

# **CREATIVE PERFORMANCE FOR TTCs**

## **STUDENT - TEACHER'S BOOK**

### **OPTIONS:**

- **Social Studies Education (SSE)**
- **Early Childhood and Lower Primary Education (ECLPE)**
- **Languages Education (LE)**

**YEAR 2**

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## FOREWORD

*Dear Student-teachers,*

Rwanda Education Board is honored to present the Creative Performance (Fine Arts and Music) Year II Textbooks which serves you to learn effectively and enhance your competence in creative performance.

In fact, the Rwandan educational philosophy is to ensure that learners achieve full potential at every level of education which will prepare them to be well integrated in society and exploit employment opportunities. Specifically, TTCs syllabus was reviewed to train quality teachers who will confidently and efficiently implement the Competence Based Curriculum in Pre-primary and Primary education. In line with efforts to improve the quality of education, the Government of Rwanda emphasizes the importance of Creative performance subject aligned with its syllabus in order to facilitate their learning process.

The ambition to develop a knowledge-based society and the growth of regional and global competition in the job markets has necessitated the elaboration of a student-teacher book which will facilitate and give you the required information about what is creative performance, its origin, history and its place and importance in our society.

I wish to sincerely express my appreciation to the people who contributed towards the development of this book, particularly, REB staff, Lecturers, Teachers, TTC Tutors and Independent people for their technical support. A word of gratitude goes to the Head Teachers and TTCs Principals who availed their staff for various activities.

**Dr. NDAYAMBAJE Irénée**  
**Director General, REB**

## **ACKNOWLEDGEMENT**

I wish to express my appreciation to the people who played a major role in development of this student-teacher's textbook of Creative Performance (Fine Art and Music) for Year II. It would not have been successful without active participation of different education stakeholders.

I owe gratitude to different Universities and schools in Rwanda that allowed their staff to work with REB in the in-house textbooks production initiative.

I wish to extend my sincere gratitude to teachers, REB staff, Lecturers, Teachers, TTC Tutors and Independent people whose efforts during writing exercise of this textbook were very much valuable.

Finally, my word of gratitude goes to the Rwanda Education Board staffs who were involved in the whole process of in-house textbook elaboration.

**Joan MURUNGI**

**Head of Curriculum, Teaching & Learning Resources Department**

# TABLE OF CONTENTS

**FOREWORD** ..... iii

**ACKNOWLEDGEMENT**.....iv

**UNIT 1: THE DEVELOPMENT OF ART THROUGH DIFFERENT ERAS** ..... 1

1.1. Renowned artists in Rwanda and in East Africa ..... 2

End unit assessment ..... 12

**UNIT 2: DRAWING AND PAINTING STILL LIFE AND NATURE** ..... 13

2.1. Different types of colour application ..... 14

2.2. Types of Painting..... 15

2.3. Painting techniques..... 17

2.4. painting Landscape or scenes ..... 20

2.5 Human figure painting..... 21

End unit assessment ..... 23

**UNIT 3: MOTIFS, PATTERN AND DESIGN PROCESS** ..... 24

3.1. Types of print making ..... 25

3.2 Applying motifs and patterns on surfaces ..... 26

End unit assessment ..... 31

**UNIT 4: LETTER STYLES AND ILLUSTRATION DESIGN** .... 32

4.1. The Elements of Graphic Design..... 32

4.2. Designs with illustrations and three dimensions (3D) letters. 37

4.3. Poster making..... 39

End unit assessment ..... 40

**UNIT 5: COLLAGE** ..... 41

5.1. Procedures of colouring technique for making collage work.... 41

5.2. Making collage works using colouring technique ..... 43

End unit assessment .....	44
<b>UNIT 6: BUILDING CLAY FIGURES .....</b>	<b>45</b>
6.1. Techniques of building clay figures .....	45
6.2. Techniques of decorating clay surfaces .....	48
End unit assessment .....	51
<b>UNIT 7: WEAVING USING BASIC LOCAL MATERIALS.....</b>	<b>52</b>
7.1. Techniques in assembling wafts and wefts using different types of raffia .....	52
End unit assessment .....	55
<b>UNIT8: MOTIFS, PATTERN IN EMBROIDERY, BATIK, TIE- DYE AND DESIGN TECHNOLOGY .....</b>	<b>56</b>
8.1. Making different motifs and patterns .....	56
8.2. Various batik designs .....	57
8.3. Making patterns of design on textiles using tie-dye technique	59
End unit assessment .....	62
<b>REFERENCES .....</b>	<b>63</b>
<b>PART TWO</b>	
<b>MUSIC .....</b>	<b>64</b>
<b>UNIT 1: COMPOUND TIME SIGNATURE .....</b>	<b>65</b>
1.1 Dotted notes and Dotted rests .....	65
1.2 Compound time signatures.....	70
End unit assessment .....	77
<b>UNIT 2: INTERVALS.....</b>	<b>79</b>
2.1 Meaning of interval .....	79
2.2 Tone and semi tone .....	80
2.3 List of simple intervals .....	81
2.4 Accidentals .....	83

2.5 Enharmonic notes.....	84
2.6 Quality of intervals .....	88
2.7 Inversion of intervals .....	90
End unit assessment .....	93
<b>UNIT 3: MUSICAL SCALES.....</b>	<b>94</b>
3.1 Diatonic and chromatic scales .....	94
3.2 Major scale .....	98
3.3 Major scales and key signatures .....	102
3.6 Major scales and their relative minor scales .....	109
3.7 Types of Minor Scale .....	113
3.8. Transposition.....	118
End unit Assessment .....	123
<b>UNIT 4: COMPOSITION OF MELODIES IN G AND F MAJOR SCALES.....</b>	<b>124</b>
4.1. G Major Scale .....	124
4.2. F Major Scale .....	125
4.3. Composition of a melody .....	127
End unit assessment .....	128
<b>UNIT 5: ASCENDING AND DESCENDING C, G AND F SCALES ON THE PIANO.....</b>	<b>128</b>
5.1. Piano keyboard and fingering .....	128
End unit Assessment .....	142
<b>REFERENCE BOOKS .....</b>	<b>144</b>



# UNIT 1

## THE DEVELOPMENT OF ART THROUGH DIFFERENT ERAS

**Key unit competence:** To be able to describe the key points in the evolution of Art through ages and carry out an appreciation of techniques and works of renowned Artists in Rwanda and East Africa in general.

### 1.0. INTRODUCTORY ACTIVITY



1. Mention the kinds of art that was used to make artworks in pictures 1, 2 and 3?
2. Identify the countries in which the works 2 and 3 were made?

## 1.1. Renowned artists in Rwanda and in East Africa

### 1.1. 1. Art in Rwanda

#### Learning Activity 1.1.1



1. Identify the art styles that were used to produce the above artworks?
2. Name the great artists renowned in Rwanda that you know.

Rwanda is one of the African countries that have stuck to their cultures. Seeing no reason to become complacent with her culture, Rwanda has maintained an explicit and traditionally refined culture that has been neatly marketed across the globe where basket craft products decorated with “*Imigongo*” pattern have been appreciated by a large number of people in this world.

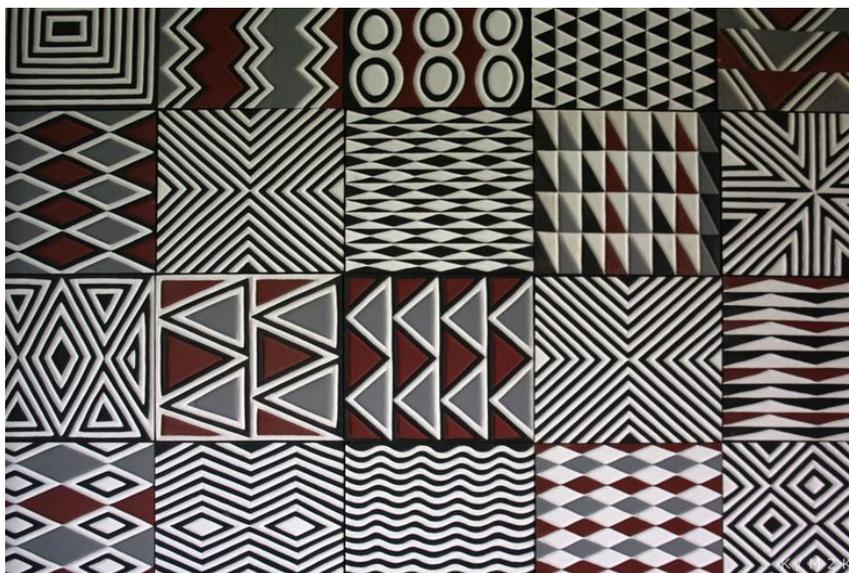


Figure 1.1.1: *Imigongo* designs

Rwanda's Art dates way back to the early 1880's, when Rwandans distinctively used dung 'paintings' known on IMIGONGO Styles. Often in the colours black, white and red, popular themes include spiral and geometric designs that are painted on walls, pottery, and canvas. They were used in local house decorations especially inside the houses.



*Figure 1.1.2 Painted ancient house Figure 1.1.3 Nyirantarengwa painted King's on palace*

The different objects are produced using cow dung and clay which is put onto wooden boards in spiral and geometric designs. The dung is left to harden and is then decorated using colours made from organic materials. The traditional colours are black, white, red, grey and yellow but increasingly other colours are being used.

However, much of Rwanda's traditional cultural heritage revolved around dances, praise songs, dynastic poems, drums (for example the royal drum 'Karinga'), riddles, and traditional crafts such as basketry, weaving, pottery, and ironworks. These provided another element of continuity with the past.



*Figure 1.1.4: Imigongo on different craftworks*

It is very paramount to note that the craftworks in figure 4 above were made from weaving, pottery and blacksmithing.

Rwanda has famous Artists like SEBUKANGA Jean Baptiste (sculptor), Medard Bizimana (sculptor), Pascal BUSHAYIJA (painter), NTAMABYARIRO Leopold (painter and art educator), KAYITANA Faustin (sculptor) who was a teacher at Ecole d'Arts de Nyundo, Laurent HATEGEKIMANA (sculptor), BIRASA Bernard (painter), KIRIMOBENECYO Alphonse (he designed Rwanda flag and National emblem), Epa BINAMUNGU (painter), KABAKERA Jean Marie Vianney (sculptor) and others.



*Figure 1.1.5: Sebukangaga Jean Baptiste (photo internet) and his craftworks.*

Sebukangaga was born in 1937 in Gitarama, at Ntenyo, in 1947 he started his school at Byimana Primary school, in 1952-1955 he was in Ecole d'Art de Kabgayi and joined Academie des Beaux Arts de Kinshasa (1955-1959) in ceramic.

In 1959, he returned to Rwanda to work with Brother Marc Wallenda on the project of creating a School of Arts in Nyundo, Gisenyi prefecture/province, the current Rubavu district. This school was founded by Brother Marc Wallenda in 1953. It was officially opened by the high ranking government officials in 1963 and during the opening ceremony, the first exhibition displaying the paintings and sculptures produced at the school by the students was made, Sebukangaga became the co-founder of that school and professor in charge of technical courses (1963-1966). From 1969 up to 1988, Sebukangaga was professor at the National Institute of Education (IPN).



Alphonse KIRIMOBENECYO



Medal awards



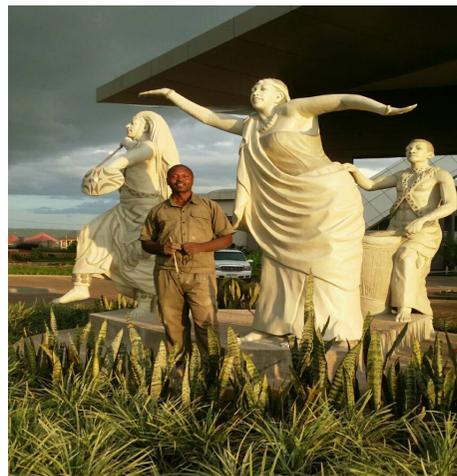
National emblem



National flag

*Figure 1.1.6: Alphonse KIRIMOBENECYO and his art works.*

- **Kabakera Jean Marie Vianney** is a Rwandan artist, born in 1968. He is a sculptor by profession. He studied at Ecole d'Arts de Nyundo which was formally called "Normale artistique" He made statues set up in front of the minor Basilica of Kabgayi, statues at Rusororo, 2 statues in the fathers Marians de Kibeho and many others.



*Figure 1.1.7: Kabakera Jean Marie Vianney with some of his artworks*

The first on the above image is located at Burera district, the second is set up at Rulindo (known as ku Kirenge cya Ruganzu) and the third is at Rusororo.



*Figure 1.1.8: Medard BIZIMANA and some of his artworks.*

BIZIMANA Medard, is a Rwandan renowned artist, a sculptor by profession, born in 1967 in Nyundo, he started primary school from 1974 to 1983. He studied his secondary School at Ecole d'Arts de Nyundo from 1983 to 1990.

From 1991 to 1993, he was a Teacher of Art at Saint Joseph High School in Gitarama/ Rwanda. In 2003, he won the second national award for Olympic games competition. The theme was ART AND SPORTS.

In 2004, he participated in the 7th China Changchun International Sculpture Symposium. In 2006, he won the first category National Award under the Theme "TOLERANCE -MUSEUMS RWANDA". Still in 2006, he won again the First category National Award for the best sculpture in MUSEUMS OF RWAMDA. In 2008, he got the Second category National Award under the theme "THE EDUCATION OF AN EXCELLENT CULTURE-MUSEUMS OF RWANDA".



Metal work



Scripture from stone

### **BIRASA Bernard**

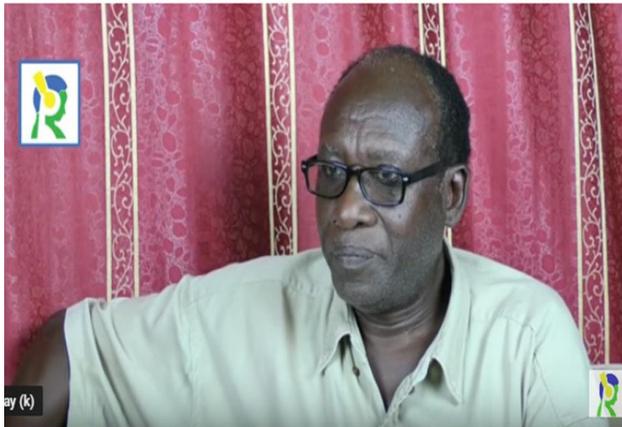


BIRASA Bernard is a Rwandan sculptor and a painter, born in 1967. He studied at Ecole d'Arts de Nyundo from 1985 to 1991, he also studied what was called "Normale artistique". Some of his artworks are exhibited in different places, museums and embassy. When he was in Senior six (1991), he made a sculpture called "La fille au calebasse" that expressed the beauty of a young girl and it is now in Gabon (Libreville) in a library.



*Figure 1.1.9: painted artwork of BIRASA Bernard*

### **BUSHAYIJA Pascal**



BUSHAYIJA Pascal is a Rwandan renowned artist, born in 1957. He studied at Ecole d'Arts de Nyundo from 1973 to 1978 and taught at Ecole d'Arts de Nyundo from 1983 to 1994. He lives in Kigali (Nyarugenge), he attended many exhibitions outside the country and apart from being a visual artist, he is also a singer, and commonly known by his song "ELINA".



Figure 1.1.10:(Herdsman and African cow) painted artwork of BUSHAYIJA Pascal

### APPLICATION ACTIVITY 1.1

1. Categorize Rwandan artists basing on their art and craft style
2. Who made the design of Rwandan emblem and Rwandan flag?
3. In which century and country were “Imigongo” styles developed? Draw a sample of “imigongo” style.

### 1.1.2. Renowned Artists in East Africa.

#### Learning Activity 1.1.2



1. Make a deep observation on the above images of artworks and name the forms of art that were used to produce them.
2. Name the East African countries where the above presented artworks can be found.

Art from East Africa is a reflection of the various communities dotting the region, and the diverse cultures and traditions that each hold. The ancient trade between the tribes situated at the Eastern African coast and the Arabs brought forth strong foreign influences that made East African art more distinct.

The religions in these parts of Africa have also crafted many sacred East African art objects like masks and statues that are used in ritual initiations, sacred ceremonies, death, and marriage. In Kenya, the ethnic group known as Mijikenda carves and erects wooden poles to commemorate the dead. The male leaders of the tribe use these poles as a medium to continually keep contact with great men who are already dead. In Malawi, the male initiations conducted by the Chewa make use of a large collection of masks.



*Figure 1.2.1 Carved Chewa mask from Malawi*



*Figure 1.2.2 Small female fetish mask of Tanzania*

Many of the ethnic groups in eastern Africa, including **Turkana** of Tanzania, **Masai** of Kenya and **Somali** of Somalia, lead a partially nomadic existence seasonally moving to be able to herd livestock to richer pastures. This way of life made way for crafts that can easily be packed and transported from one place to another. Among these nomadic East African arts are headrests made out of intricately carved wood; finely-patterned baskets; and wooden drinking vessels of different designs, shapes and sizes.

A common East African art that most tribes in this region share is their elaborate and beautifully patterned beadwork. Colourful beads are vital components in the body adornment of the Masai, Turkana and other Eastern ethnic groups. These vibrantly hued materials are created into accessories, jewelries or used **as ornaments embroidered into their exotic clothing**, and even tediously incorporated into **complex hairstyles**. The different styles and designs of this East African art symbolize differences in age, gender and social status between tribal members, feats in war for men and marital status and number of children for women.



*Figure 1.2.3: Young Masai girl from Kenya with beadworks*



*Figure 1.2.4 Prof. George Kyeyune and one of his artworks*

Prof. George Kyeyune was born in Masaka, Kyanamukaka sub-county in 1962. He was born into a traditional Ugandan family, with a double-digit number of siblings. He recalls strongly drawing pictures on the courtyard floor just after it had rained. George kept on using the ground as a canvas longer than the other kids of the same age because this excited him. This enthusiasm for drawings was one of the two reasons that led George to an artistic career and the other being two artist uncles serving as his role model.

He left Masaka in 1981 to become a student of Margaret Trowell School of Fine Arts. That started his lifelong commitment at the Makerere University. He graduated with a Bachelor of Art in 1985, which he supplemented with a Diploma in Education the following year, before heading off to the Maharaja Sayajirao University of Baroda in India. After spending three years in the state of Gujarat, he returned home in the early 90's with a Masters of Fine Arts, specialized in Sculpture.

Returning from India, Kyeyune spent the first half of the 90's teaching sculpture to students at Makerere. He also did sculptures for exhibition and worked as an illustrator. In 1996 he returned to painting. Something started to happen around painters in Kampala, a market was developing. Also, his work as an illustrator declined.

During these two decades, he has held different positions at the University; Head of Sculpture, Deputy Dean, and latest the Dean of Fine Arts, a position he has recently stepped down from. All the time, except three years spent in the UK to get a Ph.D. from 1999-2003, he has been lecturing sculpture.

### APPLICATION ACTIVITY 1.2

1. Give examples proving how East Africa traditional artworks have been done by linking to their culture
2. For each art and craft styles practiced in Rwanda and the rest of East African countries, name renowned artists and explain techniques they use for their artworks

### END UNIT ASSESSMENT

1. Give examples proving how East Africa traditional artworks have been done by linking to their culture
2. For each art and craft styles practiced in Rwanda and the rest of East African countries, name renowned artists and explain techniques they use for their artworks

# UNIT 2

## DRAWING AND PAINTING STILL LIFE AND NATURE

**Key unit competence:** to be able to make a painting of still life and nature studies by applying different techniques, media and tools.

### .2.1 INTRODUCTORY ACTIVITY



1. Name the materials that are shown in the above image.
2. Discuss about how the above materials can be used.

## 2.1. Different types of colour application

### Learning Activity 2.1

Discuss about the following concepts: Painting, different types of colour application

**Painting** is the practice of applying paint, pigment, color or other medium to a solid surface (called the “matrix” or “support”). The medium is commonly applied to the base with a brush, but other implements, such as knives, sponges, and airbrushes, can be used. The final work is also called a painting.

The support for paintings includes such surfaces as walls, paper, canvas, wood, glass, pottery, leaf, copper, and concrete, and the painting may incorporate multiple other materials including sand, clay, paper, plaster, gold leaf, as well as other objects.

### 2.1.1 Different types of colour application

#### Dry medium

Dry painting is either carbon-based or chalk-based. Dry medium painting is a painting done without using water or oil in mixing. Here one can use colored chinks, pastels, colored powder...

The primary advantage of dry drawing materials is that in case of mistake you can erase and change the color. It can be easily erased, while the primary disadvantage of dry drawing materials is that it is difficult to store and protect the final painting.



Pastels: Paint Buildings in Settings ...

*Figure 2.1.1: An Image showing the work of dry medium*

## Wet medium

**Wet painting** is liquid based medium. It is when there is a use of water or oil to dilute the paint. Here one can use water when it is water based paint. If it is oil based paint petrol and thinner can be used to dilute the paint.



Figure 2.1.2: An Image showing the work of wet medium

### APPLICATION ACTIVITY 2.1

Draw and paint a composition of different fruits using any one of the types of colour application

## 2.2. Types of Painting

### Learning Activity 2.2

Discuss about the types of paintings

The types of painting depend on painting terms or considerations. In terms of painting as material there are two major types of paints; water and oil paints. Considering painting as an artwork, it is classified into two major types such as realism and abstract painting.

Abstract painting is the type of painting that uses visual language of shapes, forms, colors and lines to create a composition which may exist with a degree of independence from visual references in the world. Abstract painting is when the image or idea of the painter is hidden, when the image doesn't appear as in real life.



*Figure 2.2.1: An Image showing abstract painting*

**Realism painting** sometimes called naturalism. It attempts to represent subject matter truthfully, without artificiality, exotic, and supernatural elements. When you see realism painting you feel the existence of the person or object on painting.



