  
\_\_\_\_\_
5. Which layer of soil supports crop growing?  
\_\_\_\_\_
6. How best can you see soil layers?  
\_\_\_\_\_
7. What is the use of earth worms in soil?  
\_\_\_\_\_
8. Which type of soil is used for building a house?  
\_\_\_\_\_
9. Which term do we give to the arrangement of soil layers from top to bottom levels?  
\_\_\_\_\_

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**Wednesday 1st April 2020**

### **Soil erosion**

Soil erosion is the movement of top soil by its agents.

### **Agents of soil erosion**

1. flowing water
2. Wind
3. Animals

### **Causes of soil erosion**

- Over stocking or over grazing
- Bush burning
- Over cultivation
- Deforestation

### **Dangers of soil erosion**

- It leads to soil infertility.
- It destroys crops.
- It causes silting of wells and streams.

## Ways of controlling soil erosion

- By mulching
- By terracing hilly areas
- By contour ploughing (digging across the hill not downwards)
- By practising crop rotation
- By planting cover crops

### Exercise

1. What is soil erosion?

\_\_\_\_\_

2. Agents of soil erosion are things that carry soil. Name any three of them;

i) \_\_\_\_\_ ii) \_\_\_\_\_ iii) \_\_\_\_\_

3. Give four causes of soil erosion

i \_\_\_\_\_ ii) \_\_\_\_\_

iii) \_\_\_\_\_ iv) \_\_\_\_\_

4. How does clearing away grass and trees cause soil erosion?

\_\_\_\_\_

5. Mention two dangers of soil erosion

i) \_\_\_\_\_

ii) \_\_\_\_\_

6. Suggest four ways of reducing the dangers of soil erosion.

i \_\_\_\_\_ ii) \_\_\_\_\_

iii) \_\_\_\_\_ iv) \_\_\_\_\_

7. What is crop rotation?

\_\_\_\_\_

8. How does mulching reduce soil erosion?

\_\_\_\_\_

Thursday 2nd April 2020

### SPELLINGS:

**Mulches, moisture, coffee husks, plant materials**

### Mulching

**Mulching** is the covering of top soil with dry plant materials.

### Examples of mulches

Mulches are materials used to cover top soil in a garden.

dry grass, coffee, husks, wood shavings, banana leaves

### Advantages of mulching

- Mulching reduces soil erosion.
- Mulching makes soil fertile. (when mulches decay or rot)
- It keeps moisture in the soil.
- Mulching reduces growth of weeds.

## **Disadvantages of mulching**

- Mulches can be a fire hazard
- Mulching is tiresome
- Mulches hide crop pests

## **Exercise**

**1. What is mulching?**

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**2. Name three mulching materials**

i) \_\_\_\_\_ ii) \_\_\_\_\_ iii) \_\_\_\_\_

**3. Why is it advisable to use dry plant materials as mulches?**

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**4. Identify any two reasons why farmers mulch their gardens.**

i) \_\_\_\_\_

ii) \_\_\_\_\_

**5. Mention any one disadvantage of mulching.**

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**Friday 3rd April 2020**

## **Changes in our environment**

### **Kinds of changes**

1. Natural changes
2. Man-made changes

These are changes that happen on their own.

### **Examples of natural changes**

- Change in weather.
- Change in day and night.
- Change in growth of animals and plants.
- Changes in seasons.

### **Causes of natural changes in the environment are;**

- floods
- drought
- earth quakes
- hail stones
- land slides
- storms
- lightning and thunder

### **Effects of natural changes**

- Some changes create hunger.
- Some changes destroy homes and property.
- Animals and plants can die.
- Some changes lead to soil erosion
- Some changes force people to migrate.
- Some changes lead to spread of diseases.

### **Exercise**

**1. What are natural changes?**

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**2. Mention any three examples of natural changes.**

i) \_\_\_\_\_ ii) \_\_\_\_\_ iii) \_\_\_\_\_

**3. Identify any four causes of natural changes in the environment.**

i) \_\_\_\_\_ ii) \_\_\_\_\_

iii) \_\_\_\_\_ iv) \_\_\_\_\_

**4 .Write short notes about the following;**

**a) Migration**

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**b) Soil erosion**

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**4. State two dangers of natural changes in the environment.**

i) \_\_\_\_\_

ii) \_\_\_\_\_

### **Monday 6th April 2020**

#### **Man- made changes**

These are changes which are brought about by human activities.

#### **Examples of human activities that bring changes in the environment**

- |                             |                           |
|-----------------------------|---------------------------|
| - Construction of roads     | - Overstocking            |
| - Construction of buildings | - Making bricks           |
| - Deforestation             | - Burning bricks          |
| - Destroying wetlands       | - Poor disposal of wastes |
| - Bush burning              | - Poor methods of farming |

#### **Ways of managing changes**

- By planting trees.
- By protecting wetlands.
- By practising good farming methods.
- By putting lightning conductors on buildings.
- By not settling in valleys.

