

Theory Workbook

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Units 1-5



*Available exclusively through
Third Hand Music
(07) 55303219*

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Theory Workbook

Unit One

Pitch

Pitch is defined as: the “highness” or “lowness” of a sound (or note).

Rhythm

Rhythm can be defined as: the specific point in time when that note appears.

Written Music

The main function of written music (notation) is to show both pitch *and* rhythm at the same time.

This is done by a variety of symbols that this theory course will present to you in a workbook format.

Complete all exercises in the spaces provided.

Pitch

1. The Musical Alphabet (Chromatic Scale)

The musical alphabet is also known as the *chromatic scale* and contains all of the note names used in the "western" music system.

A	A# Bb	B	C	C# Db	D	D# Eb	E	F	F# Gb	G	G# Ab
---	----------	---	---	----------	---	----------	---	---	----------	---	----------

2. Notes

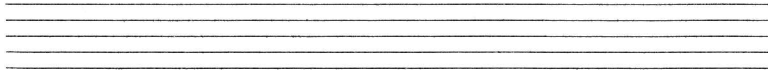
Notes are the names given to specific pitch sounds.

3. The Staff

The 5 lines and 4 spaces on which the notes are drawn in traditional music notation.

Ex. 1

Number the *lines* and *spaces* on the staff.



4. The Clef Sign

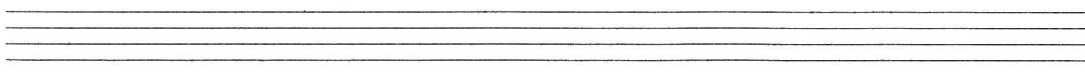
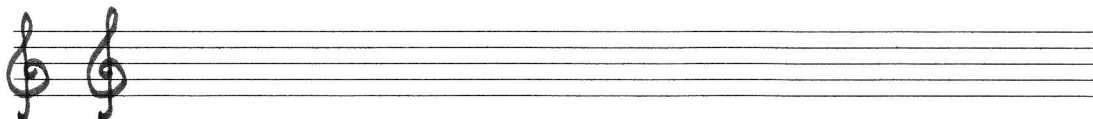
The *clef sign* shows us which note is on a particular line or space.

(a) The Treble Clef

The *treble clef* tells us that the 2nd line is called **G**.

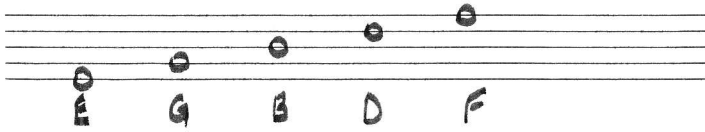
Ex. 2

Draw 2 lines of treble clefs by copying the example given.

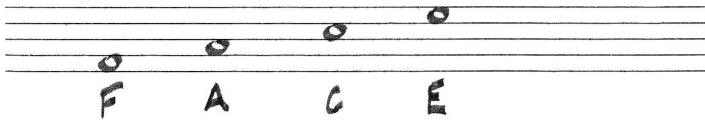


Each line or space is named as follows.

Notes on the Lines (E G B D F)

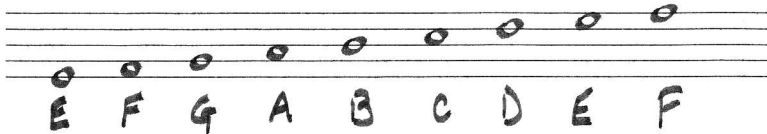


Notes in the Spaces (F A C E)



When we view the notes going from 1st line to 1st space, 2nd line to 2nd space etc., the pattern of note names takes on the familiar pattern of the alphabet. (Notice that the note names do not go past G but return to A.)

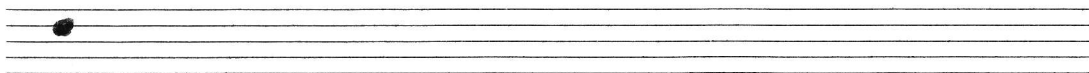
Notes on combined Lines and Spaces



EX. 3

Draw the treble clef and then write the notes on the staff.
Notes should be:

- Oval shaped with a slight tilt up to the right.
- Carefully centered on the appropriate space or line.
- Small enough to fit into the space.
- Drawn in pencil.



Example 1 2 3 4 5 6 7 8 9 10

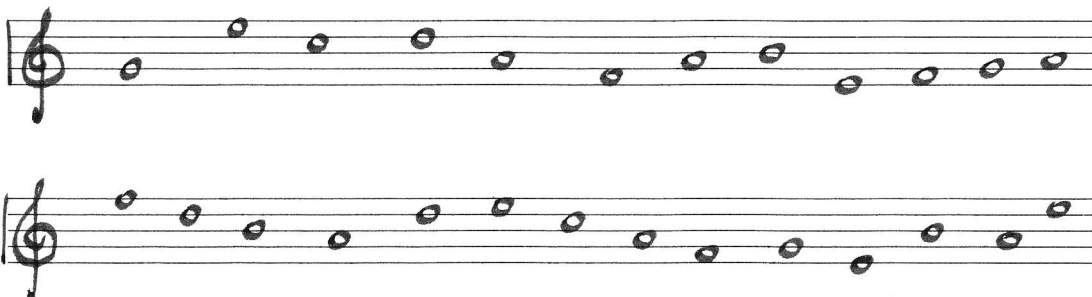
- Draw these notes:

Example: D, 4th line

- | | |
|-----------------------|-----------------|
| 1. A, 2nd space | 6. F, 1st space |
| 2. E, 4th space | 7. B, 3rd line |
| 3. D, below the staff | 8. E, 1st line |
| 4. G, above the staff | 9. D, 4th line |
| 5. C, 3rd space | 10. F, 5th line |

Ex. 4

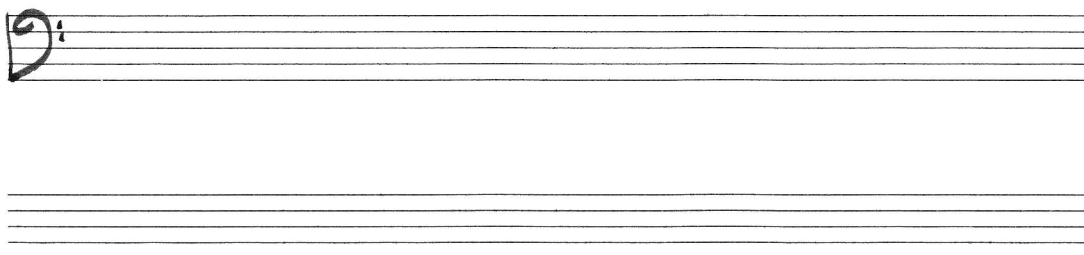
Write the names of the notes below the staff.



(b) The Bass Clef

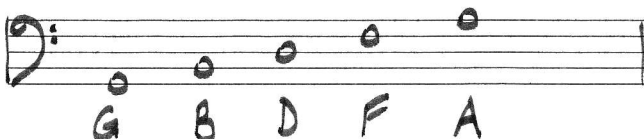
Ex. 5

Draw 2 lines of bass clefs on the staves provided by copying the example.



The notes on the bass clef are in different positions from those on the treble clef.
 Bass guitar is one instrument that uses bass clef.
 All guitar music is written on treble clef.
 A working knowledge of each clef is useful regardless of the instrument being played.

Notes on the Lines (Good Boys Deserve Fruit Always)



Notes in the Spaces (All Cows Eat Grass)

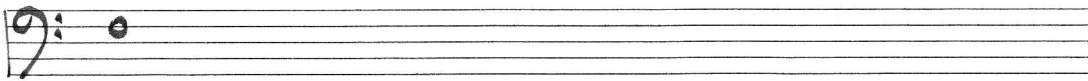


Notes on combined Lines and Spaces



Ex. 6

Draw the bass clef on the staff that follows and write the notes as indicated.



Example 1 2 3 4 5 6 7 8 9 10

- Draw these notes.

Example: F, 4th line

- | | |
|-----------------------|------------------|
| 1. D, 3rd line | 6. C, 2nd space |
| 2. G, 1st line | 7. G, 4th space |
| 3. B, above the staff | 8. B, 2nd line |
| 4. A, 1st space | 9. A, 5th line |
| 5. F, below the staff | 10. E, 3rd space |

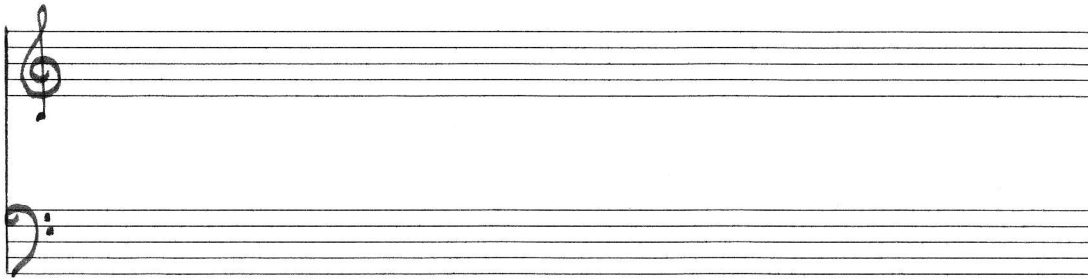
Ex. 7

Write the names of the notes under the staff. (Watch clef!!)



5. The Great Staff

The treble and bass clefs are *combined* for keyboard instruments with the left hand playing the **bass clef** notes and the right hand playing the **treble clef** notes. This is known as the **great staff**.



6. Ledger Lines

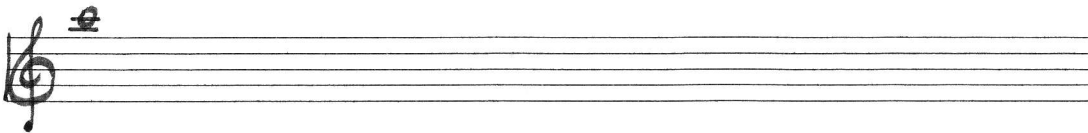
Ledger lines are short lines that are used to extend the staff upwards or downwards.