*Figure 2.2.2: An images showing realism painting*

## APPLICATION ACTIVITY 2.2

### Application activity 2.2

1. Observe the following paintings and describe their types in terms of painting as an artwork



In your own choice, draw and paint an abstract and a realism composition.

## 2.3.Painting techniques

### Learning Activity 2.3

Discuss about the different techniques of painting that you know.

A **technique** is a method of doing some task or performing something. It also includes the main materials used to make a work of painting. If one uses oil painting to make an artwork, the technique will be oil painting technique.

Other techniques of painting

- **Texture paintings:** we all love to see the brush strokes on a painting. It gives a dramatic final effect. Texture paintings are mostly used with oil paints, since while working with acrylic paints, their effects are lost when the acrylics dry up. But oil paints tend to be expensive, so as a substitute one can use acrylic impasto which works amazingly on textures. Apart from regular paint brushes, flat knives, spoons, forks, toothbrushes, blunt objects are used to create texture paintings. There are two types of texture; smooth and rough texture.



Figure 2.3.1: An image showing rough texture painting

- **Tempera paintings:**

Long Lasting Paintings are known as egg tempera art. They are fast drying and the paint lasts longer than others. Egg yolks are used as a binding medium with paints and since it's highly glutenous, they tend to dry faster. This is one of the oldest known painting techniques. Instead of eggs, sometimes, gum, glycerin, casein are used as a binding agent to the mixture of water and colors.



*Figure 2.3.2 An images showing tempera painting materials*

- **Digital painting** is the art of creating artwork on a computer, which makes it resemble a watercolor painting, oil painting or even an acrylic painting. A digitally prepared oil painting and manually done oil painting will have plenty of differences, since you have access to plenty of other textures and instruments which are easily available on the system. Yes, you don't have to worry about paint spills a standing for long hours. You can do the same art in a relaxed manner, at the comfort of your homes.



*Figure 2.3.3: An images showing digital painting*

- **Spray Painting:** Paint is usually administered from a spray bottle to achieve the desired results. Mostly spray paints are used on streets (street art), graffiti, canvas, wood, metal, glass, ceramic and more. If a large area of canvas requires the same pigment, spray painting technique is used to cover the areas for a faster turnout.



*Figure 2.3.4: An images showing spray painting*

- **Fresco paintings** or wall painting technique are paintings usually created on a freshly created lime plaster. The color pigments are mixed water solution and directly applied on the lime plaster, thus creating a permanent painting. Fresco paintings have been around since the renaissance period, one can view these paintings in the Vatican walls and ceilings.



*Figure 2.3.3: An images showing “fresco” painting*

Some authors add other techniques depending on materials used,

- **Oil painting:** Oil paint is usually mixed with linseed oil, or other solvents to make the paint thinner, faster or slower-drying.
- **Watercolor painting:** is a painting method in which the paints are made of pigments suspended in a water-based solution.
- **Pastel painting:** is an art medium in the form of a stick, consisting of pure powdered pigment and a binder. The color effect of pastels is closer to the natural dry pigments than that of any other process.

- Acrylic painting: are water based paintings but the final result shines as if it was oil colors another thing on acrylic is that it is a fast-drying paint.

### APPLICATION ACTIVITY 2.3

Draw and paint a composition of kitchen utensils using a painting technique of your choice.

## 2.4. painting Landscape or scenes

### Learning Activity 2.4

Observe the following image and answer its related question.



Classify 3 main parts of landscape that are painted on above picture

Parts of a landscape:

**Landscape paintings are divided into 3 main parts: foreground, middle ground and background. Land in the background appears more blue and pale than land towards the front. Artists make things look further away by painting them a pale colour. They make things look closer by painting them using high intensity colours.**



### APPLICATION ACTIVITY 2.4

1. Draw and paint a scene of a surrounding landscape.
2. Draw and paint a local activity of your choice that is done in your community.

## 2.5 Human figure painting

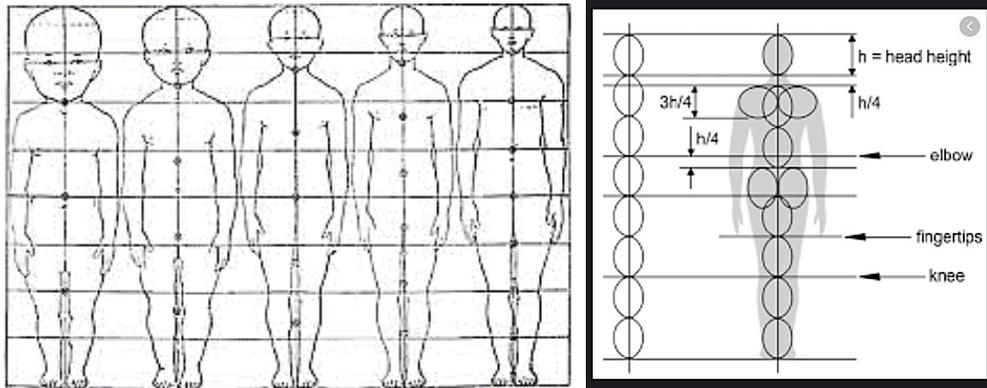
### Learning Activity 2.5

Discuss about human body proportion

Draw and paint a figure of human.

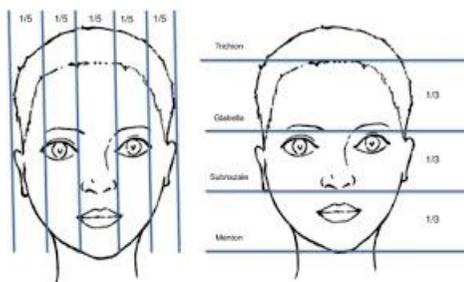
**In a standing position**, seven figure drawing proportions to keep in mind are:

1. The figure is approximately 7.5 heads tall.
2. About two heads down from the top of the figure is the line of the nipples.
3. About three heads down from the top of the figure is the navel, or belly button.
4. About four heads down from the top of the figure is the pubic bone, which is at the top of the genitals.
5. The pubic bone is approximately the half-way point on the body.
6. The wrists line up with the greater trochanters of the femurs (upper leg bone).
7. The elbows line up with the navel (belly button).



### Proportions of the Face

1. The eyes are on the middle level of the head.
2. The edges of the nostrils line up with the tear ducts of the eyes.
3. The space between the eyes is approximately the width of an eye.
4. The head is about five eyes wide. This one can be tricky because the shape of the head is often obscured by hair. Visualizing a “headband” similar to the one drawn in the above image can be helpful in finding the shape of the head.
5. The corners of the mouth line up with the pupils of the eyes.



Colour may be used **objectively** to represent forms as they appear in nature. E.g. green trees, yellow sun, blue sky, these are objective colours.

Colours may be used **subjectively** as the artist chooses to express himself/herself. E.g. purple water, red grasses, green people, these are not real they are subjective colours.

When someone is doing painting artwork, he should think about social meaning of colours because colours create different emotional reactions as indicated below;

RED: warm, fire, danger, blood, love, youth, attention drawer

YELLOW: warm, sunlight, ripe, fruity, happy

GREEN: cool, vegetation, raw, fresh, fertile, promising

BLUE: cool, sky, water, calm, mysterious

INDIGO: cool, calm, romantic, darkness, intrigue

VIOLET: cool, grapes, sad, rich, royal, egocentric

ORANGE: warm, fire, fruity, happy, comfort

WHITE: cold, snow, pure, untouched, holy, wisdom, peace

BLACK: cold, charcoal, night, dark, African, neutral, mysterious, death

GREY: cool, ash, dull, sad, neutral, aging

BROWN: warm, dirt, earth.

### APPLICATION ACTIVITY 2.5

Draw and paint a human figure.

### END UNIT ASSESSMENT

1. Draw and paint a composition of still life.
2. Draw and paint a person and put him/her in nature.

# UNIT 3

## MOTIFS, PATTERN AND DESIGN PROCESS

**Key unit competence:** To be able to describe the key points in the evolution

### 3.1 INTRODUCTORY ACTIVITY



1



2



3



4



5

1. What do images 1, 2 and 3 remind you of in terms of design?
2. What activities are taking place on images 4 and 5?

## 3.1. Types of print making

### Learning Activity 3 .1



What is the difference between different texts on the above images?

**To print** is to reproduce a text, an image or an object by using a master plate or a master form. Master plate or master form is something that will help to make a reproduction, like a stencil, a design on computer, a form when making different objects.

Main types of printing can be divided into 3, based on the result of a printed work.

#### 1. Surface printing

Surface printing when the text or the image lies on the background. Example is: texts in newspapers, magazines, on walls, on some clothes

#### 2. Relief printing

3. Relief printing is when the text or the image is raised on the background, here the text or image is felt, and you touch and feel it. Example is: texts and images on coins, the word UMOJA on some slippers, the word BIC on some pens, words on TVs or radios...

Note that there are 2 types of relief printing; relief and intaglio (incision). Intaglio is when the text or the design is incised (curved) in the background of the surface. Like the way some texts or images are incised on cleaning soaps, on some padlocks, on rulers, on pencils' marks,

#### 4. 3D printing

Three dimension printing is when a text, image or object has the length, width and height. Here the object is printed so that you can see the front, the back, the right, the left, the bottom and the top of it. Examples are many: school materials (erasers, pens, pencils,...), some foods are printed using master form like cakes,

candies, sweets, biscuits, gums,... letters can be printed in 3D and make a text on the top of a building as a signpost of the building.



surface printing



lower relief printing



raised relief printing



3D printing

### APPLICATION ACTIVITY 3.1

Create a motif and reproduce it using any one type of printing from the main types of printing.

## 3.2 Applying motifs and patterns on surfaces

### Learning Activity 3.2

Discuss on the techniques that can be used to apply a motif and patterns on a surface

### Printing Technique

#### a. Using impression technique

There are times you can transfer a pattern from one source to another by impression. Patterns from hard surface as biscuits, rocks, stones, tree bark, coin, shoe sole, prepared clay with different patterns etc are needed to use this method.



raised bloc for giving design on plastic material



Plastic material for impression



To be read to press on a block of design

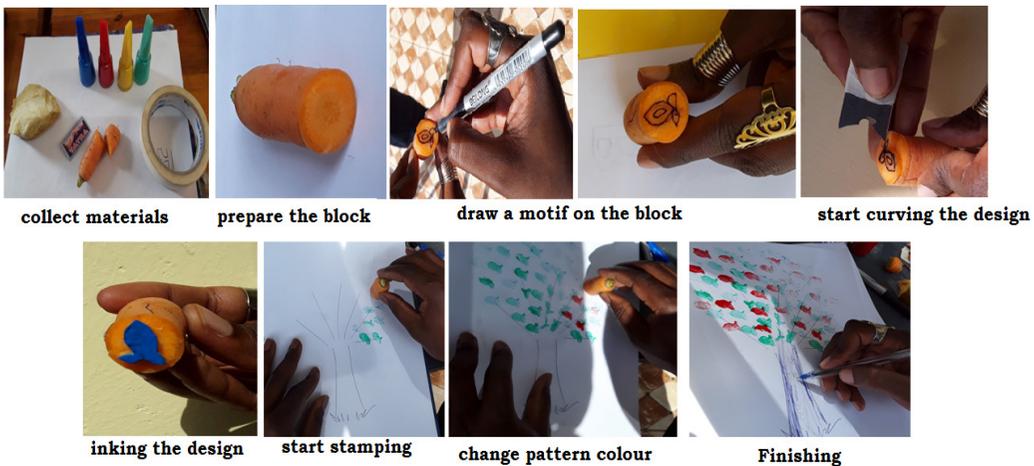


Final result of impression on plastic material

## b. Using stamping technique

Stamping is a craft in which some type of ink is applied to an image or pattern that has been carved. The ink coated rubber stamp is pressed onto any type of medium such that the colored image is transferred to the surface or other medium.

One can make a stamp using a sharpen razor and waste of gumboots made in rubber. You draw the design in reverse, remove the background, put the piece of gumboot on the support and put the design in the ink pad, then stamp on the surface.



## c. Using stenciling technique

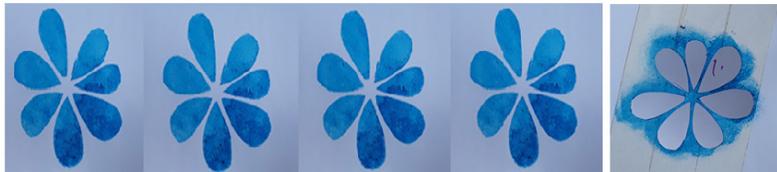
**Stenciling technique** produces an image or pattern by applying paint to a surface over an intermediate object with designed gaps in it which create the pattern or image by only allowing the pigment to reach some parts of the surface. The key advantage of a stencil is that it can be reused to repeatedly and rapidly produce the same letters or design. With some designs, this is done by connecting stencil **islands** (sections of material that are inside cut-out “holes” in the stencil) to other parts of the stencil with **bridges** (narrow sections of material that are not cut out).



a cut out of a stencil

put a paint on sponge

start printing

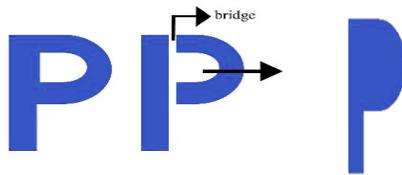


final print

stencil kept to be reused

..

### Parts of a stencil



### The result when you forgot bridge

Some letters and numbers like I, J, K, L, M, N, S, T, U, V, 1, 2, 3, 5,... don't need bridges when cutting them, but letters like A,B, D, O, P, R,4, 6, 8, 9, 0,... need bridge to support or protect the island. This is not only on numbers and letters but also on shapes or other designs, bridges are sometimes needed.

- a. **Screen printing** is a printing technique that uses a woven mesh to support an ink-blocking stencil to receive a desired image. There are many ways of making screen printing depending on the used materials.

The following steps can be used in general for screen printing techniques

#### Method 1: using film of two layers

**Step 1:** Prepare your screen

**Step 2:** Make a design, using freehand or computer

**Step 3:** transfer the design on film,

**Step 4:** cut the film, remove the design

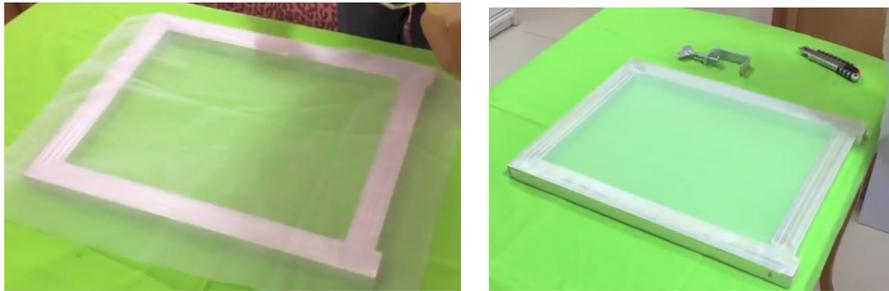
**Step 5:** burn the cut out of the design on the screen using thinner and brush or sponge, you can dilute the thinner with water because thinner is too strong, it can damage the design

**Step 6:** coat the rest of the screen with masking tape, let only where ink will pass.

**Step 7:** start printing. And after wash and dry your screen. You can also iron your t-shirt or fabric to fix well the design on the fabric.

## **Method 2: using photo emulsion**

**Step 1:** Prepare your screen



**Step 2:** make a design using computer, or free hands (better to use a marker or ink pen)

**Step 3:** print with a printer your design on film (a translucent paper)

**Step 4:** coat your screen with emulsion and let it dry in dark place

Because light destroys the emulsion, for 24hours but to save time you can use hair dryer to be quick.



**Step 5:** stick the film on top of the screen and burn it using light bubble or add few petrol on the screen and stick the film and expose it to the sun when you don't have the appropriate light bubble.



**Step 6:** wash and dry your screen, to remain with the design which will be open so that ink can pass through.

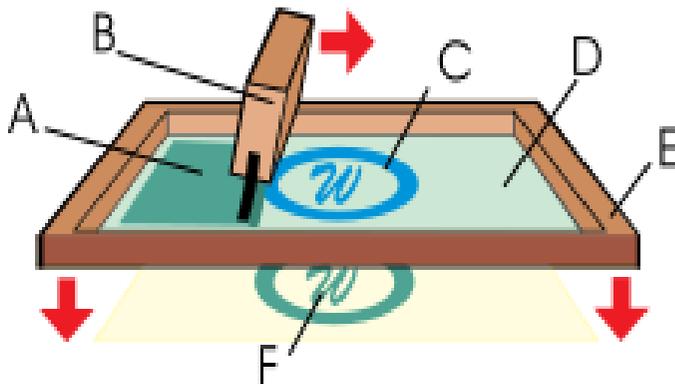


**Step 7:** start printing. And after wash and dry your screen. You can also iron your t-shirt or fabric to fix well the design on the fabric.



### Materials to be used:

Fabric, Canvas stretcher, woven mesh, Staples or nails to mount the woven mesh on the screen, Staple gun or a small hummer, Thick printer paper, printer (optional), pencil, utility knife, masking tape, screen printing fabric ink, squeegee (D-cut or square-edged), Water, Sponge.



- |                    |                           |
|--------------------|---------------------------|
| A. Ink             | B. Squeegee               |
| C. Image or design | D. Photo-emulsion or film |
| E. Screen          | F. Printed image.         |

### APPLICATION ACTIVITY 3.2

Make a design and apply it using possible printing techniques on an available surface.

### END UNIT ASSESSMENT

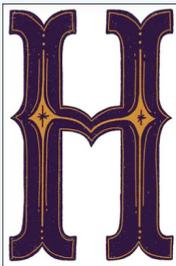
1. Give a known example on each type of printing that you know.
2. Design a short text with patterns or message and print it on a surface using the technique of your choice.

# UNIT 4

## LETTER STYLES AND ILLUSTRATION DESIGN

**Key Unit competence:** To be able to create various designs with images and different letters styles.

### 4.1 INTRODUCTORY ACTIVITY



1. Discuss on the above images and their roles in our daily life.

### 4.1. The Elements of Graphic Design

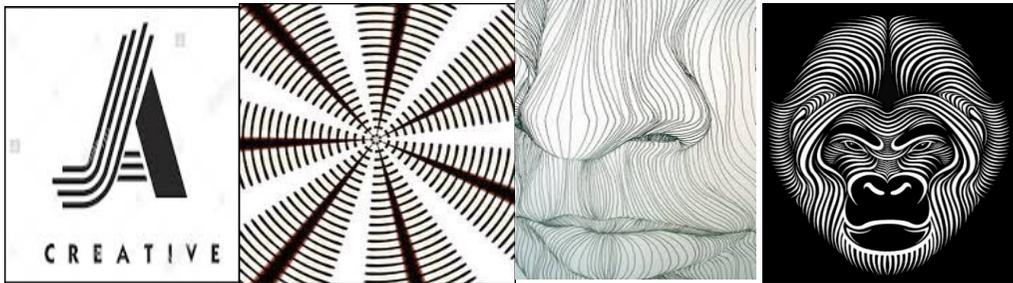
#### Learning Activity 4.1



1. Make a study of the above design and describe the elements of design and the qualities used to compose it. a surface

## 1. Lines

Lines are used as roadmaps to direct the viewer's eye movements. They can exist on their own or be employed to create texture and movement to connect information, to demarcate space or even to create a desired mood. Lines can be vertical, horizontal, diagonal, circular, patterned, free form or solid/bold.



## 2. Shape

Shapes can be geometric, abstract, stylized or as they occur in nature. They give volume to the forms in a design. You can make use of texture, lines, colors and alterations in value to discern shapes.



## 3. Texture

Texture is a powerful graphic design tool used to enhance design with details necessary for creating visual impact. It delivers a sense of feel, especially with two-dimensional images. In graphic design, texture can take the form of layers or gradation of text, lines or shapes.



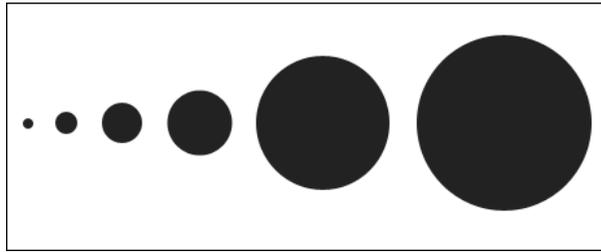
#### 4. Space

In design expression; white space is called negative space. It can be used to connect, separate or maximize the relationship between the elements making up the design. Negative space creates groupings, enhances expressions and emphasizes hierarchies. Space can also be used to give the illusion of depth or multi-dimension.

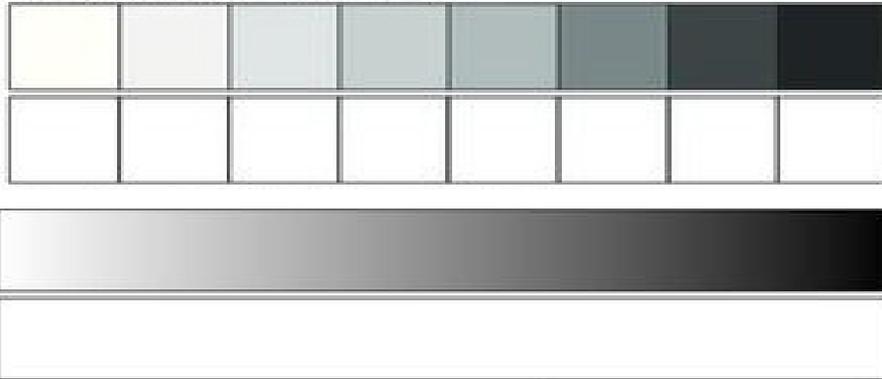


#### 5. Size

The functionality of a graphic design layout hinges heavily on size. Use size to draw attention to the most important element in the design; typically, a larger size invites the most attention. Different sizes within the same graphic design or layout creates a hierarchy of dominance. Use variations in size to guide the viewer's eye through the path you want it to take.