### **Exercise**

**1. What are man-made changes?**

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**2. Give any three examples of natural changes**

i) \_\_\_\_\_ ii) \_\_\_\_\_ iii) \_\_\_\_\_

**3. State three examples of activities that cause man-made changes**

i) \_\_\_\_\_ ii) \_\_\_\_\_

iii) \_\_\_\_\_

**4. How can people overcome deforestation?**

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**5. In which way is bush burning a danger to the environment?**

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**6. How can brick making lead to the spread of malaria?**

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**7. Why is poor disposal of wastes a danger to the environment?**

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**Tuesday, 7th April 2020**

## **Air**

### **What is air?**

Air is a mixture of gases.

### **Components of air**

- |            |                  |
|------------|------------------|
| - Nitrogen | - Carbon dioxide |
| - Oxygen   | - Rare gases     |

### **Examples of rare gases**

Argon, Neon, Helium, krypton, xenon

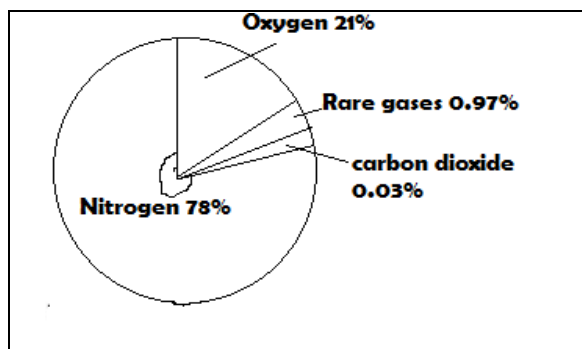
### **Percentages of gases in the atmosphere**

- |                   |                           |
|-------------------|---------------------------|
| 1. Nitrogen - 78% | 3. Carbon dioxide – 0.03% |
| 2. Oxygen – 21%   | 4. Rare gases – 0.97%     |

**Note:** nitrogen has the highest percentage.

Carbon dioxide occupies the least or lowest percentage in atmosphere.

**Graph showing percentages of gases in the atmosphere**



**Exercise**

1. Define the term air.

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2. Mention any four components of air.

i) \_\_\_\_\_ ii) \_\_\_\_\_

3. Which component of air occupies the largest percentage in the atmosphere?

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4. Name the part of air that occupies the least percentage.

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5. Which part of air is used for respiration?

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6. Why is carbon dioxide used in fire extinguishers?

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7. Give one reason why oxygen is not used in fire extinguishers.

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8. Identify one local game played using air.

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9. Differentiate between air and wind.

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**Wednesday, 8th April 2020**

**Uses of air**

- Air inflates balloons.
- Air is put in car tyres.

**Uses of Nitrogen**

- Nitrogen is used in electric bulbs.
- Used by legumes to make plant proteins.
- Used in the storage of drugs.

**Uses of oxygen**

- ✓ Oxygen is used for respiration
- ✓ Oxygen supports germination
- ✓ Oxygen supports burning

**Uses of Carbon dioxide**

- Used by plants to make food.
- Used in fire extinguishers to put out fire.
- Used in preserving bottled drinks.

**Uses of rare gases/inert or noble gases**

- Argon and neon are used in electric bulbs.
- They are used in neon signs posts.

**Exercise**

1. Which part of air burns food in our body?

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2. Why is carbon dioxide used in the preservation of food and drinks?

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3. Give a reason why carbon dioxide is used in fire extinguishers?

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4. What is the use of fire extinguishers?

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5. How is burning and germination similar?

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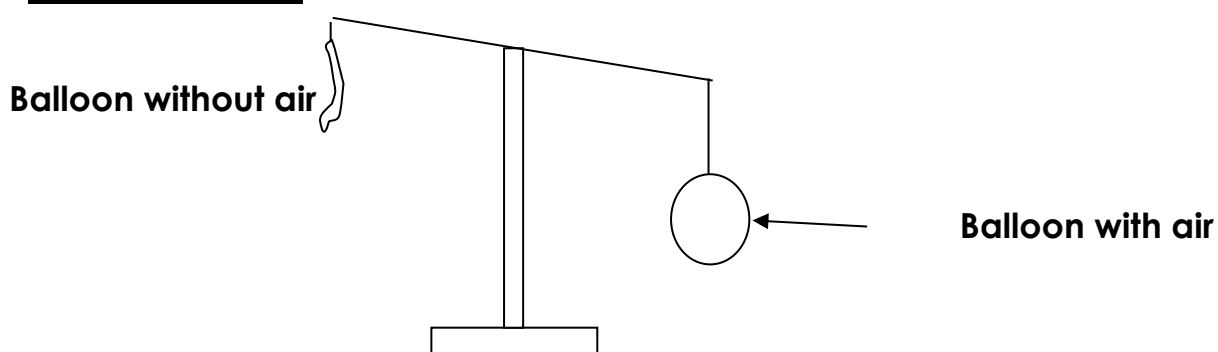
6. Rare gases don't take part in any chemical reaction. How are they useful?