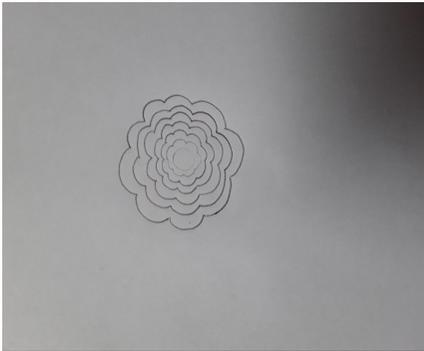
## 6. Value



This refers to how dark or light (in terms of color) something is. In a monochromatic image, value is used to define the shape and texture of a design element. Value comes in handy when you want to convey the illusion of movement or bring one element into sharp focus while another recedes into the background.

## 7. Color

People process color subconsciously. To establish mood, create appeal, generate interest and get a message across, color is the most potent tool in your graphic design collection.



### Aspects/qualities of design

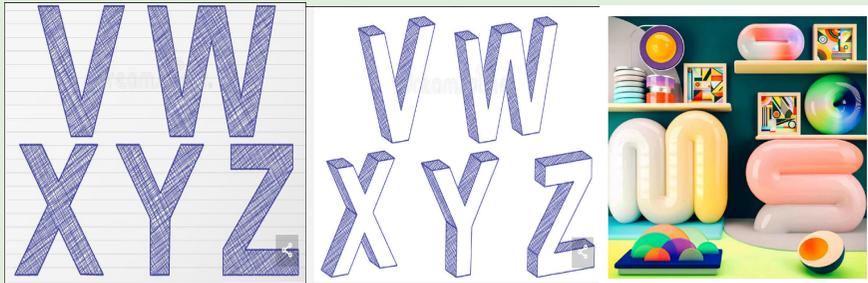
- **Layout** in graphic design deals with the arrangement of visual elements so as to achieve specific communication objectives.

When designing, the graphic designers should rely on the required information to present the layout properly, such as rotating and resizing the images, which requires time and efforts. In order to be able to design quickly, it is necessary to plan the layout in advance to save time and create a consistent look for your design.

- **Legibility:** the artist should choose the kind of lettering that will be easy to read at a glance. It should not be too congested or condensed. The words should have proper spacing, a good background color and illustrations should be seen clearly.
- **Placement:** don't overlap your images over your font, but make sure they are next to any wording that helps explain them. You shouldn't be using these just to fill a giant empty space. All of your images should have purpose.
- **Illustration:** are those images or pictures that accompany the text to explain it, illustrations help the viewer to understand well and quickly the message. On a poster it is better when the illustration takes a big place at least 60% of the whole place.

## 4.2. Designs with illustrations and three dimensions (3D) letters

### Learning Activity 4.2



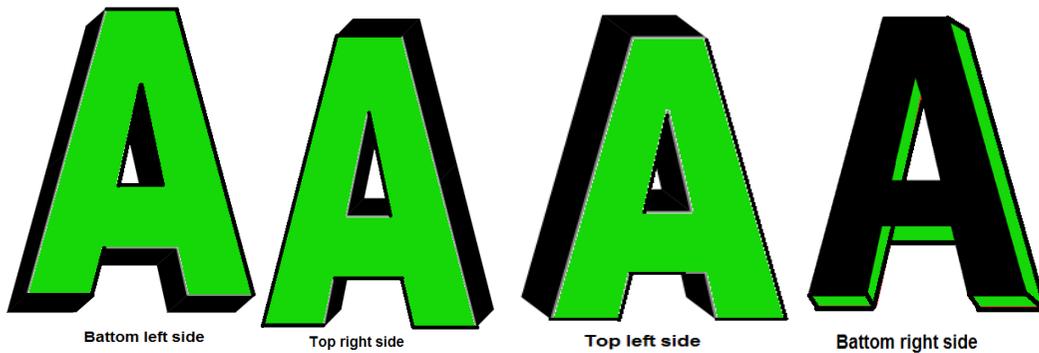
1. Differentiate between the letters shown above.
2. What are the elements that were used to make image 3?

As the name states 3D lettering is turning any desired marketing messaging, including your logo, and give it the volume.

With any marketing campaign, the most important aspect is for the campaign to get noticed and to create an impression on the viewer. There are many different aspects to achieve this goal, with one being the incorporation of adding a three dimensional effect to your messaging. The added layer of dimension distinguishes the messaging from outside distractions by giving it that extra-added visual pop, drawing the eye towards the main focal point

Letters on a page look flat. This is called two dimensional. You can give your letters depth by drawing the sides of the letter, as well the top, or the bottom. Even though you are still drawing just lines on a piece of paper, your letters will have the illusion of depth. They will look three dimensional (3D). To construct three dimensional letters parallel line method can be used to shift from shape to form where the deep is observed.





Three dimension letters for uppercase and its relative lower case letters



When you are creating designs with illustrations and three dimensional (3D) letters you need to make sure that they are both saying the same message and do not contradict one another.



#### APPLICATION ACTIVITY 4.2

3. By choosing one theme from the following themes: best wishes, animals, vegetation, unity, peace, family planning and love
  - a. Make a design with illustrations and three dimensional letters
  - b. Explain the main idea from your composition

## 4.3. Poster making

### Learning Activity 4.3

Assuming that you have been selected as the best student-teacher in your school to sensitize people in your community about children's rights, as an artist, design a very good poster to attract people to come and join your campaign.

**Poster** describes a general category of printed 2-D **artwork** which is designed to be affixed to a vertical surface. **Posters** may consist exclusively of illustrations, or images and text.

The main function of a poster is to capture a moving audience with a message. When designing a poster, plan its design carefully. You will have a short amount of time to attract and hold your readers attention. Think about the one aspect of the information that must convey the message and plan your design around that.

After you determine the most important information you need to think about the imagery that will best convey your message visually, you should use on large image, or have several small interesting shapes. Use colors to evoke the mood or emotion that you want and make sure that some of the words should be in very large type to be easily read.

It is also important to know what type of format will be used. What size will the poster be? How big or small? That will help you with the placement of imagery and text. Also consider where the poster will be displayed and what size and shape it should be. Eliminate any superfluous detail. Work out the right size and placement for everything on the poster. Because you are usually working on a large scale, pay careful attention to balance and proportion.



### brainstorming poster

Figure 4.3: needed images to make a poster of Rwanda Air



### FINISHED POSTER

#### APPLICATION ACTIVITY 4.3

1. Make a poster advertising your school or a business you are planning to do after finishing your studies.

#### END UNIT ASSESSMENT

1. List the elements of graphic design
2. Given a paper of 30cm height and 40cm width, choose your own theme and design a relevant poster.

# UNIT 5

## COLLAGE

**Key Unit competence:** To be able to make coloured collage works.

### 5.1 INTRODUCTORY ACTIVITY



1. How do you call the technique used to make the image above?
2. What are the tools and materials that were used to make it?

#### Learning Activity 5.1

Discuss about the procedures of making coloured collage

### 5.1. Procedures of colouring technique for making collage work

An art of making collage work is an activity which is done progressively where there are steps required to be respected as detailed down especially when it is a colored collage. Procedure is a set of small steps taken to accomplish a task.

Steps that can be followed to make a collage

**1<sup>st</sup> step:** Theme: think about the theme of your collage

**2<sup>nd</sup> step:** Brainstorm what will appear on your collage

Draw the idea of how you wish your collage should look like, here it is better to sketch more than one idea in order to choose the best idea.

**3<sup>rd</sup> step:** Think about coloured materials to be used in collage, you can paint them before or after depending on the kind of selected materials to be used in the composition. Collect materials like hard paper, pencil, eraser, glue, scissor, razor, white paper or a drawing notebook, paints and brushes

To enhance the good appearance of the coloured paper collage it will be better to paint them before, but for other materials like sand, rice, sorghum, small pearls... can be painted after being stacked on the surface.

**4<sup>th</sup> step:** sketch or draft the idea. Make a layout. It refers to the act of making a layout of your collage.

**Tools** are materials that you can use to make a given work like razor or sharpener, scissor, pencil and many others while materials are those materials that will be found on the work( that make an artwork) like paint, beans, rice, pieces of clothes and many others

**5<sup>th</sup> Sticking over the sketch prepared pieces:** after preparing pieces of materials to make collage work, artists need to put glue on pieces then after he or she takes them and put over them on the sketch and let them dry.

**6<sup>th</sup> Painting and finishing collage work:** this the process of applying the paint on collage works for enhancing its appearance. After stacked materials being dried the next is applying colours using oil paint or water colour targeting the original colour of colored objects in their nature.

### APPLICATION ACTIVITY 5.1

Make a draft of a coloured collage and propose materials to be used.

## 5.2. Making collage works using colouring technique

### Learning Activity 5.2



Observe the above image and name the techniques of collage that is used.

Like any other artistic creation, collage making is influenced by the mood and feelings of an artist. The arrangement of the colours, combination of the shapes and materials used, display the creativity of the artist. A collage puts to use the special features on each material, especially the textures that are unique in each one of them. The beauty of the collage shall then depend on the arrangement of the objects and other media such as paints and crayons.

When you are sketching and displaying collage materials, you should think about elements and principles of design like unity, harmony, color, shape, line...

Primer: is the substance applied on the working ground or surface when it is very smooth. It is a combination of powder paint and pastes. It helps the materials to stick better and the collage to last longer.



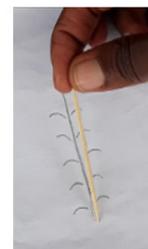
**Collecting Materials for collage work**



**Sketching design**



**Gluing materials**



**Sticking over the sketch**



**Sticking other kinds of materials**



**Painting collage work**



**Finished collage product**

*Figures: 5.2 Steps for making colored collage*

### **APPLICATION ACTIVITY 5.2**

1. Make a collage of your choice using colouring technique.

### **END UNIT ASSESSMENT**

1. What procedures are taken to make a coloured collage?
2. Make a coloured collage under the theme "UNITY IS STRENGTH".OUR

# UNIT 6

## BUILDING CLAY FIGURES

**Key Unit competence:** To be able to manipulate different tools and materials to build clay figures, forms and masks and apply various decoration patterns on the surfaces of various objects

### 6.1 INTRODUCTORY ACTIVITY



1. Name the activities which are taking place in the above pictures
2. Name the tools that are being used in the above activity

### Learning Activity 6.1

Discuss about the techniques of building clay figures.

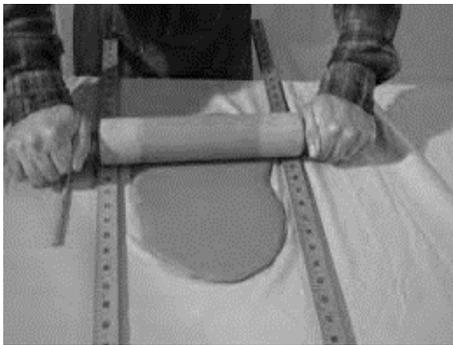
### 6.1. Techniques of building clay figures

After kneading and wedging clay, you can use different technique to make items. Techniques used are the following:

- Slab
- Pinch
- Coil

a) **Slab method**

Slab of clay are prepared and then pressed together to make different objects. A slab is a flat piece of clay, rolled out using a rolling pin or bottle by pressing between hands (as it is done when making chapatti). Slabs are cut to required shapes. To join them, scratches are made and slip applied. Slabs are then pressed to fix.



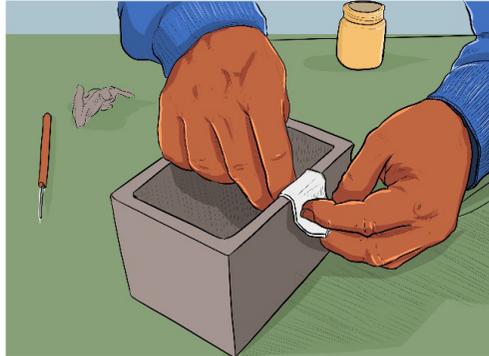
(1) Roll flat the lump of clay



(2) cutting slab



(3) Joining slab

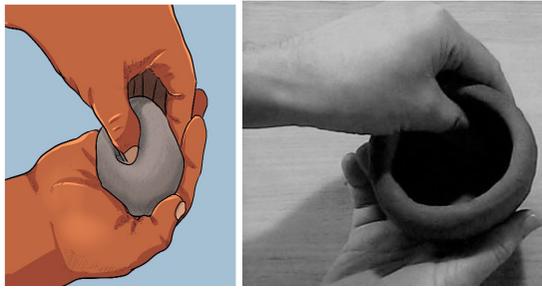


(4) Press slab to be fixed

**Figure 6.1:** Steps of using slabs

**(b) Pinching method**

A lump of clay is molded into a ball in the hands. A groove is created in the middle using the thumb. Punching is then done to form the wall. The article is shaped as the ball is pressed in pinching motion. It is also called **thumb method**.



(1) Make a shallow hole



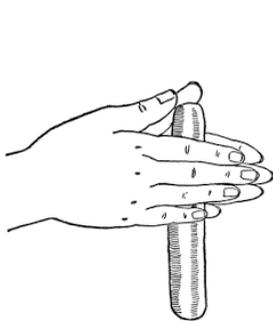
(2) Rotating to give form

(3) Finished work

**Figure 6.2:** Steps of making object with pinching

**(c)Coiling method**

Strips of clay are rolled out on a slab. They are then used to shape a container. They are called **coils**. They are attached by scratching and pressing together subsequent coils then smoothening.



Making coils



(2) place coil on support



(3) Joining coils

**Figures 6.3:** Steps of making object with coiling

## APPLICATION ACTIVITY 6.1

1. a) Follow the steps of using coiling method and make a flower pot.  
b) Display and discuss with your classmates about the flower pot that you have made.

## 6.2. Techniques of decorating clay surfaces

### Learning Activity 6.2



1. Discuss the techniques used to decorate the above clay work.
2. Name the local materials that can play the same role as the above materials when decorating clay forms.

Decorating clay figures is one of the most rewarding aspects of working in clay. It is the time when you can add colour and life to a bare clay surface that can show your creative talents. Decorations can be made before or after firing the clay figure. Firing can be done by putting the clay figure in a kiln and fired so as to harden it.

There are different techniques you can use to decorate clay figures like; *incision, impression, marking, grazing and varnishing.*

### **(i) Incision**

**Incising** is decorating technique where you use sharp tools or trimming tools to create designs by piercing the surface of lather hard ceramic ware



*Figure 6.4: Creating designs with incision*

### **(ii) Impression**

Impressing is a type of decoration produced by pressing something on the surface of the clay when it is still soft or stamped decoration.



*Figure 4.10: Creating designs with impressing*

### **(iii) Marking**

It is known as **cord marking** is the decorative technique in which cord or string wrapped around a paddle and pressed against an unfired clay vessel, leaving the twisted mark of the chord.



*Figure 4.11: Pot decorated by marking*



*Figure 4.12: Cord wrapped paddle*

#### (iv) Grazing

This is applying chemical on fired clay to create shining or various colours after the firing.



(1)

(2)

(3)

(4)

1. Firing
2. Pour white slip
3. Paint coloured slips in the surface
4. Use dull needle tool to incise a drawing



Figure4.14: Painted cup and grazed bottle

#### APPLICATION ACTIVITY 6.2

1. Choose one object from the environment and build it with one technique of building clay figure and decorate it.

## END UNIT ASSESSMENT

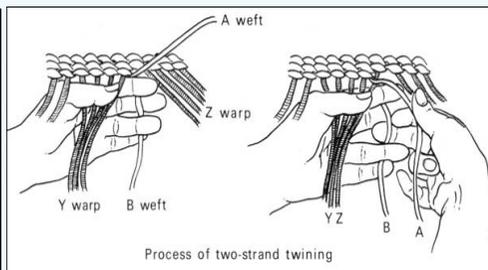
1. Why is it necessary to wedge clay before modelling?
2. Mention at least four tools used in shaping clay and state what they are used for
3. How can one prevent clay products from cracking during firing?
4. a) Use prepared clay and coiling technique to make a jug from clay  
b) Decorate the clay made object with decorating technique of your choice.

# UNIT 7

## WEAVING USING BASIC LOCAL MATERIALS

**Key Unit competence:** To be able to use various tools and different forms of raffia weaving techniques (plain twill, twill weaves and twinning weaves) to make different weaved items.

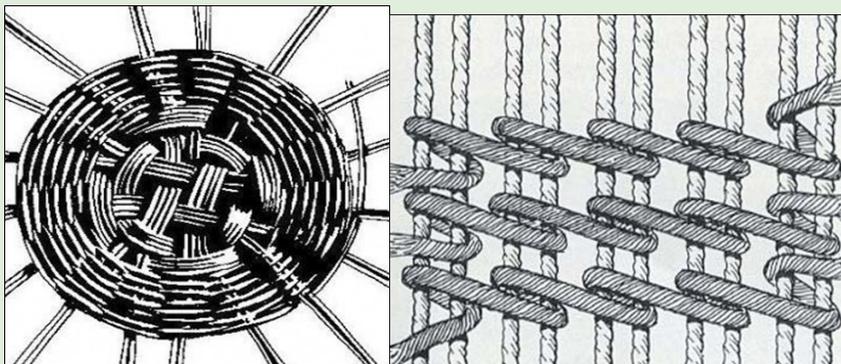
### 7.1 INTRODUCTORY ACTIVITY



1. Name the activity that is taking place in the pictures above.
2. Identify the technique of craft that is being used for producing the above artworks

### 7.1. Techniques in assembling wafts and wefts using different types of raffia

#### Learning Activity 7.1

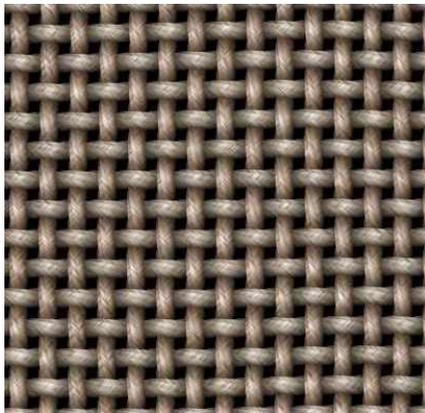


3. Identify the technique used in weaving craftwork when decorating clay forms.

The way the weft is made to intersect through the warps results into a product that is related to different techniques and having particular characteristics. The methods/techniques that can be used for assembling raffia works are the following:

**i. Cross (plain weave)**

A plain weave structure is created when a weft goes in and out the warps in a pattern of one over one. The weave can be diagrammatically represented as shown below:



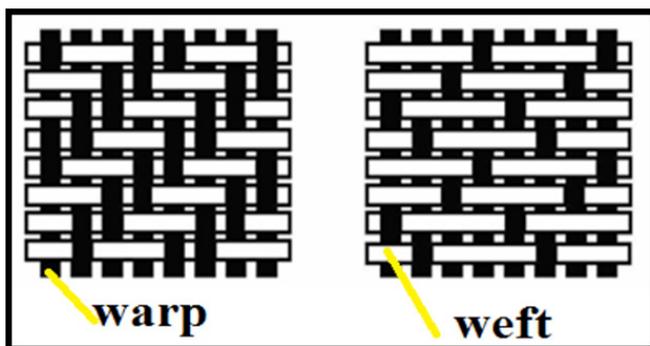
*Figure 7.1: Plain weave*



*Figure 7.2: Woven basket in plain*

**ii. Diagonal (twill weave)**

A twill weave structure usually creates diagonal lines on the woven fabric and is popular with suiting materials. The weave is created by passing one weft over one warp, under two, over one and so on. It could also be one weft over one warp, under three, over one and so on. The threads that look loose are called floats.



*Figure 7.3: Various twill weaves*



*Figure 7.4: Twill woven mat*

Twill weaves look heavier and stronger and therefore they are used to make works that last longer.

### iii. Twining weave

A twining weave forms a chained formation dense fabric. The weave is created by interlocking two crossing wefts around one warp. Twining is the easiest known technique of weaving or assembling raffia works. This technique involves two or more weavers or weft that are twined around a warp (over and under) and not necessarily twisted. It is also called pairing of two weavers and wailing when three or more weavers are used. This technique can be used to make basket and mats as you learned in senior two.

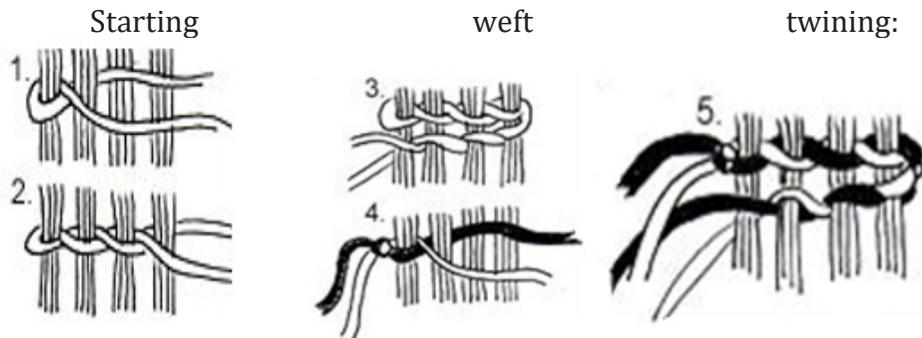


Figure 7.5: Steps of twining

1. and 2. They show how folded weft passes in front and behind bundles of warps a twist between them.

3. Weft returns at the end of a twined section in countered twining technique.

4. and 5. Countered twining creating vertical stripes is made by tying black and white yarns together.

### iv. Ghiordes knot

A ghiordes knot is a type of technique that creates a pile like a towel or bushy rag. Pieces of thread (yarn) are cut short. Two rows of plain weave are done. The next row is done by wrapping the short-cut threads around the warps in loop called the ghiordes knot. The next two lines are done plain weave. Then a row of knots . The knot is made as follows

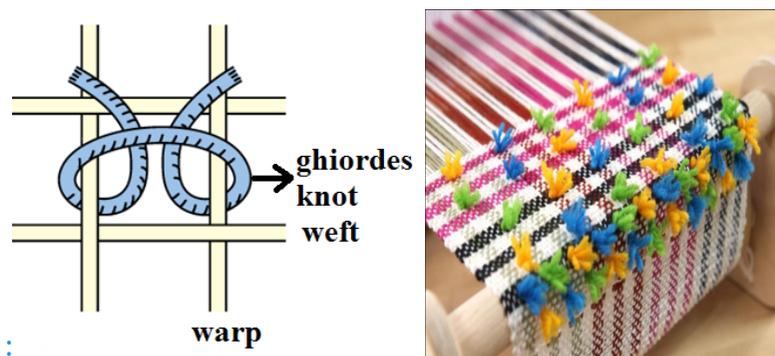


Figure 7.6: The ghiordes knot

#### v. Satin weave

The other type of basic weave is the satin weave which is similar to the twill weave, but generally it may use as many as five to twelve harnesses for its construction. The satin weave may have two faces, warp-face or filling face construction. Warp faced satin weave construction is done such that the warp yarns are seen on the surface of the woven material. For example, in a five-harness example sateen satin construction, the warp passes over four weft yarns and under one weft yarn. The warp always lies on the surface and interlaces only one weft yarn at a time.

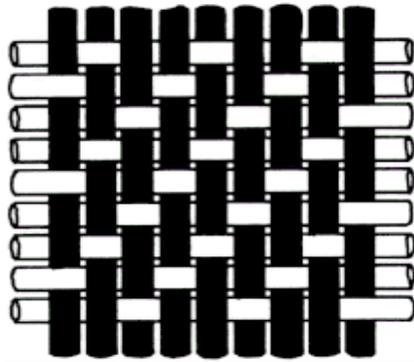


Figure 7.7: Satin weave

#### APPLICATION ACTIVITY 7.1

1. Explain any four weaving techniques
2. Among the studied technique assembling raffia work, choose one and use it make craftwork of your choice

#### END UNIT ASSESSMENT

1. Give four techniques of weaving.
2. Distinguish between twining weave and ghiordes knot.
3. Use locally available raffia to weave utilitarian material at your home

# UNIT 8

## MOTIFS, PATTERN IN EMBROIDERY, BATIK, TIE-DYE AND DESIGN TECHNOLOGY

**Key Unit competence:** To be able to create different patterns on textiles by manipulating various materials and tools.

### 8.1 INTRODUCTORY ACTIVITY



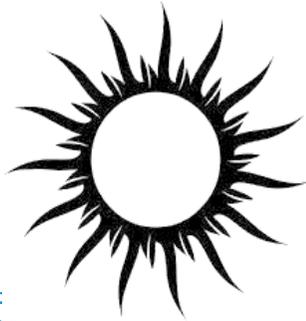
1. Describe the types of art and crafts that was applied in the works above.
2. Classify the items that can be made by embroidery, batik and tie-dye techniques

### Learning Activity 8.1

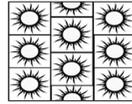
Choose your own inspiration and sketch a motif and a pattern on a piece of paper.

### 8.1. Making different motifs and patterns

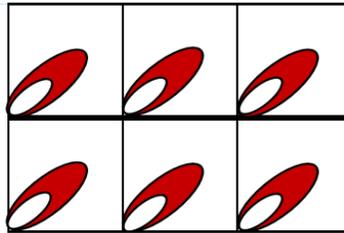
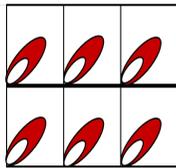
**Motif** is a single design and a **pattern** is a repetition of the motif in a design. The following is the example of motif and pattern.



**Motif**



**Pattern**



### APPLICATION ACTIVITY 8.1

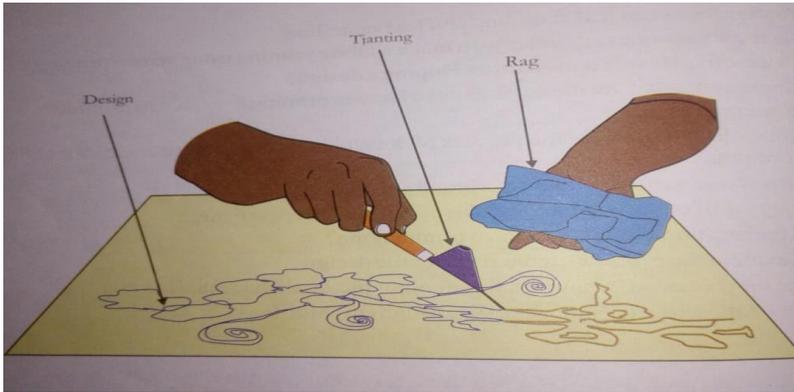
- Take the pattern drawn on the piece of paper and reproduce it on the textile.
- Embroider the pattern drawn on the textile.

## 8.2. Various batik designs

### Learning Activity 8.2

#### Discuss about steps of putting batik on a fabric

**Batik** is a method of producing designs on fabric by using a wax resist. Once the fabric is painted with wax designs, it is placed in a dye bath where only the areas with no wax are dyed. The hot wax can be applied on the fabric using Tjanting. Tjanting is a tool for drawing



## Steps

### 1. Melt your batik wax



### 2. Begin to apply the wax with your Tjanting or other tools



### 3. Repeat another application of wax to add more layers of color and design.



#### 4. Dye your fabrics in base colors.



5. **Remove the wax.** When you are done with all the color dyeing, you may remove the wax in one of two ways:

- **Boil the wax out.**
- **Iron the wax out.**

#### 6. Wash and dry your fabric



### APPLICATION ACTIVITY 8.2

Make a design of batik and apply all processes to batik the fabric

### 8.3. Making patterns of design on textiles using tie-dye technique

#### Learning Activity 8.3

**Discuss about tie-dye technique and steps to be followed to make tie-dye**

**Tie and dye** is a process in which a pattern is produced by a resist from folding, twisting or tying material while **Batik** is a more controlled, detailed process using melted wax as a resist to draw a design or pattern onto material.

By using a variety of tying methods, you can create interesting patterns with your tie dye.

The steps involved in mixing dyes for tie and dye are:

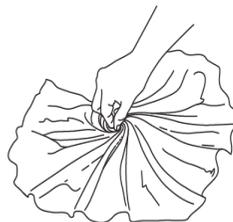
- Boiling water
- Dissolving the dye powder with a small amount of hot water
- Add the mixture that you have got to a larger amount of hot water
- Add salt in the mixture to make colours more permanent on the fabric.

The following images are the design and the finishing of tie dye technique made of folding technique.

1. Decide what you are going to tie dye, think about the result you want to get.



2. Fold, twist and tie or band depends on the wanted result



Twist it



Band it

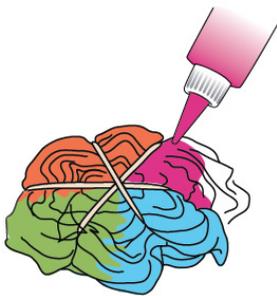


Fold your damp t-shirt in half (in either direction).



Tightly tie your rubber bands around your t-shirt. You can use the rubber bands as colour guides when you're dye.

3. Apply the dye with your bottles.



Dye it



Reveal it & Love it!



Put the dye on in stripes.  
Doing narrow dye stripes  
will give you more colours  
on your t-shirt!

4. Let it dry: place project in a plastic bag and leave overnight (24hours).

5. Wash and dry the fabric.



Multiple  
Stripes



Single  
Stripes

### **APPLICATION ACTIVITY 8.3**

Tie-dye the cloth based on the process above.

### **END UNIT ASSESSMENT**

- 1. What is the difference between batik and tie-dye techniques?**
- 2. Take a piece of cloth or a t-shirt, embroid on the design using techniques of your choice**
- 3. On the same place batik a simple design**
- 4. Tie-dye the piece of cloth or t-shirt**

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# **PART TWO**

## **MUSIC**

# UNIT 1

## COMPOUND TIME SIGNATURE

**Key unit competence:** Be able to sight sing respecting compound time signature

### 1.0. INTRODUCTORY ACTIVITY



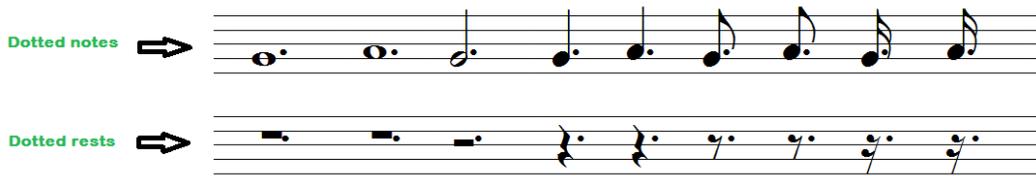
1. Discuss different types of time signatures.
2. Perform any wedding song or church song and accompany it with clapping.
3. What do you understand by “” beat ”” and “” beat unit ””

### 1.1 Dotted notes and Dotted rests

#### Learning Activity 1.1

1. Discuss dotted notes and dotted rests in Music.

In music, a dotted note or dotted rest has a small **dot** written after it. The dot lengthens the **value** (duration) of the note or rest by adding a **half** of its original value.



### Dotted notes and dotted rests symbols

	dotted semi breve (dotted whole note) = 6 (4+2) beats		dotted semi breve rest (dotted whole rest) = 6 (4+2) beats
	dotted minim (dotted half note) = 3 (2+1) beats		dotted minim rest (dotted half rest) = (3 (2+1) beats
	dotted crotchet (dotted quarter note) = 1 1/2 (1+1/2) beats		dotted crotchet rest (dotted quarter rest) = 1 1/2 (1+1/2) beats
	dotted quaver (dotted eighth note) = 3/4 (1/2+1/4) beats		dotted quaver rest (dotted eighth rest) = 3/4 (1/2+1/4) beats
	dotted semi quaver (dotted sixteenth note) = 3/8 (1/4+1/8) beats		(dotted semi quaver rest (dotted sixteenth rest) = 3/8 (1/4+1/8) beats

Consider the examples below:

	=		+		A dotted semi breve rest equals a semi breve rest plus a minim rest
	=		+		A dotted minim rest equals a minim rest plus a crotchet rest
	=		+		A dotted crotchet rest equals a crotchet rest plus a quaver rest
	=		+		A dotted quaver rest equals a quaver rest plus a semi quaver rest

	<b>a crotchet equals one beat</b>
	<b>a minim equals two beats</b>
	<b>a dotted minim equals three beats</b>
	<b>a dotted crotchet equals one beat and half</b>
	<b>two quavers equals one beat</b>
	<b>one quaver equals half beat</b>

Below is how to count the beats

One beat = one clap = a crotchet note 

**SING** → TA TA



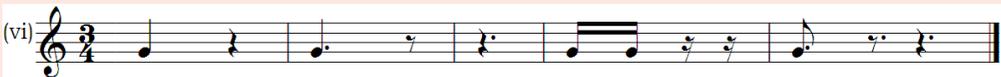
**CLAP** →

## APPLICATION ACTIVITY 1.1

1. Write the corresponding rests for the following notes.



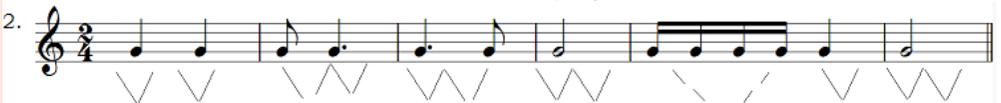
2. Complete each measure with one note that compliments the given notes if necessary.



3. Add the missing bar lines.



4. Clap the rhythm while singing TA...TA...





7. Compose a six-measure melody in which dotted notes are used then perform.

## 1.2 Compound time signatures

### Learning Activity 1.2

1. sol-fa and perform beating time in a moderate speed then in quick speed

2. Compare the speeds above

### 1.2.1 Three-eight-time signature $\frac{3}{8}$

To better count the beats in compound time signatures let us introduce a new simple time signature which is  $\frac{3}{8}$ . This  $\frac{3}{8}$  time signature is a simple time signature whose

beats are governed by **quavers**. That is to say, one beat equals one quaver. Since there are three quavers in  $\frac{3}{8}$  measure, there are also three beats.

Consider the figure below:

**3/8 time signature has three counts/beats in each measure** →

= one count/beat  
 = two counts/beats  
 = three counts

In  $\frac{3}{8}$  one quaver equals one beat. So the following beat can measured can be timing as follows:

1st measure                      2nd measure

### APPLICATION ACTIVITY 1.2

1. Add bar lines

(a)

(b)

(c)

2. Solfa and perform

(a)

(b)

(c)

## Compound time signature

### Learning Activity 1.3

1. Differentiate compound time signatures from simple time signatures.

In **compound time signature** the top number is divided by 3 to determine how many beats are in each measure.

### Common Compound Time Signatures

The chart below shows some frequently used compound time signatures.

Time signature	Number of beats per measure	Type of note that gets the beat
$\frac{6}{8}$	2	dotted quarter note
$\frac{9}{8}$	3	dotted quarter note
$\frac{12}{8}$	4	dotted quarter note

**Notice:** when the bottom number is 8, notes in compound meter are grouped in three quavers (eighth notes) which are equal to a dotted crotchet (quarter note).

- $\frac{6}{8}$  is classified as a **duple** because two dotted crotchets lead the beats.  
**Duple** means two beats per measure.



- $\frac{9}{8}$  time is classified as **compound triple**. There are three beats (three dotted quarter notes), thus making the meter triple.

$\frac{9}{8}$  time is classified as **compound triple**.  
There are three beats (three dotted quarter notes), thus making the meter triple.



**Triple** means three beats per measure

- $\frac{12}{8}$  time is classified as **compound quadruple**. There are four beats, thus making the meter quadruple.

making the meter quadruple.

$\frac{12}{8}$  time is classified as **compound quadruple**.  
There are four beats, thus making the meter quadruple.



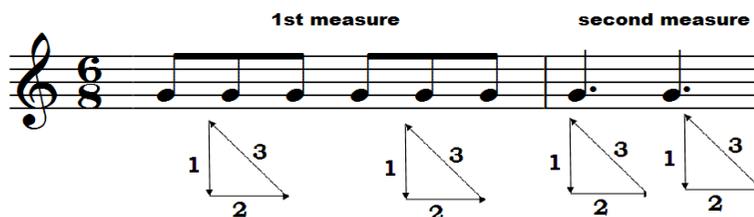
**Quadruple** means four beats per measure

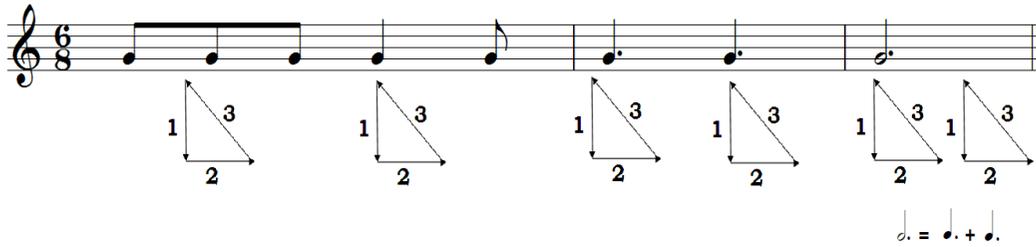
The **beat unity** of the compound times ( $\frac{6}{8}$ ,  $\frac{9}{8}$  and  $\frac{12}{8}$ ) is a dotted crotchet.

In  $\frac{6}{8}$ , we have two beats per measure governed by two dotted crotchets, in  $\frac{9}{8}$  we have three beats per measure governed by three dotted crotchets in  $\frac{12}{8}$  we have four beats per measure governed by four dotted crotchets.

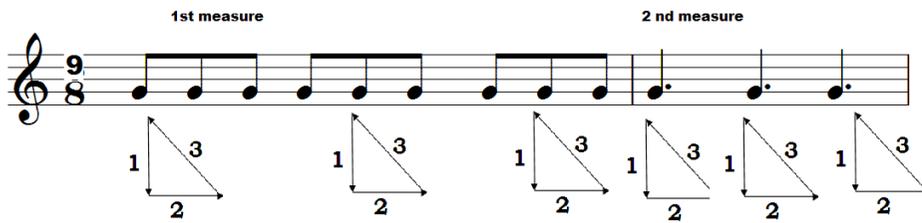
Since  $\frac{6}{8}$  time signature is a **double** of  $\frac{3}{8}$ , its beats will also be a double of the ones we have in  $\frac{3}{8}$ . Hence, beating time of the compound time signature can be made easy by imitating the one we use for  $\frac{3}{8}$  time; doubling  $\frac{3}{8}$  for  $\frac{6}{8}$  time, tripling  $\frac{3}{8}$  for  $\frac{9}{8}$  time and then quadrupling  $\frac{3}{8}$  for  $\frac{12}{8}$  time.

See the examples below.

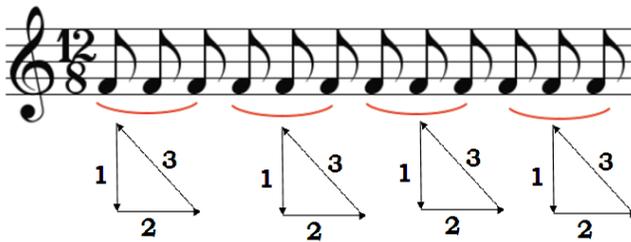




Since  $\frac{9}{8}$  time signature is a triple of  $\frac{3}{8}$ , its beats will also be a triple of the ones we have in  $\frac{3}{8}$ . See the examples below.



Since  $\frac{12}{8}$  time signature is a quadruple of  $\frac{3}{8}$ , we will **quadruple** the beats we have in  $\frac{3}{8}$ . See the examples below.



If in  $\frac{3}{8}$ , a quaver carries one beat, when we tap compound meter beats in the style of in  $\frac{3}{8}$ :

**IF IN 3/8 A QUAVER CARRIES ONE BEAT, WHEN WE TAP  
COMPOUND METER BEATS IN THE STYLE OF 3/8:**

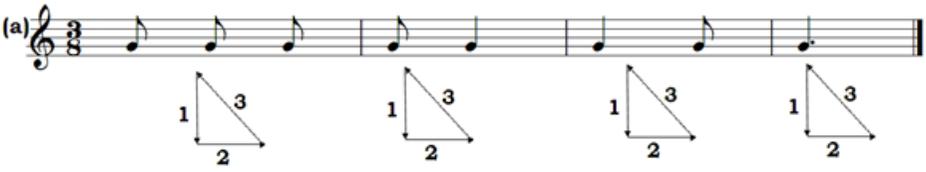
a quaver will carry one beat	( ♪ = 1 beat )
a crotchet will carry two beats	( ♩ = two beats )
a dotted crotchet will carry three beats	( ♩. = three beats )
a minim will carry four beats	( ♪♪ = four beats )
a minim + a quaver will carry five beats	( ♪♪ + ♪ = five beats )
a dotted minim will carry six beats	( ♪♪. = six beats )

**Note that beat 1 and beat 4 are strong.**

The musical notation shows a single staff in 6/8 time. The notes are:   
 Measure 1: quarter, quarter, quarter   
 Measure 2: quarter, quarter, quarter   
 Measure 3: quarter, quarter, quarter   
 Measure 4: quarter, quarter, quarter   
 Measure 5: quarter, quarter, quarter   
 Measure 6: quarter, quarter, quarter   
 The beat numbers 1 through 6 are written below the staff, corresponding to the six eighth notes in each measure.

## APPLICATION ACTIVITY 1.3

- Say Ta...Ta... while numbering beats using your hand

(a) 

(b) 

- Write beats in  $\frac{3}{8}$  style; (a quaver carries 1 beat)



- Write in bar lines to reflect the meter of  $\frac{6}{8}$ .



- Write in bar lines to reflect the meter of  $\frac{3}{8}$ .



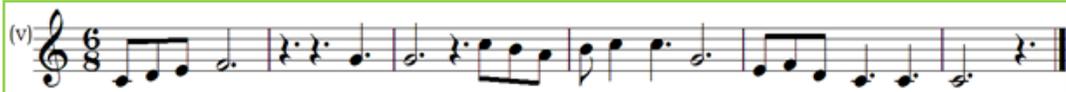
- Write in bar lines to reflect the meter of  $\frac{9}{8}$ .



- Write in bar lines to reflect the meter of  $\frac{12}{8}$ .



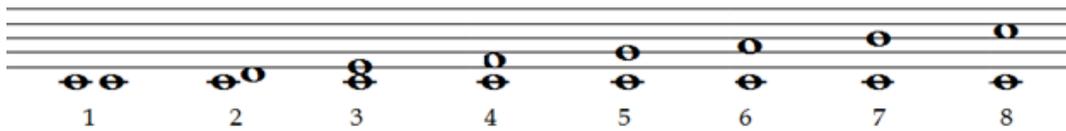




4. By using  $\frac{6}{8}$ ,  $\frac{12}{8}$  time signatures, compose a six measure melody and then perform it.



## KINDS OF INTERVALS

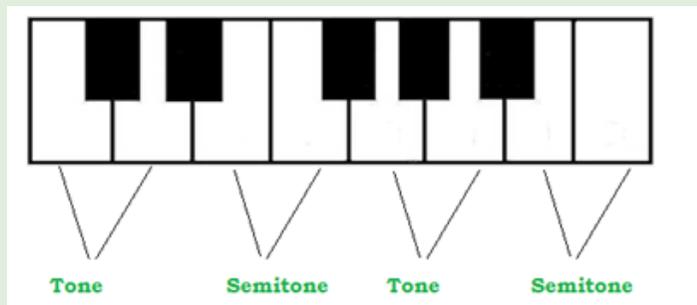


### 2.2 Tone and semi tone

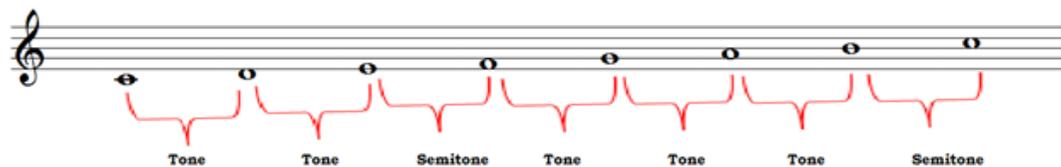
A semitone or half step is the smallest distance between any two adjacent notes. On the keyboard there is a semitone on adjacent keys whether it is black and white or white and white. The white keys of the piano (from C to the upper C) consist of five tones and two semitones.