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Thursday 9<sup>th</sup> April 2020

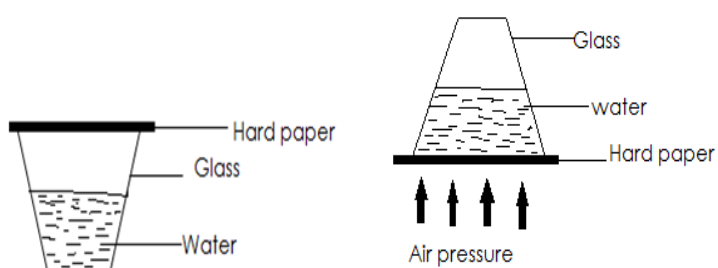
### PROPERTIES OF AIR

#### 1. Air has weight



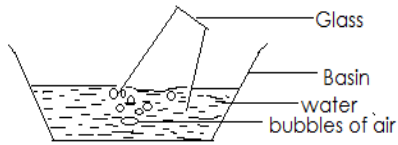
**NB: The balloon with air goes down because air has weight.**

#### 2. Air exerts pressure



**NOTE:** When you turn the glass upside down, the hard paper does not fall off because air pressure pushes it up. When taking a drink e.g. soda using a straw, the pressure pushes the drink up the straw.

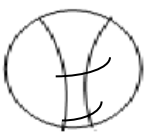
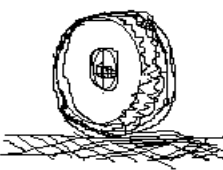
### **3. Air occupies space**



- Air bubbles are seen escaping representing air from the glass.
- Air can be compressed when air enters balloon, it swells. This shows that air occupies space.
- We are able to pump air in tyres because air occupies space.

### **4. Air can be compressed**

Compressed air is used in car tyres to support the weight of the car.  
It is also used in balls, balloons, floaters and

Compressed air in a ball	Compressed air in a tyre
	

### **Uses of carbon dioxide**

i) Carbon dioxide used in fire extinguishers to put out fire.

#### **A picture of a fire extinguisher**



### **Places where we find fire extinguishers**

- |              |           |
|--------------|-----------|
| 1. schools   | 3. banks  |
| 2. hospitals | 4. hotels |

5. Vehicles

6. fuel stations

ii) Carbon dioxide is used to preserve bottled drinks like soda, beer and tinned food.



### **Exercise**

1. **Mention any two uses of air.**

i) \_\_\_\_\_

ii) \_\_\_\_\_

2. **Name the component of air that supports burning.**

\_\_\_\_\_

3. **Which component of air is used in fire extinguishers to put out fire?**

\_\_\_\_\_

4. **State four properties of air.**

i) \_\_\_\_\_ ii) \_\_\_\_\_

iii) \_\_\_\_\_ iv) \_\_\_\_\_

5. **Okello blew air into a balloon and it swole. Which property of air enabled It to swell?**

\_\_\_\_\_

6. **Which part of air is used to preserve drinks?**

\_\_\_\_\_

7. **Name two places where we can find fire extinguishers.**

i) \_\_\_\_\_ ii) \_\_\_\_\_

8. **Why are some fire extinguishers painted with bright colours?**

\_\_\_\_\_

## **Light and the sun**

- The Sun is a very big star that shines in the sky during day.
- The sun is the main natural source of light.

## **Sources of light**

1. **Natural sources of light.**
2. **Artificial sources of light**

### **Natural sources of light.**

These are objects which produce their own light in nature

#### **Examples of natural sources of light**

The sun, stars, fire flies, erupting volcanoes and glow worms.

The moon doesn't produce light on its own but reflects light from the sun.

#### **Artificial sources of light**

These are sources of light which are made by people.

#### **Examples of Artificial sources of light**

Torches, burning candles, bulbs, lamps, fire flames.

## **Uses of the sun**

- Heat from the sun dries wet clothes.
- Sunlight enables the skin to make vitamin D
- It provides us with light.
- Sun's heat kills some bacterial infections.
- It dries harvested seeds before storing them.
- The sun gives us solar energy.

## **Dangers of the sun**

- Too much sunshine causes drought
- Too much sunshine spoils eyes when you look at the sun directly.
- Too much sunshine dries water sources

- Too much sunshine destroys crops in a garden
- Too much sunshine makes us hot and thirsty

### **Exercise**

**1. What is the main source of light in our environment?**

\_\_\_\_\_

**2. Give any three sources of light**

i) \_\_\_\_\_ ii) \_\_\_\_\_ iii) \_\_\_\_\_

**3. Why is the moon not regarded as a source of light?**

\_\_\_\_\_

**4. Mention two artificial sources of light**

i) \_\_\_\_\_ ii) \_\_\_\_\_

**5. In which two ways is the sun useful in our sub-county?**

i) \_\_\_\_\_

ii) \_\_\_\_\_

**6. State any two dangers of too much sunshine to the people of Nakawa Division**

i) \_\_\_\_\_

ii) \_\_\_\_\_

**7. Name the nutrient made by our skin using early morning sunshine**

\_\_\_\_\_