#### Learning Activity 1.3

1. By considering the white keys on the keyboard, the two semitones and two tones have been illustrated for you. Can you find the other three tones?



On the musical staff, tones and semitones are ordered as following:



## APPLICATION ACTIVITY 1.3

1. How many tones or semitones exist between:
  - a. E and F=----- vi. A and C=-----
  - b. E and G=----- vii. C and E=-----
  - c. B and C=-----viii.C and D=-----
  - d. A and B=-----ix.C and G =-----
  - e. C and F=----- x. C and B=-----

### 2.3 List of simple intervals

Using the C Major Scale as example, **we have the following list**

- Same pitch C (1) =**Unison**
- From C to D (1, 2) =**Second - 2nd**
- From C to E (1, 2, 3) =**Third - 3rd**
- From C to F (1, 2, 3, 4) =**Fourth - 4th**
- From C to G (1, 2, 3, 4, 5) =**Fifth - 5th**
- From C to A (1, 2, 3, 4, 5, 6) =**Sixth - 6th**
- From C to B (1, 2, 3, 4, 5, 6, 7) = **Seventh - 7th**
- From C, to C above (1, 2, 3, 4, 5, 6, 7, 8) =**Octave - 8ve**

**Example of intervals on the treble staff**

A musical staff in 4/4 time with a treble clef. It shows eight pairs of notes representing intervals: unison (C-C), second (C-D), third (C-E), fourth (C-F), fifth (C-G), sixth (C-A), seventh (C-B), and octave (C-C'). The labels 'unison', 'second', 'third', 'fourth', 'fifth', 'sixth', 'seventh', and 'octave' are written in blue below the staff.

**Any note can be a reference to count the intervals**

A musical staff showing the C major scale. Below the staff are eight boxes, each containing an interval and its name:
 

- C to D = a second
- D to E = a second
- E to A = a fourth
- F to C = a fifth
- C to E = a third
- G to E = a sixth
- same G = a unison
- G to G = an octave

## APPLICATION ACTIVITY 2.2

1. Identify these intervals on the treble and bass staves

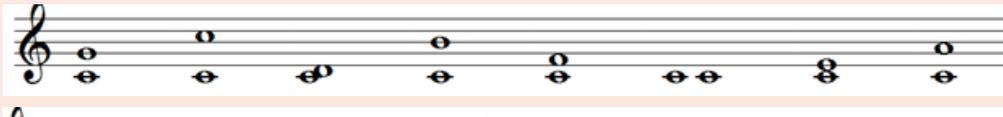
i. 

ii. 

iii. 

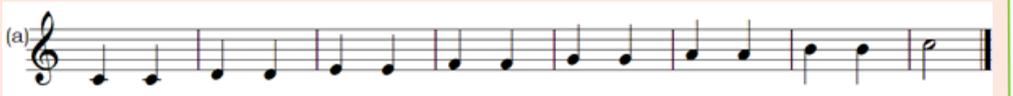
iv. 

2. Play the intervals on a piano





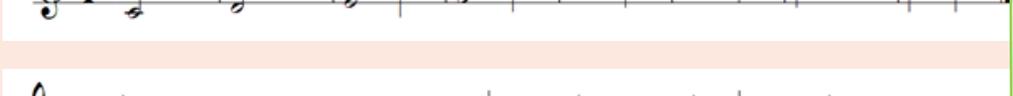
3. Sol-fa respecting the intervals

(a) 

(b) 

(c) 

(d) 

(e) 



## 2.4 Accidentals

**Accidentals** are signs or symbols placed to the **leftside** of a note to indicate that the pitch is to be altered.

These accidentals are **sharp (#)**, **flats (b)** and **natural (♮)**. Remember all the notes we have learnt: C, D, E, F, G, A and B. When you look at a piano's keyboard, these notes, from C to B are the white keys. All the black keys are called accidentals.

**The sharp (#) raises** the pitch of the note by semitone.

**The flat (b) lowers** the pitch of a note by a semitone.

**The natural (♮)** cancels the effect of either the sharp or the flat.

As we have seen, the purpose of a sharp is to raise the pitch of a note by a semitone.

Below is a sharpened note in a space



Remember that the sharp sign is in front of the note.

Below is a sharpened note on a line



Once more, the sharp sign is in front of the note.

When we flatten a note, we lower it by a semitone.

Like sharps, flats may be placed in front of notes that are on lines or in spaces.

Below is a sharpened note in the space.



Below is a sharpened note in a line



The same rules apply to notes that don't have black keys between them. Those notes are **E** and **F**, **B** and **C**. If we **raise E** by a semitone, or **sharpen** it, we arrive at **F**. So **F** is the **enharmonic** equivalent of E sharp. The reverse is true too. If we **lower F** by a semitone, or **flatten** it, we arrive at E, so E is the enharmonic equivalent of F flat. In the same way if we **raise B** by a semitone, or **sharpen** it, we arrive at **C**. So **C** is the enharmonic equivalent of **B** sharp. If we **lower C** by a semitone, or **flatten** it, we arrive at **B**, so **B** is the enharmonic equivalent of **C** flat.

Note that when accidentals are not used in musical staff they placed after note names. For example: C sharp (C#) or A flat (A **b**).

## 2.5 Enharmonic notes

C sharp = D flat

E = F flat

D sharp = E flat

F = E sharp

F sharp = G flat

B = C flat

G sharp = A flat

C = B sharp

A sharp = B flat

### Enharmonic notes on musical staff

Two rows of musical staves illustrating enharmonic notes. Each staff shows two notes with their respective accidentals and labels below them.

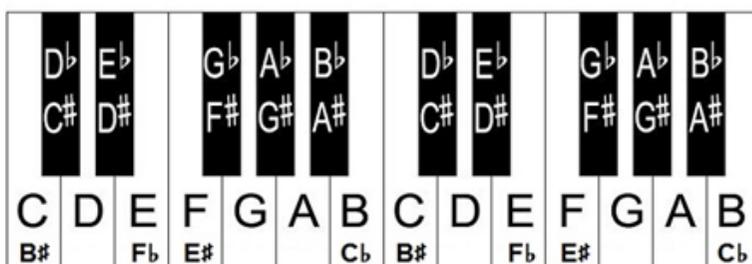
Row 1:

- Staff 1: C sharp and D flat
- Staff 2: D sharp and E flat
- Staff 3: E and F flat
- Staff 4: E sharp and F

Row 2:

- Staff 5: F sharp and G flat
- Staff 6: G sharp and A flat
- Staff 7: A sharp and B flat
- Staff 8: B and C flat
- Staff 9: B sharp and C

## Illustration of enharmonic notes on the piano



Natural  $\natural$

A **natural** sign, when placed in front of a note, **cancel out** the effects of a sharp sign or flat sign placed in front of a similar note before it. In other words, it restores a note to its **original pitch**.

If we place a sharp sign in front of an F, the note then becomes **F sharp** and any other **F** that appears in **the same bar** is also **F $\sharp$**  (even if the repeated **F**s don't have sharp signs in front of them). But if the composer wanted to play a natural F and not a sharpened then the natural F would have a natural sign placed in front of it, thus, restoring the note to its original pitch. The staff below summarizes this explanation.



In the staff above, the first note is **B flat (B $\flat$ )**, and so is the second, even though there is no sharp sign directly in front of it. The third note is B natural and so is the fourth.

The same if we place a flat sign in front of a B, the note then becomes **B $\flat$**  and any other **B** that appears in the same bar is also **B $\flat$**  (even if the repeated **B**s don't have flat signs in front of them).

Consider the staff below.



In the staff above, the first note is **B flat (B $\flat$ )**, and so is the second, even though there is no sharp sign directly in front of it. The third note is B natural and so is the fourth.

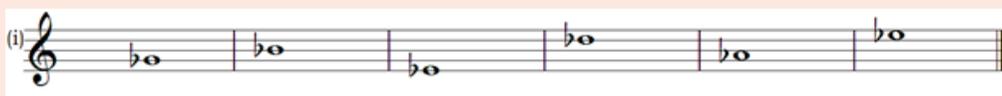
### APPLICATION ACTIVITY 2.3

1. Write in the name of the sharpened notes and then indicate them (the notes) on the keyboard.

(i) 

(ii) 

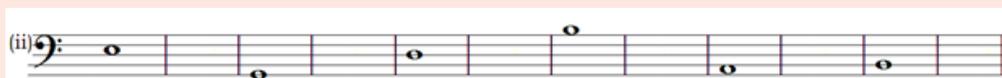
2. Write in the name of the flattened notes and then indicate them (the notes) on the keyboard.

(i) 

(ii) 

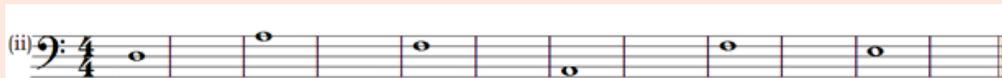
3. Raise the following notes by a semitone. (Write your answer in the empty measure/bar).

(i) 

(ii) 

4. Lower the following notes by a semitone. (Write your answer in the empty measure/bar).

(i) 

(ii) 

5. Name the notes below

A musical staff in treble clef with 16 numbered notes. The notes are: 1. G4, 2. A4, 3. B4, 4. C5, 5. B4, 6. A4, 7. G4, 8. F4, 9. E4, 10. D4, 11. C4, 12. B3, 13. A3, 14. G3, 15. F3, 16. E3.

1. -----  
 2. -----  
 3. -----  
 4. -----  
 5. -----  
 6. -----  
 7. -----  
 8. -----  
 9. -----  
 10. -----  
 11. -----  
 12. -----  
 13. -----  
 14. -----  
 15. -----  
 16. -----

6. To return the last note to the pitch of the first note of each of the following staves, which accidental would you put just before it.

Three musical staves in treble clef, each with three notes. Staff i: G4, A4, B4. Staff ii: B3, A3, G3. Staff iii: G3, F3, E3.

7. In the blanks below, write the enharmonic notes for the notes given to you.

i.	D#-----	<u>A</u> ♭-----	F#-----	B♭-----
ii.	C#-----	<u>E</u> ♭-----	<u>G</u> ♭-----	A#-----
iii.	G#-----	<u>F</u> ♭-----	B#-----	D♭-----
vi.	<u>C</u> ♭-----	F#-----	C-----	B-----
vii.	E-----	F-----	F-----	

8. Sol-fa the following notes respecting the accidentals then, play the notes and compare sound produced by the piano and the sol-fa you have done.

(a) Musical staff in treble clef, 2/4 time signature. Notes: C4, D4, E4, F4, G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4.

## 2.6 Quality of intervals

Intervals are also known by their quality:

- Major (M)
- Minor (m)
- Perfect (P)
- Augmented (augm)
- Diminished (dim) or (o)

**Relationship of quality designations**

- **Major** is one half-step larger than minor
- **Minor** is one half-step smaller than Major
- **Augmented** is one half-step larger than perfect and Major
- **Diminished** is one half-step smaller than Perfect or minor

Major (M) and Perfect (P) intervals on the musical staff

P1 (Unison) M2 M3 P4 P5 M6 M7 P8 (Octave)

When a size of minor or Perfect interval is reduced a half step, it becomes a diminished interval.

P1 dim1 m2 dim2 m3 dim3 P4 dim4 P5 dim5 m6 dim6 m7 dim7 P8 dim8

When a minor interval is raised a half step it becomes a major interval

### APPLICATION ACTIVITY 1.3

1. Name and play the following intervals on the keyboard:

(i)

(ii)

(iii)

(iv)

(v)

(vi)

2. Write the note that complete the intervals above the given notes

(a) 
  
P5 P5 P5 P4 P4 m3 P4 P4 P4 P5 M3 M3

(b) 
  
A3 d3 A3 m3 m3 M6 m6 M6 d3 M3 A3 m3

(c) 
  
P5 P5 A5 P5 P4 P4 A4 m2

(d) 
  
m2 m2 M2 M2 m2 m3 m3 M3

Notes:

- A perfect prime is often called a unison. It is two notes of the same pitch.
- A perfect octave is often simply called an octave. It is the next "note with the same name".
- Perfect intervals - unison, fourth, fifth, and octave - are never called major or minor
- Compound intervals are intervals larger than an octave. They are functionally the same as the corresponding simple intervals (those an octave or less in size). Thus, a 9<sup>th</sup> is a compound 2<sup>nd</sup>, a 10<sup>th</sup> is a compound 3<sup>rd</sup>, an 11<sup>th</sup> is a compound 4<sup>th</sup>, a 12<sup>th</sup> is a compound 5<sup>th</sup>, 13<sup>th</sup> is compound 6<sup>th</sup>, 14<sup>th</sup> is compound 7<sup>th</sup> but not used in music, octave is the compound of 15<sup>th</sup> etc.

Here is a chart of the compound intervals that might be encountered (remember that the issue of quality does not change in a compound situation: a compound *major* 3<sup>rd</sup> is a *major* 10<sup>th</sup>):

Interval	Compound
2nd	9th
3rd	10th
4th	11th
5th	12th
6th	13 <sup>th</sup>
7th	14th (not used)
Octave	15 <sup>th</sup>

### Examples of compound intervals

The image shows a musical staff with five measures, each illustrating a compound interval. The notes are as follows:

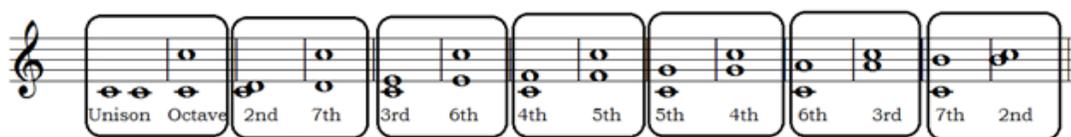
- Measure 1: Compound minor 2nd (Bb below staff, B below staff)
- Measure 2: Compound diminished 5th (Bb above staff, F below staff)
- Measure 3: Compound major 3rd (B# above staff, G below staff)
- Measure 4: Perfect 11th (B# above staff, B below staff)
- Measure 5: Augmented 12th (B# above staff, B# below staff)

## 2.7 Inversion of intervals

To invert an interval is taking a lower note of an interval, and put it on the top. Any interval can be inverted.

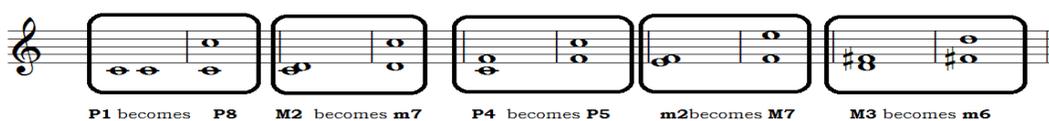
The following table and staff illustrate the interval inversions:

Original Interval	Interval after Inversion
1 (unison)	8 (Octave)
2nd	7th
3rd	6th
4th	5th
5th	4th
6th	3rd
7th	2nd



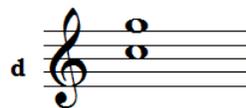
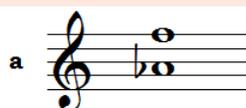
The next table shows the interval quality and their inversions

Original Quality	Becomes after inversion
Perfect	Perfect
Major	Minor
Minor	Major
Augmented	Diminished
Diminished	Augmented



## APPLICATION ACTIVITY 2.5

1. Match the intervals on the left with their inversions on the right.



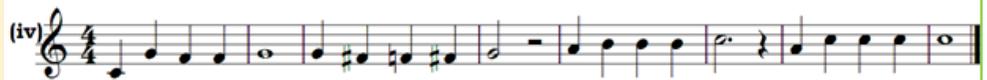
2. Name the following intervals and then give their inversions on the staves



## END UNIT ASSESSMENT

From C to upper C, distinguish and locate tones and semitones on music staff

1. On music keyboard, demonstrate the tones and semitones.
2. Compare and contrast the qualities of intervals
3. Sol-fa and perform



# UNIT 3

## MUSICAL SCALES

### 3.0. INTRODUCTORY ACTIVITY

1. In groups of three, look at the key board from C to B and answer the following questions:
  - (i) How many white keys are there?
  - (ii) How many black keys are there?
2. The distance between the nearest keys is called half-step. Consider now the white keys:
  - (i) How many half-steps are there in C scale?
  - (ii) How many whole steps are there in C scale?
  - (iii) Locate the steps and half steps on the key board.



**Picture: Group of singers Students (putting uniform) singing musical notes**

### 3.1 Diatonic and chromatic scales

#### 3.1.1 What is a diatonic scale?

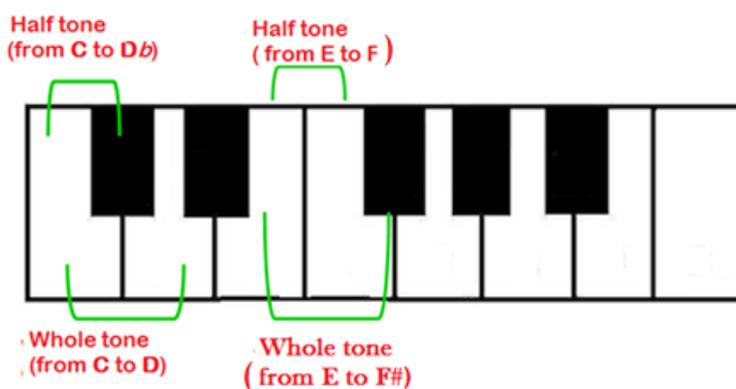
A **diatonic** scale consists of a pattern of **whole tones** and **halftones** (semitones). The notes of the diatonic scale are referred to as scale degree. The successive scale degrees are numbered **1,2,3,4,5,6,7, 8**. For instance if the first note of an octave is **C**, then the pattern of notes will be as follow:

**Whole Tone-Whole tone-Half tone- Whole tone - Whole tone - Whole tone -Half tone = (W-W-H-W-W-W-H)**

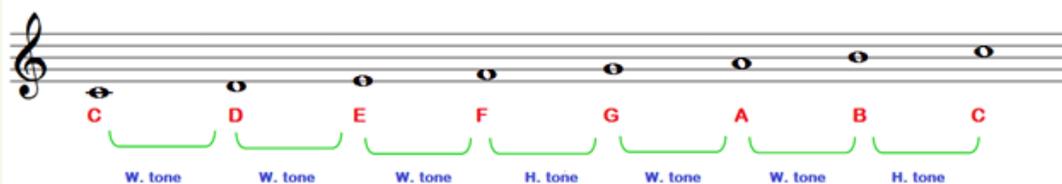
Remember that a **whole tone** consists of an interval of two halftones (two half steps); for example, the intervals from **C** to **D** or from **E** to **F#** are whole tones. That is, there is one and only one other note between those two tones (notes).

A **half tone** consists of an interval between two directly adjacent notes; for example, the intervals from **C** to **D<sup>b</sup>** or from **E** to **F** are half tones. That is, there can be no notes in between two notes which are separated by a half step.

On the keyboard these tones look as follow:



### A diatonic scale on the musical staff



From **C** to **D** there is a whole tone

From **D** to **E** there is a whole tone

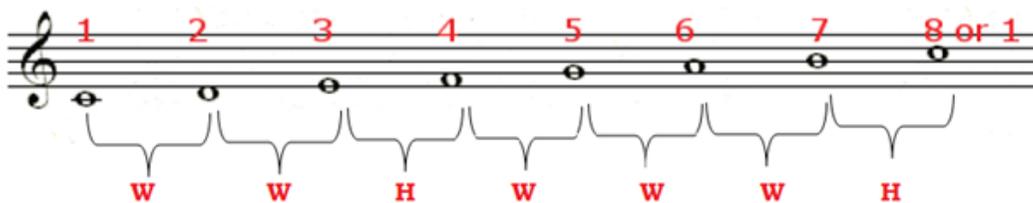
From **E** to **F** there is a  $\frac{1}{2}$  tone

From **F** to **G** there a whole tone

From **G** to **A** there is a whole tone

From **B** to **C** there is a  $\frac{1}{2}$  tone

We can also use numbers to show diatonic scale degrees

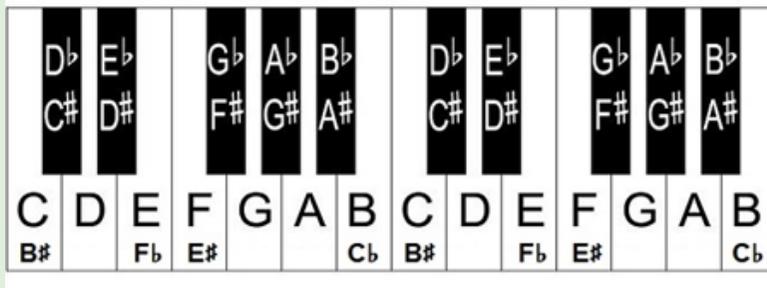


### 3.1.2 What is a Chromatic Scale

#### Learning Activity 3.1

How many half steps are there in a series of C scale?

1. On a staff, use sharps to show all the successions of half steps in ascending order.
2. Downwards in C scale, use flats to show all the succession of half steps

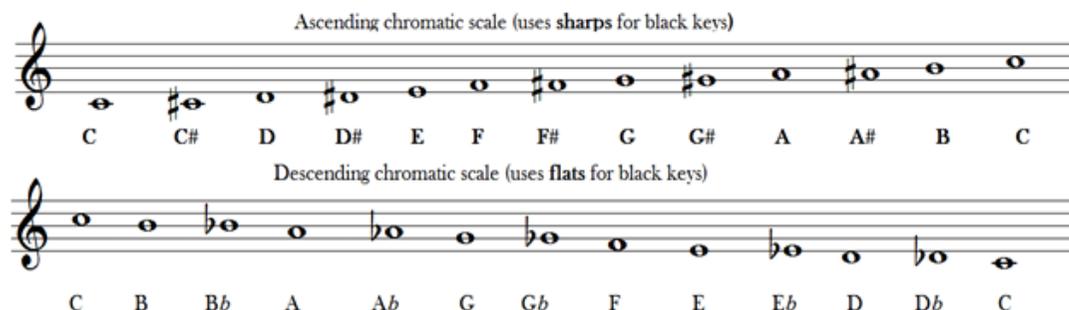


A **chromatic scale** consists of all the **8** tones in the do-re-mi scale plus all the additional **half-tones** that are left out when you sing Do-Re-Mi.

In other words, the 12 tones in a chromatic scale are a half-step or semi-tone apart.

C Chromatic Scale as you go up: C C# D D# E F F# G G# A A# B C

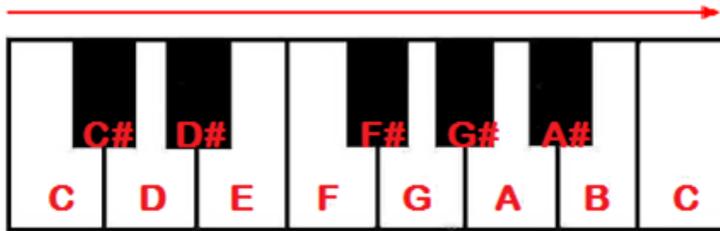
C Chromatic Scale as you go down: C B B $\flat$  A A $\flat$  G G $\flat$  F E E $\flat$  D D $\flat$  C



On the keyboard, every key is played consecutively; you do not jump any key.

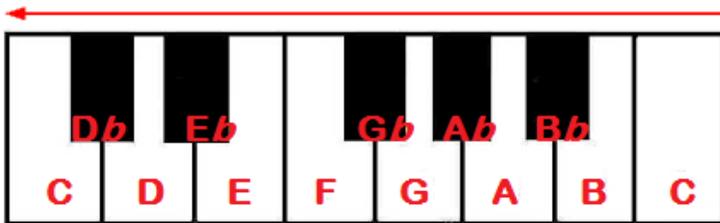
**On a keyboard, ascending chromatic scale use sharps**

**(C-C#-D-D#-E-F-F#-G-G#-A-A#-B-C)**



On a keyboard descending chromatic scale use flats

**(C-D♭-D-E♭-E-F-G♭-G-A♭-A-B♭-B-C)**

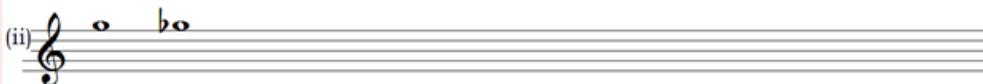


### APPLICATION ACTIVITY 3.1

3. Complete the following ascending chromatic scales



4. complete the following descending chromatic scales



## .2 Major scales and the key signatures



Picture: Children with music sheets, on cerle singing in choir, one in the middle guiding them

### Learning Activity 3.2

1. Individually write notes on a musical scale from C to C' above.
2. Play these notes on the piano keyboard (use the white keys only).
3. Use a sharp to complete the series of tones and semitones starting from the second line of treble staff respecting the following structure: **W W H W W W H (W=Whole tone H=Half tone).**

## 3.2 Major scale

A Major scale consists of eight notes organized in a diatonic structure. It has two half tones (half steps) and five whole tones (whole steps). So the pattern of major scale is organized as follows:

W W H W W W H

W=Whole tone

H=Half tone

### 3.2.1 C Major scale

The first scale degree (first note of the scale) is designated by the symbol 1 and is known as the tonic. The first note (or tonic) of C major scale is C. So scale degree names in any Major key are:

1<sup>st</sup> scale degree = **Tonic**

2<sup>nd</sup> scale degree = **Supertonic**

3<sup>rd</sup> scale degree = **Mediant**

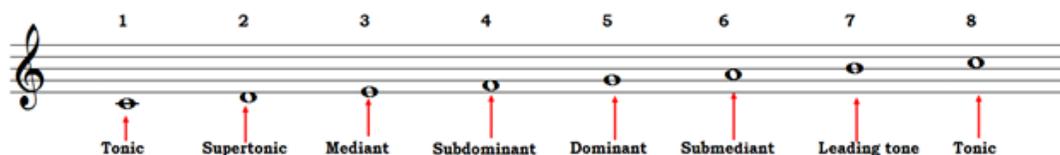
4<sup>th</sup> scale degree = **Subdominant**

5<sup>th</sup> scale degree = **Dominant**

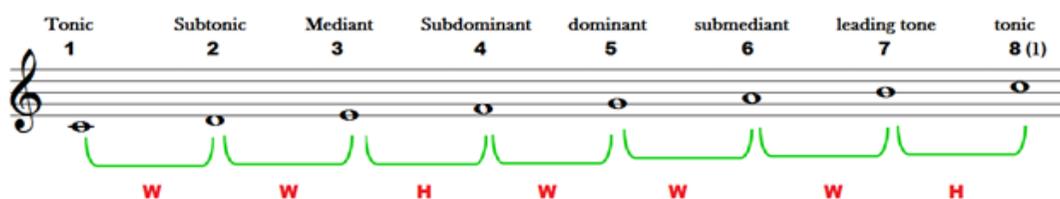
6<sup>th</sup> scale degree = **Submediant**

7<sup>th</sup> scale degree = **Leading tone**

8<sup>th</sup> scale degree = **Tonic**



The pattern of notes in C Major appears as follows on musical staff:



**Rule:** All Major scales have the following pattern of whole tones (steps) and half (tone) steps: half tones occur always and only between 3-4 and between 7-8. All other tones are whole tones.

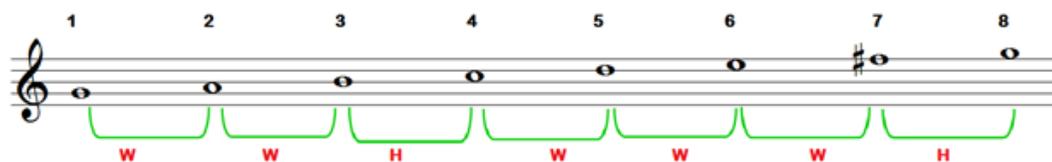
It is worth to know that starting a major scale on note names other than C requires **accidentals**.

A **Sharp (#)** raises a half tone (half step)

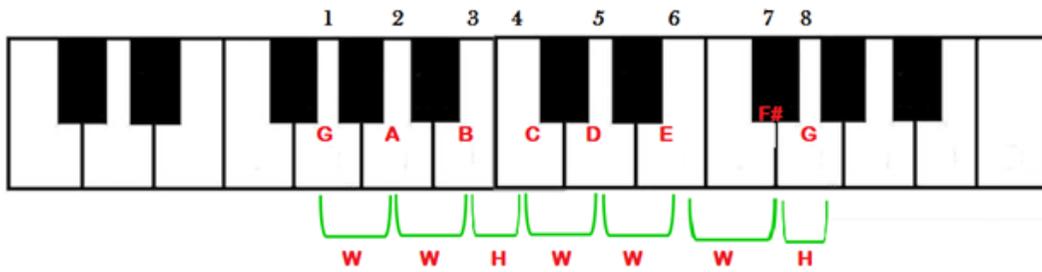
A **Flat (b)** lowers a half tone (half step)

Consider the examples below:

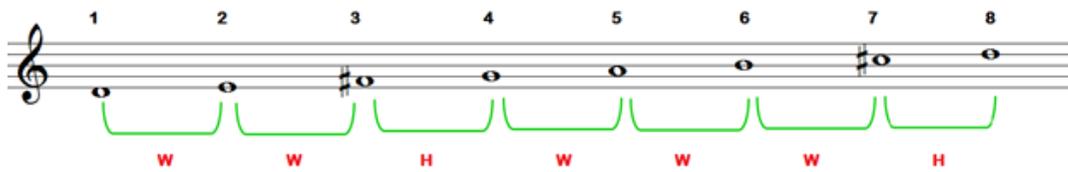
G Major (the tonic is G)



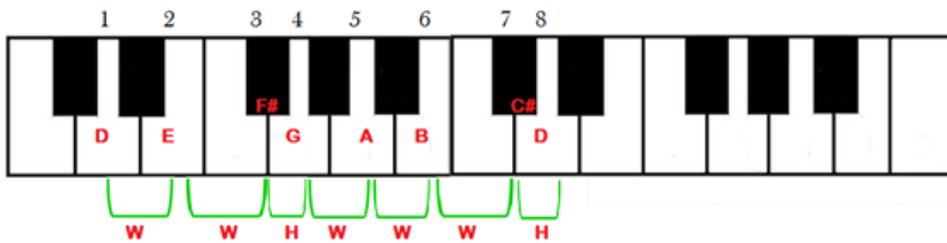
G Major scale on the keyboard



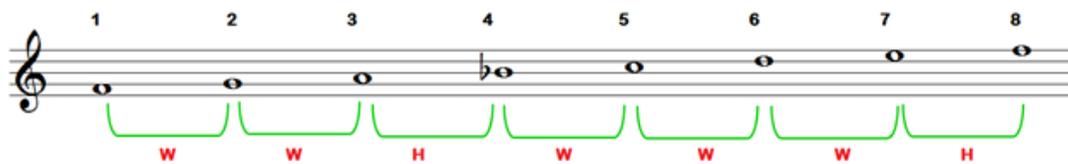
**D Major scale (the tonic is D)**



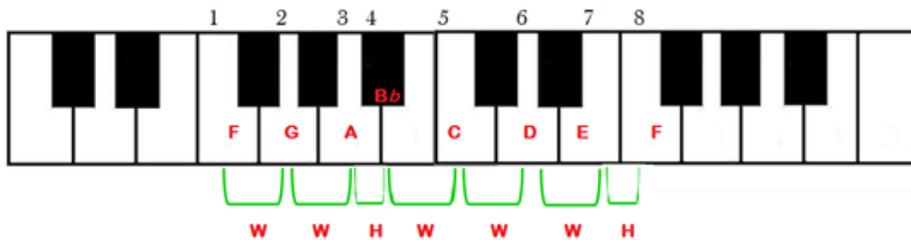
**D Major scale on the keyboard**



**F Major (The tonic is F)**



**F scale on the keyboard**



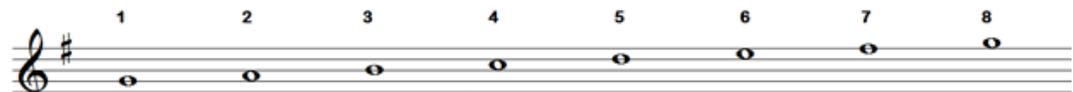
You have noticed that to respect the same patterns of half tones and semi tones in Major scales accidentals sharp (#) and flat (b) are used.

You can start a Major scale from any note provided that you respect the pattern above indicated.

**Note that** when the key signature is used, the accidentals in the middle of the staff are replaced by the key signature.

See examples below:

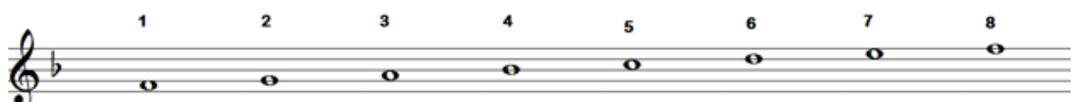
### G Major scale with the key signature



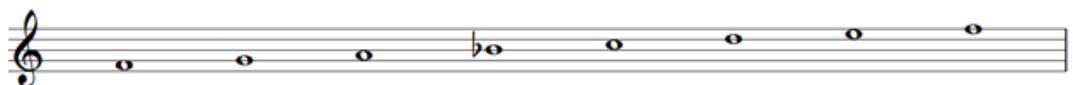
### G Major scale without the key signature



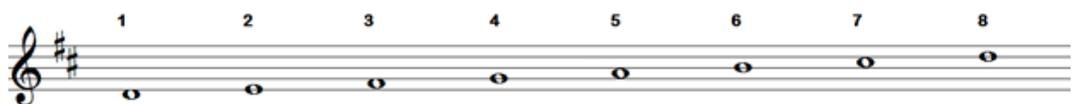
### F Major scale with the key signature



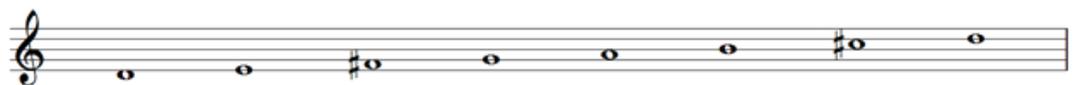
### F Major scale without the key signature



### D Major scale with the key signature



### D Major scale without the key signature



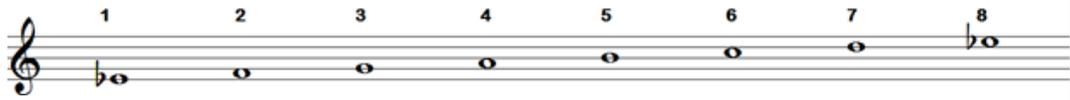
## 3.2.2 Major scales spelling

How to construct scales starting with a flat (E♭ Major scale)?

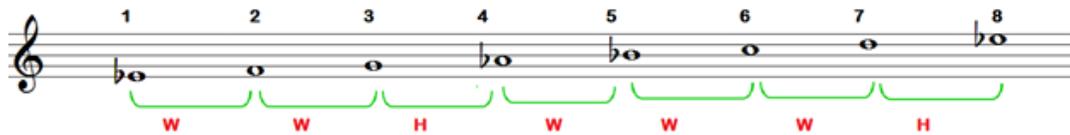
**Step 1:** Write scale degree starting with and ending with E an octave high.



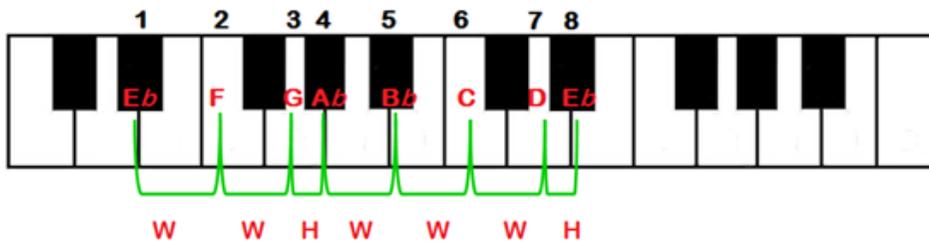
**Step 2:** E first degree and E on eighth degree should have a flat



**Step 3:** Start from the first E flat and ascend the scale respecting the major scale pattern (W-W-H-W-W-W-H). You can also use a Keyboard shape to help you determine tones and semi tones.



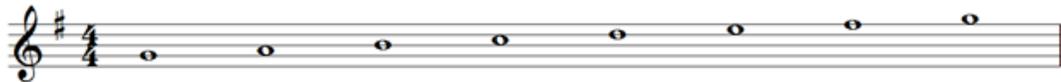
This third step on the keyboard is as follows:



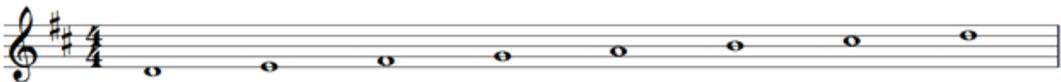
### 3.3 Major scales and key signatures

#### 3.3.1 Major scales with sharp keys

G Major 1 Sharp



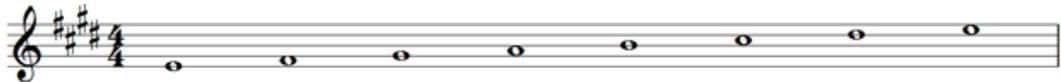
D Major 2 Sharps



A Major 3 Sharps



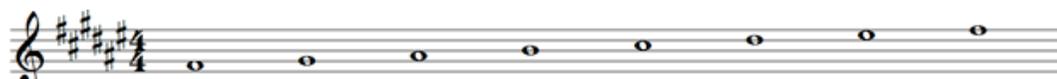
E Major 4 Sharps



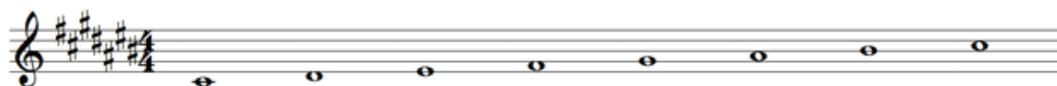
B Major 5 Sharps



F# Major 6 Sharps



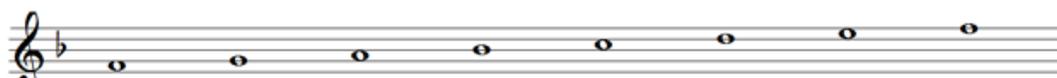
C# Major 7 Sharps



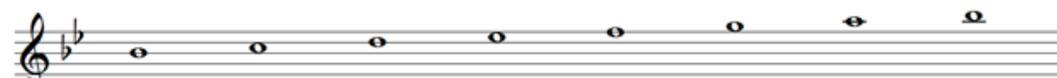
**Note:** To identify key signature you have to know that the name of the key is higher a step than the last sharp in the key signature. Example: G Major has a sharp which is on F. B Major the last sharp is on A.

### *3.3.2 Major scales with flat keys*

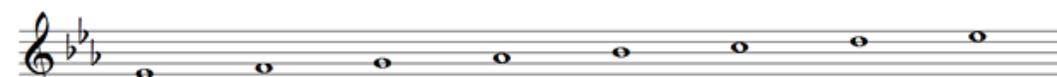
F Major 1 Flat



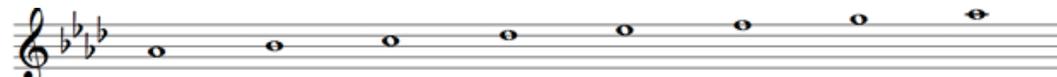
Bb Major 2 Flats



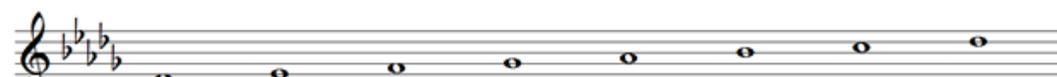
Eb Major 3 Flats



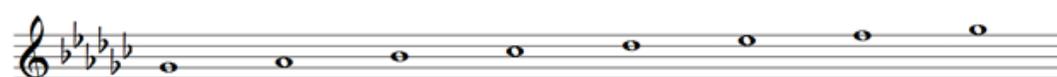
Ab Major 4 Flats



Db Major 5 Flats



Gb Major 6 Flats



Cb Major 7 Flats



The succession of major scales key signatures in both treble and bass staves

**Sharps**

**Flats**

Note that some of the scales we have seen above are enharmonic. It means they have notes which are identical but spelt differently. Thus, **C# major** and **D flat major** are just different ways of describing the same notes. The same **F# major** is the same as **G flat major**; **B major** is the same as **C flat Major**.

Remember that scales are named after their tonics, thus the tonic of the scale of **C** is the note **C**, and the scale of **G** is the note **G** etc.

### APPLICATION ACTIVITY 3.2

1. Write the major scale pattern starting from the note indicated on the staves below. Don't use the key signature. Insert the accidentals as needed.

(a)

(b)

(c)

(d)

(e)

(f)

(g)



(h)



(i)



2. Identify the notes in the following melodies by their scale degree names. Number one and number two are done for you.

(i)

(ii)

For Major keys in the **moveable do** system, **Do** is always the first scale step (tonic).

**G major scale**

1 2 3 4 5 6 7 8  
do re mi fa sol la si do

**F major scale**

1 2 3 4 5 6 7 8  
do re mi fa sol la ti do

**A<sup>b</sup> major scale**

1 2 3 4 5 6 7 8  
do re mi fa sol la si do

### APPLICATION ACTIVITY 3.3

1. Sol-fa and perform

(a)

(b)

(c)

(d)

Two staves of musical notation in 3/4 time, key of B-flat major. The first staff contains a melody of quarter notes: B-flat, A-flat, G, F, E, D, C, B-flat. The second staff contains a bass line of quarter notes: B-flat, A-flat, G, F, E, D, C, B-flat.

(e)

Two staves of musical notation in common time, key of D major. The first staff contains a melody of quarter notes: D, E, F#, G, A, B, C, D, E, F#, G, A, B, C, D. The second staff contains a bass line of quarter notes: D, E, F#, G, A, B, C, D, E, F#, G, A, B, C, D.

## 2. sol-fa and sing

### Twamagane ibiyobyabwenge

Musical notation for the song 'Twamagane ibiyobyabwenge' in 4/4 time, key of D major. The lyrics are: Mu nya rwa nda mwa na w'u Rwa nda twi ri nde i bi yo bya bwe nge byi c'u bu zi ma bi ka bu she ge sha i gi hu u cya cu ki ka bu r'a ma ho ro mu ze tu bya ma ga ne

### Tubane mu rukundo

Musical notation for the song 'Tubane mu rukundo' in 4/4 time, key of D major. The lyrics are: U ru ku ndo ni rwo ge re u ru ku ndo ni rwo ge re kw'i si ho se ba rwa ma ma ze 1. Tu ba ne mu ru ku ndo ru zi r'u bu du 2. Tu ba ne mu ru ku ndo du ho re du rya rya tu ru kwi ze ho se ru sa ga mbe ke ye du fa sha nye twe se du te r'i mbe re

## Igihe

1. I gi h'i yo gi hi se ki ge nda bu ru ze  
 2. Nza ko ra n'u mwe te si nza nda go ze

ndu ki ka zi mi ra Njye we nza ho ra  
 ra nza gi ri ba kwe

nde ke re je i gi he nti ki nsi ge

## I'll sing

I'll sing of the Lord's great love for - e - ver with my mouth

I'll make His name known through all ge - ne - ra - tion

## I am proud

I'm proud I'm proud I'm proud of my coun-

try I'm proud 'cause I live in peace

## IMANA NI UMUBYEYI

Injyana:

1. I ma - na ni yo ya tu re mye ya tu re mye mui shu sho ya - yo -  
 2. Ya - tu re mye ka ndii du ku - nze ma zei du to - za gu ku - nda i  
 3. I ma na ko ko n'u mu bye - yi ni yo bu hu - ngi ro bwa - cu -

1. i du hau bwe - nge n'u mu ti ma ni mu cyo na twe du ku nda ne.  
 2. du sa ba twe - se gu ku nda na ni mu cyo re ro du ku nda ne.  
 3. tu yi ga ne tu yi - ya mba ze ni mu cyo re ro du ku nda ne.

### 3.4 Major scales and their relative minor scales

#### Learning Activity 3.4

1. Make a C scale on the musical staff then play it on the piano
2. Start from the sixth degree of C scale and illustrate the series of tones and semitones on the staff.
3. Play from A Upper A using the white keys only.
4. What is the difference between both (in 1 and 3) scales according to the series of tones and semitones?

The **minor scales** get its notes from the Major scale. The minor scale begins on the 6th scale degree of the **major scale** and then follows those same notes in the same order. For instance, the sixth note of C major is **A**. If we start from **A** and end up to **A** an octave high we will have the notes (**A B C D E F G A**). This is how the **A** minor scale gets its entire notes from the C major scale, since the note **A** is the 6th note in **C** major scale and all the notes in **C** major scale (**C D E F G A B C**) are in minor scale (**A B C D E F G**) but in different arrangement. Hence, **A** minor is called a relative minor to C major. **C** major is a relative major of **A** minor.

The image shows two musical staves. The first staff is labeled 'C major scale' and contains the notes C, D, E, F, G, A, B, C. Below the notes are brackets indicating intervals: W (whole) between C-D, D-E, E-F, F-G, G-A, and A-B; and H (half) between B-C. The second staff is labeled 'A minor scale' and contains the notes A, B, C, D, E, F, G, A. Below the notes are brackets indicating intervals: W (whole) between A-B, B-C, C-D, and D-E; and H (half) between E-F and F-G.

As you can see on the staff above, the sixth note of the C major scale is the first note (tonic) of A minor scale. Notice the difference in the arrangement of the tones and half tones.

**C major scale:** W-W-H-W-W-W-H

**A minor scale:** W-H-W-W-H-W-W

The first scale degree (first note) of A minor scale is designated by the symbol 1 and is known as the **tonic**. The **first note** (or **tonic**) of A minor scale is **A**. So scale degree names in a natural minor are:

1<sup>st</sup> scale degree= **Tonic**

2<sup>nd</sup> scale degree = **Supertonic**

3<sup>rd</sup> scale degree = **Mediant**

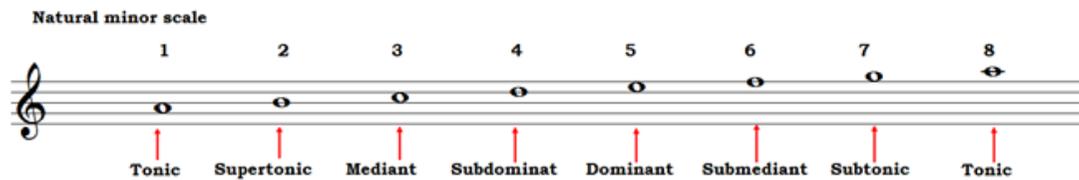
4<sup>th</sup> scale degree = **Subdominant**

5<sup>th</sup> scale degree = **Dominant**

6<sup>th</sup> scale degree = **Submediant**

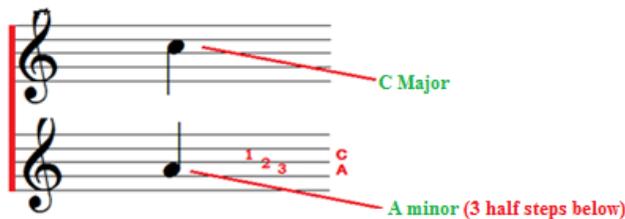
7<sup>th</sup> scale degree = **Subtonic**

8<sup>th</sup> scale degree = **Tonic**

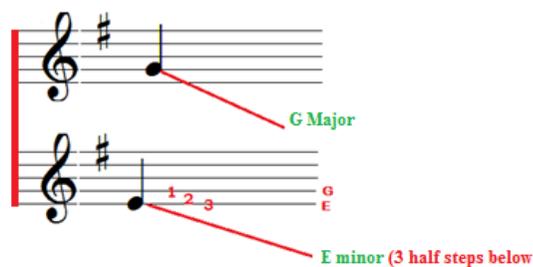


Another way of recognizing a minor scale, you take the tonic of the major scale and go down three half notes (three half steps). The tonic note of the minor you get, will be the same as in the examples above.

**C Major tonic and its relative A minor tonic three half steps below**



**G Major tonic and its relative E minor tonic three half steps below**



### APPLICATION ACTIVITY 3.4

Give the relative minor of the major keys below and then construct the ascending scales of both major and minor.



**Note that each Major scale has its relative minor scale and vice versa.**

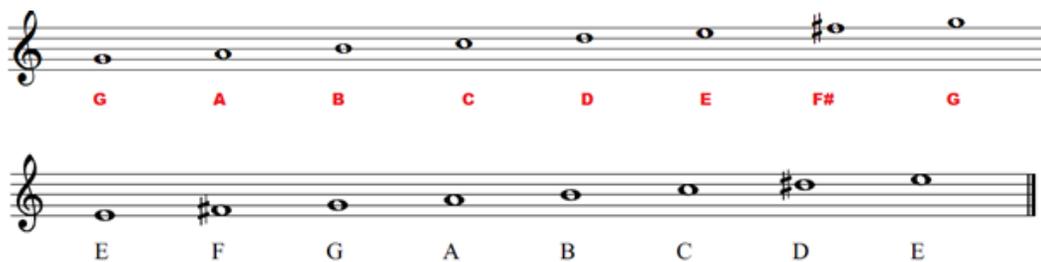
Compare:

- o C major scale: C, D, E, F, G, A, B, C
- o A minor scale: A, B, C, D, E, F, G#, A
- o G major scale: G, A, B, C, D, E, F#, G
- o E minor scale: E, F#, G, A, B, C, D#, E

Note that C major and its relative A minor scale don't have any sharp.



G Major scale and its relative E Minor scale use one sharp.

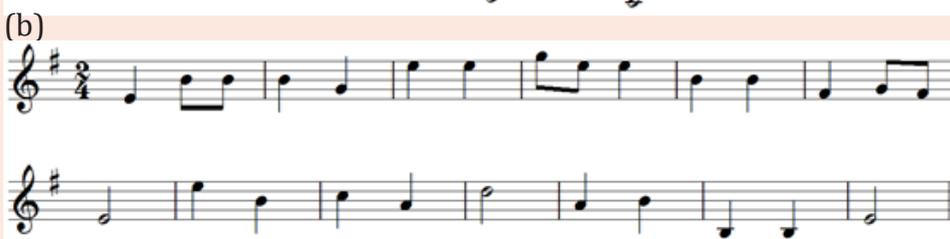


### APPLICATION ACTIVITY 3.5

1. Give the relative minor of the major keys below and then construct the ascending scales of both major and minor.



2. Sol-fa and perform



3. In groups sol-fa and sing the melodies

**UMUGAMBI**

u mu ga mbi wa nje niu gu ko ra cya ne nga te zai mberei  
gi hu gu n'i si yo se nku ko na byi ye me je

**NEVER GIVE UP**

Ne - ver give up ne - ver give up try har - der  
ne - ver give up suc - cess is at hand

### 3.5 Types of Minor Scale

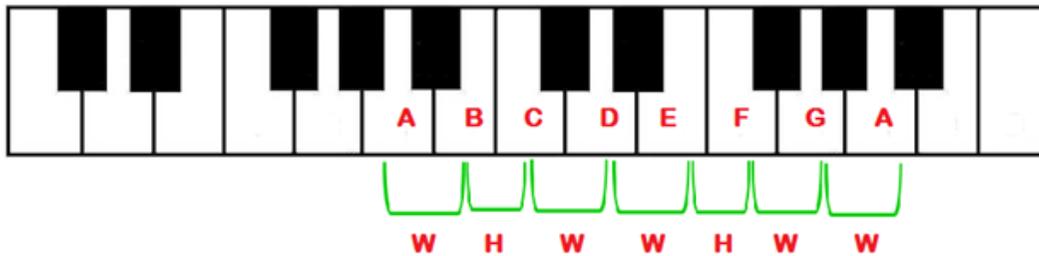
Although there is only one kind of major scale, there are three types of minor scale: natural, harmonic and melodic.

#### 3.5.1 Natural minor scale

A natural minor scale is the one we have been studying above. It consists of 8 notes organized in the pattern of **Whole-Half-Whole-Whole-Half-Whole-Whole** (or WHW<sup>H</sup>WHW<sup>H</sup>). All natural minor scales should follow this pattern. On the staff, if we start with **A minor**, this pattern is as follows:

1      2      3      4      5      6      7      8  
A      B      C      D      E      F      G      A  
W      H      W      W      H      W      W

## The A natural minor scale on the keyboard



### Learning Activity 3.5

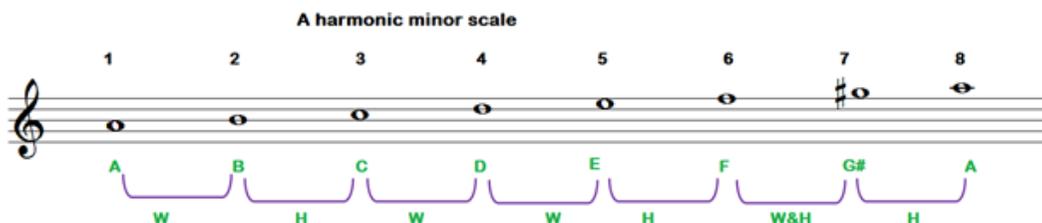
1. Construct the scale of A minor and E minor rising the seventh degree by a half step
2. Play them on the keyboard
3. What is the difference between the scales in 1 and the others you know?

#### 1. Harmonic minor scales

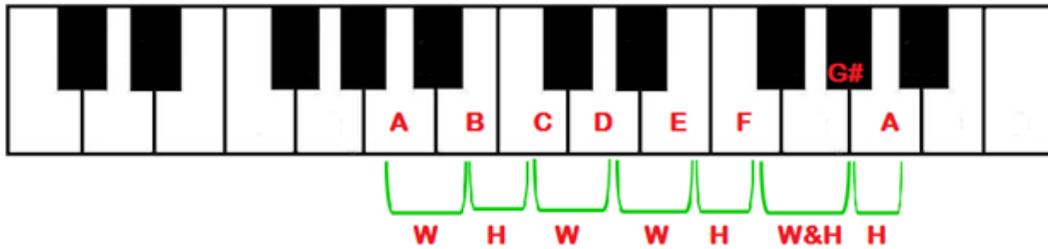
The *harmonic minor scale* differs from the *natural minor* scale by only one half step—the seventh degree is raised a half step.

Whole Half-Whole-Whole-Half- $W\frac{1}{2}$ -Half (WHWWHW $\frac{1}{2}$ -H). It means you take the pattern of natural minor (W-H-W-W-H-W-W) and raise the note on the seventh degree a half step. Then you get (W-H-W-W-H- $W\frac{1}{2}$ -H)

Note that  $1\frac{1}{2}$  means a whole tone and a half tones (W&H)



A harmonic minor scale on the piano

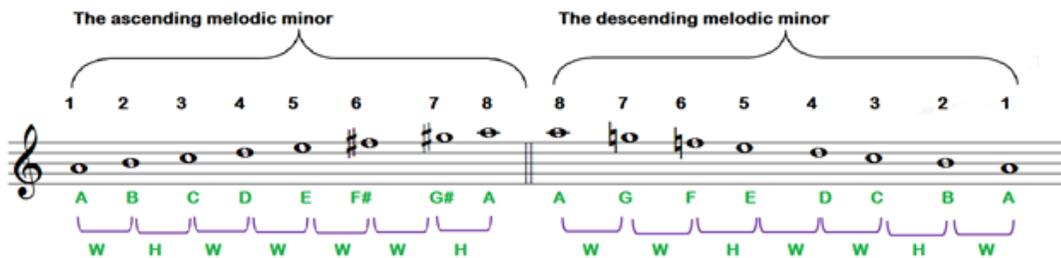


## 2. Melodic minor scales

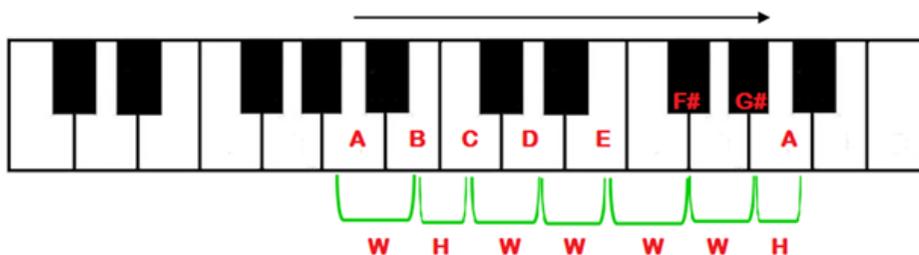
Another variation on the minor scale is the melodic minor scale that has a different pattern depending on whether you are going up the scale or coming down. The sixth and seventh degrees of the scale are raised a half step when ascending and are lowered a half step when descending. It's clear that the descending scale is the same as the natural minor scale. A melodic minor ascending and descending patterns are as follows:

The ascending pattern is: **W-H-W-W-W-W-H**

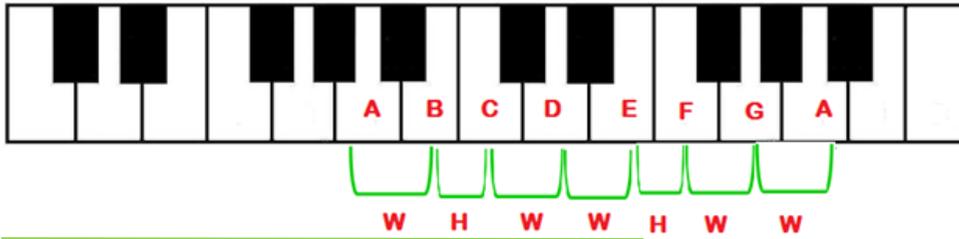
The descending pattern is the Natural Minor Scale: **W-H-W-W-H-W-W**



The ascending melodic scale on the keyboard



The descending melodic minor on the keyboard; (it is the same as natural minor)



### APPLICATION ACTIVITY 3.6

- Without using a key signature write the specific type of minor scale below. Remember that the minor scale key signature comes from its relative major key signature.

(i) E Melodic minor (ascending and descending)



(ii) D harmonic minor (ascending and descending)



(iii) E $\flat$  melodic minor (ascending and descending)



- Using a key signature write the specific type of minor scale below.

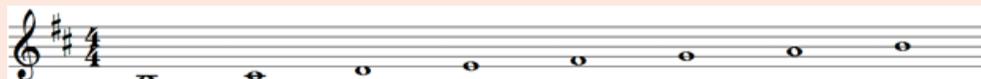
F# natural minor (ascending).



3. G $\flat$  melodic minor ascending



- Write out the scale of B minor and fill in the names of the notes (tonic etc.) underneath.



5. Sol-fa and perform

Musical notation for exercise 5, first system. Treble clef, 4/4 time signature. Notes: G4, A4, B4, C5, D5, E5, F#5, G5, A5, B5, C6, D6, E6, F#6, G6, A6, B6, C7.

Musical notation for exercise 5, second system. Treble clef, 3/4 time signature, key signature of one sharp (F#). Notes: G4, A4, B4, C5, D5, E5, F#5, G5, A5, B5, C6, D6, E6, F#6, G6, A6, B6, C7.

Musical notation for exercise 5, third system. Treble clef, 3/4 time signature, key signature of two flats (Bb, Eb). Notes: G4, A4, B4, C5, D5, E5, F#5, G5, A5, B5, C6, D6, E6, F#6, G6, A6, B6, C7.

6. Sol-fa and sing the melody below

AMAGAMBO

Musical notation for exercise 6, titled "AMAGAMBO". Treble clef, 3/4 time signature. Lyrics: A ma ga mbo wa mbwi ye na ra ya zi ri ka nye cya ne.

## 3.6. Transposition

### Learning Activity 3.6

- (i) Sing a song of your choice
- (ii) Sing the same song in another tone higher than the first
- (iii) Now sing it in a low tone than the first
- (iv) Discuss the relationship between the three activities you have done above.

**Transposition** is changing the key of a piece of music, which affects notes or chords positions. For instance, on the piano, you play the note C in the key of C which is **the key** tonic note. When you transpose that note to the key of **D** you now play D which is the tonic note for **the key** of **D**. In this method, you count the half steps between the first key and the second, and then you move each note up or down the necessary numbers of steps.

Consider the following melody in the key of C. If we transpose it to D, we will have to move two half steps high.

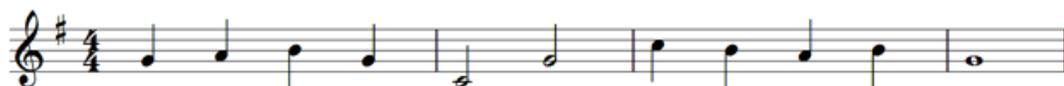


1. Take the first note of the melody—a G. If you move this note up two half steps, it becomes A.
2. Move to second note of the melody—an A. If you move this note up two half steps, it becomes a B.
3. Move to the third note of the melody—a B. If you move this note up two steps, it becomes a C#. You can continue transposing other notes.

When you finish all the notes in D will be as follows:



Consider another example below in which the original melody is in G Major. Transpose it to E major. In this case we have to move two half steps down.



1. Take the first note of the melody –a **G**. if you move this note down three half steps, it becomes **E**.
2. Take the second note of the melody –an **A**. if you move this note down three half steps, it becomes **F#**.
3. Take the third note of the melody –a **B**. if you move this note down three half steps, it becomes a **G#**.

You can continue transposing other notes ...

When you finish all the notes, in E will be as follows:

**Note: Before transposing any piece of music:**

1. Use the correct **key signature**.
2. Move all the notes the **correct interval**.
3. Take care with the **accidentals**.
4. When you are transposing, the **intervals never** change.
5. Never transpose **from minor to major** or vice versa.



In the examples below, see how some accidentals have been affected after transposition of a melody from C major, with some accidental, to D major.



1. Take the sixth note of the melody –a **B**. If you move this note up two half steps, it becomes **C**. But since we have a sharp (#) on C line in the key signature it should be cancelled by using a natural sign in order to maintain our C.

You can continue transposing other notes ...

When you finish all the notes in D will be as follows:



Note that you can transpose from any key to another key when a key signature is supplied or not. When it is not given the accidentals are written in the staff.

The two staves below are exactly the same. They are in G major: One is used with a key signature another without the key signature



If we transpose the previous melody in F Major, we shall have the pattern below; one with a key signature another without a key signature.



*To transpose an octave, you have to go up or down the whole octave of each note (12 half steps). That is to say you maintain the same note an octave up or down.*

Consider this example.



After transposing the previous melody an octave high it becomes as follows:



When you want to transpose notes from treble clef (**G clef**) to bass clef (**F clef**), first of all, you have to know that both clefs share one note which is middle C.

Thus, the note above middle C in any clef will always be above the middle C while the notes below the middle C will always be down.

Consider the example below:



If we transpose the previous melody to F clef, it will be as follows:



You have noticed that the middle C never changes in both G and F clefs.

Why do we need to transpose?

The following are common reasons that may require you to change the key of a piece of music:

- To put in the right key for your vocalist
- Instrumentalist may find that a piece is easier to play if it is in a different key
- Instrumentalist with transposing instruments will usually need any part they play to be properly transposed before they can play it.

### APPLICATION ACTIVITY 3.6

1. Transpose to the key indicated. Play and/or sol-fa the original and the transposed version (s).

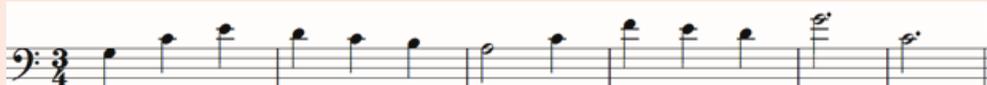
(i) Transpose from C to E Don't use the key signature.



(ii) Transpose from G to F# with and without the key signature



(iii) Write the following melody using treble clef.



(iv) Write the melody using a bass clef



(v) Transpose this melody down an octave to make it suitable for an alto voice to sing and then sol-fa the notes.



(vi) Transpose down an octave to make it suitable for a bass voice to sing and then Sol-fa the notes.



## END UNIT ASSESSMENT

1. With tangible two examples on each, describe the following musical terms:

- a. Scale
- b. Chromatic scale
- c. Diatonic scale
- d. Major scale
- e. Minor scale
- f. f. Transposition

2. Discuss the types of minor scales

3. Discuss the importance of transposition in music?

4. Transpose the following melody two tones low and sight sing.



# UNIT 4

## COMPOSITION OF MELODIES IN G AND F MAJOR SCALES

**Key unit competence:** Be able to compose melodies in G and F scales.

### 4.0. INTRODUCTORY ACTIVITY

1. Sol-fa the following piece of music and perform



2. Compose lyrics and match them with the music in activity one above



### 4.1. G Major Scale

The **G major scale** uses one accidental, raising the F natural to an F sharp. To do this, we use a **key signature** which is found at the beginning of a staff and indicates the key, or the scale the piece is based on.

**Scale of G, with and without a key signature.**

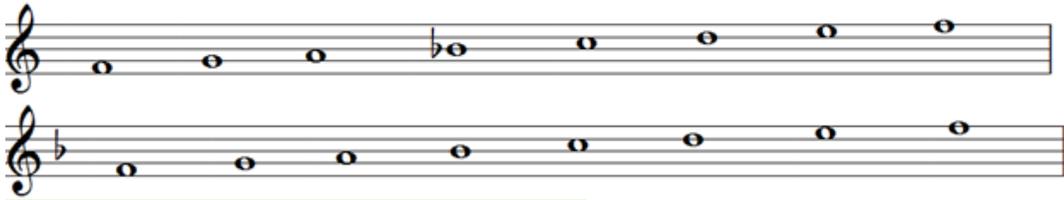


## 4.2. F Major Scale

The F major scale uses one accidental lowering the B natural to a B flat.

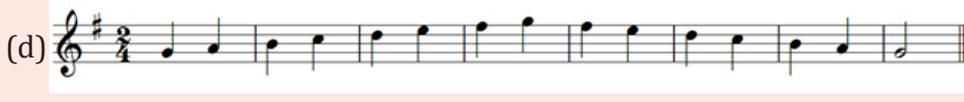
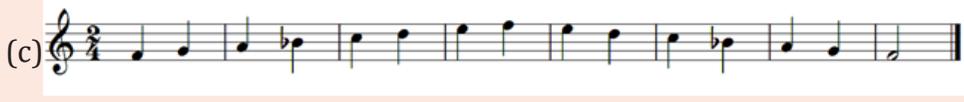
The **F Major** scale (or the key of F) consists of the pitches F, G, A, B $\flat$ , C, D, and E. Its key signature has one flat.

Scale of F, with and without a key signature



### APPLICATION ACTIVITY

1. Sol-fa the notes in C Major, G Major and F Major.



2. Sol-fa and sing



(b)

### Let us unite

Let us u - nite    Let us u - nite    let us walk as one

Let us u - nite    let us walk as one    let us u - nite

(c)

### Kubaha

Yahimbwe na Nsengiyaremye Faustin

Du - fa - ta - nye twe - se,    twe - bwe Rwa - nda rw'e - jo,

<sup>3</sup> twi - to - ze ku - ba - ha - na,    tu - b'i - nta - nga - ru - ge - ro a - ho tu - nyu - ra ho - se,

<sup>6</sup> tu - ra - ngwe no ku - ba - ha.    Tu - za - ta - ng'a - ma - ho - ro,    na - twe tu - ya - bo - ne.

(d)

### Isuku ni ngombwa

Yahimbwe na: KAZINDUTSI Jean Damascene

Injyana :

1. I su ku ni ngo    mbwa ba na b'u Rwa - nda    ku kw'a ri yo so -
2. Du su ku re ne    za a ho du tu - ye    i su ku n'i so -
3. Tu ju gu ny'i mya    nda a ha bu ge ne we    i su ku n'i so -
4. Du su ku ri shu    ri n'i mpa nde za - ryo    i su ku n'i so -
5. Du ka ra be mu nto    ki - mbe re yo ku rya    i su ku n'i so -

ko            y'u    bu    zi    ma.

### 4.3. Composition of a melody

#### Learning Activity 3.4

1. Perform to the peers a song of your choice with closed mouth.
2. Discuss the difference between a song performed with closed mouth and a song with words.

Remember that a melody is a succession of musical tones that are produced as a single entity. It (melody) can be broken down into parts or phrases. It can be produced with/without words (lyrics).

#### APPLICATION ACTIVITY 4.2

1. Compose lyrics on love then match them with music notations below.



2. Below you are given lyrics. Now in a treble staff compose music notations and match them with the lyrics. Then sing before the peers.
3.

Amahanga yose	Or	My God is with me
Akwiye gusingiza		My God is my all
Rurema wa byose.		I will work for Him
		Forever.
4. Compose a song using a treble staff and the notes in G and F Major scales. Your song should be between six and ten measures (bars). Then sing before the peers.
5. Compose lyrics on love, environment, reconciliation etc. and then match them with notes in G and F scales.
6. Compose lyrics on love, environment, reconciliation etc. and then match them with notes in G and F scales.

## END UNIT ASSESSMENT

### 1. Sol-fa and sing

(a)



1 Joy to the world! the Lord is come: let earth re - ceive her  
 2 Joy to the earth! the Sav - ior reigns; let all their songs em -  
 3 No more let sin and sor - row grow nor thorns in - fest the  
 4 He rules the world with truth and grace, and makes the na - tions



King. Let ev - ery heart pre - pare him  
 ploy, while fields and floods, rocks, hills, and  
 ground; he comes to make his bless - ings  
 prove the glo - ries of his right - eous -



room, and heaven and na - ture sing, and heaven and na - ture  
 plains re - peat the sound - ing joy, re - peat the sound ing  
 flow far as the curse is found, far as the curse is  
 ness and won - ders of his love, and won - ders of his



sing, and heaven, and heaven and na - ture sing.  
 joy, re - peat, re - peat the sound - ing joy.  
 found, far as, far as the curse is found.  
 love, and won - ders, won - ders of his love.

(b)

### Nzakorera u Rwanda

*Tahimbwe na Sylvestre NTABAJYANA*



Nza ko re r'u Rwa nda nza ha ra ni ra ku rwu ba ka



nza ba na n'a ba ndi mu ma ho ro tu ru te zi mbe re

1.Nza ha ra ni ra ku rwu ba ka nza rwa ny'u bu ne bwe  
 2.Nza ha ra ni ra ku rwu ba ka nza rwa ny'i cya ru hu nga ba na  
 3.Nza ha ra ni ra ku rwu ba ka nza ru vu ga ni ra ho se  
 4.Nza ha ra ni ra ku rwu ba ka mbu nga bu ng'i bi du ki ki je

nza ho ra mbwi r'a ba ndi gu ko ra na u mwe te  
 nza fa ta nya n'a ba ndi ku ru rwa ni ri ra  
 nza ma ga n'i ki bi cyo se cya tu ma ru hu nga ba na  
 nza ma ga na ba ru twi tsi n'a ba shi mu t'i nya ma swa

2. Compose lyrics on a topic of your choice, match them with the notes below and perform

(i)

(ii)

(iii)

(iv)

(v)

K

# UNIT 5

## ASCENDING AND DESCENDING C, G AND F SCALES ON THE PIANO

**Key Unit competence:** be able to play C, G and F scales on the piano using both hands



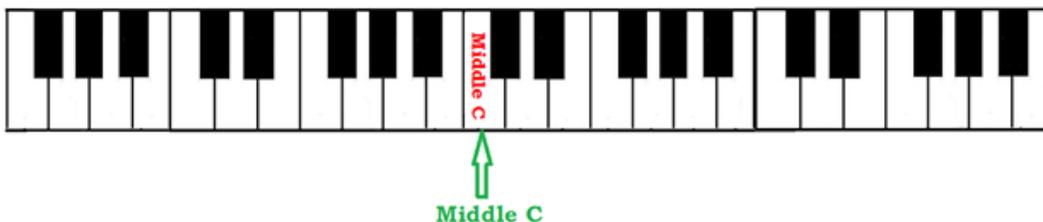
### 5.0. INTRODUCTORY ACTIVITY

1. Play the ascending and descending C scale
2. Explain the choice of fingers used when playing
3. compare the fingers you have used to play the note pitches

### 5.1. Piano keyboard and fingering

On the piano keyboard you notice that there are two sets of keys: Black keys and white keys.

The black keys are in groups of two and three keys. When you want to play piano you have to localize the middle C. Middle C is an important reference note on the piano.



To create a good position on the piano, turn your palms to the flow and keep your fingers curved



For the piano playing, our fingers are given numbers. The numbers are the same for both hands.

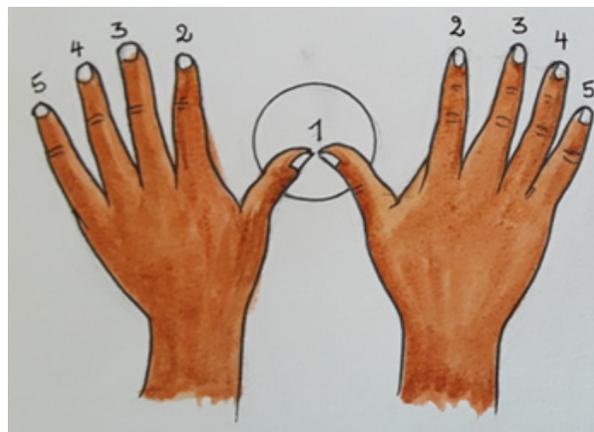
Thumb=finger#1

Pointer= finger#2

Middle= finger#3

Ring= finger#4

Pinky = finger#5



Remember the notes on the keyboard. The white keys on the piano follow an alphabetic pattern that goes from C to B. that is this pattern is as follows:

C-D-E-F-G-A-B.

The pattern starts on the bottom (low bass notes) of the piano keyboard, and repeat many times. As the notes go upwards, get higher in pitch (sound).

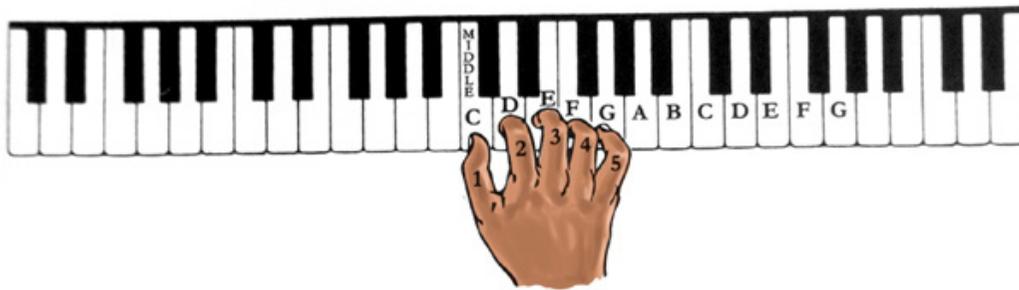
### 5.1.1 Playing the piano with right hand (RH)

#### Learning Activity 5.1

Play the notes on the piano

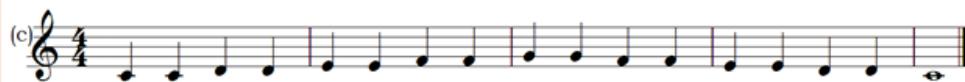


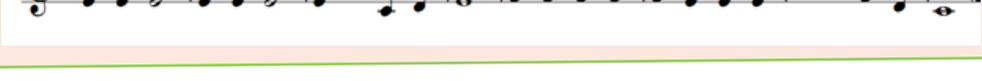
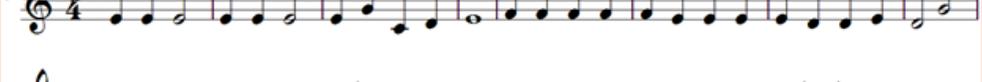
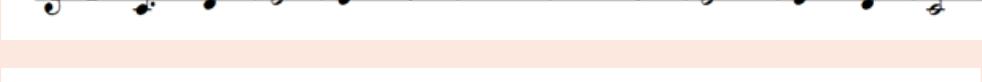
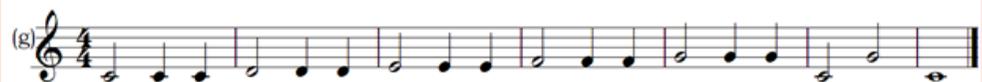
When we have note on a treble staff, we play the piano using the right hand (RH). With your right hand (RH), the thumb plays middle C as reference key dividing bass notes as indicated on the piano below.



#### APPLICATION ACTIVITY 5.1

1. Sol-fa then play on piano keyboard the following pieces of music using your right hand:









### 5.1.3 Playing the piano with both hands

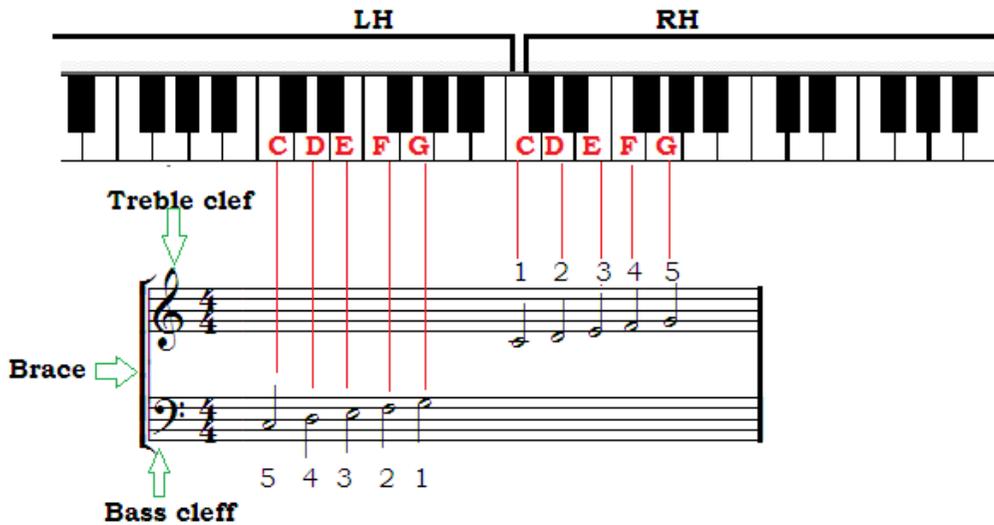
Grand staff

#### Learning Activity 5.3

Play the notes on the Grand staff



When we have notes on the grand staff, we play the piano using both Right and left hands. The grand staff is formed by combining the treble staff and bass staff joined together with a brace.



### APPLICATION ACTIVITY 5.3

Practice piano on the grand staff

1.

1. Treble clef, 4/4 time. Notes: C4 (1), D4 (2), E4, F4, G4 (5), A4, B4, C5 (1). Bass clef is empty.

2. Treble clef is empty. Bass clef notes: A3 (5), G3 (4), F3 (3), E3 (2), D3 (1), C3, B2 (2), A2 (5).

2.

2. Treble clef notes: C4, D4, E4, F4, G4, A4, B4, C5. Bass clef notes: A3, G3, F3, E3, D3, C3, B2, A2.

3.

3. Treble clef notes: C4, D4, E4, F4, G4, A4, B4, C5. Bass clef notes: A3, G3, F3, E3, D3, C3, B2, A2.

4.

4. Treble clef is empty. Bass clef notes: A3, G3, F3, E3, D3, C3, B2, A2, G2, F2, E2, D2, C2, B1, A1.

5.

5. Treble clef notes: C4, D4, E4, F4, G4, A4, B4, C5. Bass clef is empty.

The image displays a musical score for measures 6 through 9, organized into four systems. Each system contains two staves: a treble clef staff on top and a bass clef staff on the bottom. The time signature is 4/4. Measure 6 shows a treble staff with a sequence of eighth notes (C4, D4, E4, F4, G4, A4, B4, C5) and a bass staff with whole rests. Measure 7 features a treble staff with eighth notes (C4, D4, E4, F4, G4, A4, B4, C5) and a bass staff with eighth notes (C3, D3, E3, F3, G3, A3, B3, C4). Measure 8 has a treble staff with eighth notes (C4, D4, E4, F4, G4, A4, B4, C5) and a bass staff with whole rests in the first two measures, followed by eighth notes (C3, D3, E3, F3, G3, A3, B3, C4). Measure 9 shows a treble staff with eighth notes (C4, D4, E4, F4, G4, A4, B4, C5) and a bass staff with whole rests in the first two measures, followed by eighth notes (C3, D3, E3, F3, G3, A3, B3, C4). The score is presented on a light green background with pink horizontal dividers between systems.

10.

Musical notation for the first system, measures 10-13. Treble clef has a melody of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Bass clef has whole rests.

Musical notation for the second system, measures 14-17. Treble clef has whole rests. Bass clef has a melody of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5.

Musical notation for the third system, measures 18-21. Treble clef has a melody of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Bass clef has whole rests in measures 18-19, then a melody of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5.

Musical notation for the fourth system, measures 22-25. Treble clef has a melody of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Bass clef has whole rests in measures 22-23, then a melody of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5.

Musical notation for the fifth system, measures 26-29. Treble clef has a melody of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Bass clef has a melody of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5.

Musical notation for the sixth system, measures 30-33. Treble clef has a melody of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Bass clef has a melody of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5.

Musical notation for the seventh system, measures 34-37. Treble clef has a melody of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Bass clef has a melody of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5.

Musical notation for the eighth system, measures 38-41. Treble clef has a melody of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Bass clef has a melody of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5.

First system of musical notation, measures 1-4. Treble clef, 4/4 time signature. The melody consists of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. The bass line consists of quarter notes: C3, D3, E3, F3, G3, A3, B3, C4.

Second system of musical notation, measures 5-8. Treble clef, 4/4 time signature. The melody consists of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. The bass line consists of quarter notes: C3, D3, E3, F3, G3, A3, B3, C4.

Measure 15. Treble clef, 4/4 time signature. The melody consists of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Fingering numbers 1, 2, 3, 4, 5, 4, 3, 2, 1 are written above the notes.

Measure 16. Bass clef, 4/4 time signature. The melody consists of quarter notes: C3, D3, E3, F3, G3, A3, B3, C4. Fingering numbers 5, 4, 3, 2, 1, 2, 3, 4, 5 are written above the notes.

Measures 17-18. Treble clef, 4/4 time signature. Measure 17 has a whole rest. Measure 18 has quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Fingering numbers 1, 2, 3, 4, 5 are written above the notes. Bass clef, 4/4 time signature. Measure 17 has a whole rest. Measure 18 has quarter notes: C3, D3, E3, F3, G3, A3, B3, C4. Fingering numbers 5, 4, 3, 2, 1 are written above the notes.

Measures 19-20. Treble clef, 4/4 time signature. Measure 19 has a whole rest. Measure 20 has quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Bass clef, 4/4 time signature. Measure 19 has a whole rest. Measure 20 has quarter notes: C3, D3, E3, F3, G3, A3, B3, C4.

Measures 21-22. Treble clef, 4/4 time signature. Measure 21 has quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Measure 22 has a whole rest. Bass clef, 4/4 time signature. Measure 21 has a whole rest. Measure 22 has quarter notes: C3, D3, E3, F3, G3, A3, B3, C4.

Measures 23-24. Treble clef, 4/4 time signature. Measure 23 has quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Measure 24 has quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Bass clef, 4/4 time signature. Measure 23 has quarter notes: C3, D3, E3, F3, G3, A3, B3, C4. Measure 24 has quarter notes: C3, D3, E3, F3, G3, A3, B3, C4.

(20) *Bass clef, 4/4 time. Descending scale: G4 (5), F4 (4), E4 (3), D4 (b2), C4 (1), B3 (b2), A3 (3), G3 (4), F3 (5).*

(21) *Bass clef, 4/4 time. Ascending scale: F3 (5), G3 (4), A3 (3), B3 (b2), C4 (1), D4 (b2), E4 (3), F4 (4).*

(22) *Treble clef, 4/4 time. Ascending scale: C4 (1), D4 (2), E4 (3), F4 (4), G4 (5), F4 (5), E4 (4), D4 (3), C4 (2), B3 (1).*

### 5.1.4. *Playing C and G major scales on the piano*

#### Learning Activity 5.4

Play ascending and descending C scale

In music the scale is made of an octave. Each scale begins and ends on a note of the same name. Since there are eight notes of the scale and we have only five fingers, we have to pass the thumb under the third finger to play the all notes of the scale. When we are playing C and G major scales the fingers move as follows:

### Right hand (RH)

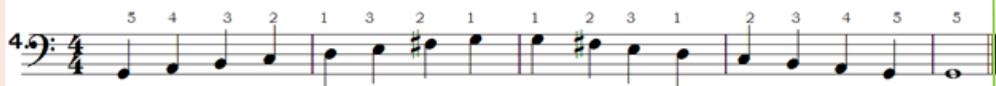


### Left hand (LH)



## APPLICATION ACTIVITY 5.4

Play the notes on the piano



## END UNIT ASSESSMENT

1. Play descending and ascending C, and G scales on the piano
2. Play the following music patterns on the piano

(a)

Exercise (a) consists of two systems of musical notation in 4/4 time. The first system has a treble clef staff with notes G4, A4, B4, C5, B4, A4, G4 and a bass clef staff with notes G3, A3, B3, C4, B3, A3, G3. The second system has a treble clef staff with notes G4, A4, B4, C5, B4, A4, G4 and a bass clef staff with notes G3, A3, B3, C4, B3, A3, G3.

(b)

Exercise (b) consists of two systems of musical notation in 4/4 time. The first system has a treble clef staff with notes G4, A4, B4, C5, B4, A4, G4 and a bass clef staff with notes G3, A3, B3, C4, B3, A3, G3. The second system has a treble clef staff with notes G4, A4, B4, C5, B4, A4, G4 and a bass clef staff with notes G3, A3, B3, C4, B3, A3, G3.

(c)

Exercise (c) consists of two systems of musical notation in 3/4 time. The first system has a treble clef staff with notes G4, A4, B4, C5, B4, A4, G4 and a bass clef staff with notes G3, A3, B3, C4, B3, A3, G3. The second system has a treble clef staff with notes G4, A4, B4, C5, B4, A4, G4 and a bass clef staff with notes G3, A3, B3, C4, B3, A3, G3.

(d)

Exercise (d) is a short piece in 3/4 time, key of D major. It consists of two systems of two staves each. The first system has a treble clef with a melody starting on G4, marked with fingerings 1 and 2, and a bass clef accompaniment starting on D3, marked with fingerings 5 and 4. The second system continues the melody and accompaniment.

(e)

Exercise (e) is a short piece in 3/4 time, key of B minor. It consists of two systems of two staves each. The first system has a treble clef with a melody starting on B3 and a bass clef accompaniment starting on B2. The second system continues the melody and accompaniment.

(f)

Exercise (f) is a short piece in 4/4 time, key of C major. It consists of one system of two staves. The treble clef has a melody starting on C4, and the bass clef has a simple accompaniment starting on C3.

(g)

Exercise (g) is a short piece in 4/4 time, key of D major. It consists of two systems of two staves each. The first system has a treble clef with a melody starting on D4 and a bass clef accompaniment starting on D3. The second system continues the melody and accompaniment.

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