Ledger lines should be:

- About 4mm long
- Spaced the same as the lines on the staff
- Be parallel to the lines of the staff.

Ex. 8

Draw a treble clef and write the notes as required using ledger lines, above or below the staff.



Example 1 2 3 4 5 6 7 8 9 10

- Draw these notes:

Example: C, above the staff

Above the staff

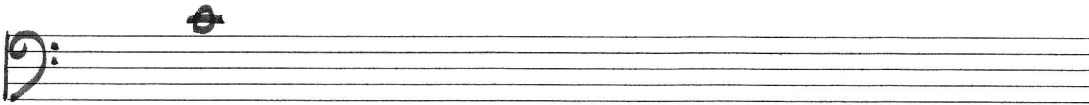
1. D
2. C
3. B
4. A
5. E

Below the staff

6. C
7. G
8. B
9. A
10. E

Ex. 9

Draw a bass clef and write the notes as required using ledger lines.



Example 1 2 3 4 5 6 7 8 9 10

Above the staff

Below the staff

- | | | | |
|----|---|-----|---|
| 1. | C | 6. | E |
| 2. | D | 7. | C |
| 3. | E | 8. | D |
| 4. | F | 9. | A |
| 5. | G | 10. | B |

7. Accidentals

(a) The Sharp (#)

The **sharp** sign **raises** the pitch of a note by 1 fret (or semitone or half-step).

(b) The Flat (b)

The **flat** sign **lowers** the pitch of a note by 1 fret (or semitone or half-step).

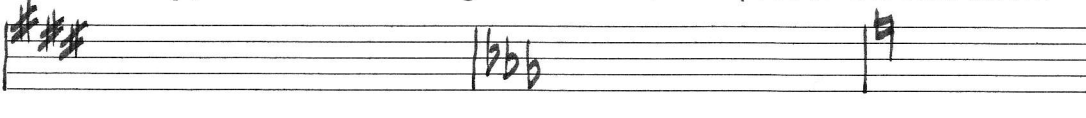
(c) The Natural Sign (♮)

The **natural** sign **restores** the note to its original pitch.

A	A#	B	C	C#	D	D#	E	F	F#	G	G#
	Bb			Db		Eb			Gb		Ab

Ex. 10

Draw a **sharp**, **flat** and **natural** sign on each line and space on the staff below.

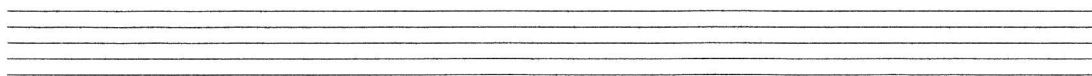
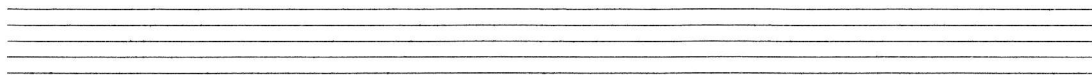
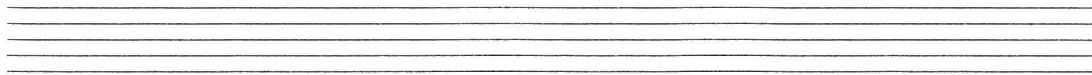
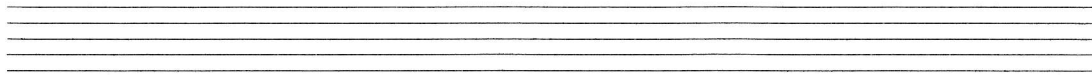


Word Spelling in Notes

Ex. 13

Spell out these words using the notes on the staff. You may use ledger lines also.

Cabbage	Deed	Fade
Dead	Ace	Bad
Baggage	Gag	Egg
Badge	Face	Beg
Add	Dad	Feed



Objectives for Unit 1:

- Be able to name any note on either clef and draw it.
- Be able to accurately draw clefs, ledger lines and accidentals.

Unit 2

Rhythm (1)

1. The Notation of Rhythm

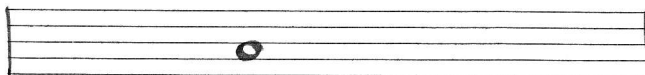
There are 2 symbols in use for writing rhythm. These are *notes* and *rests*.

2. Notes

These show how long a note sounds for and when it is played.

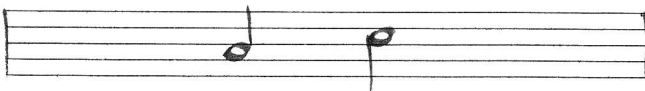
(a) Whole Note

A *whole note* receives 4 counts.



(b) Half Note

A *half note* receives 2 counts.



(c) Quarter Note

A *quarter note* receives 1 count.



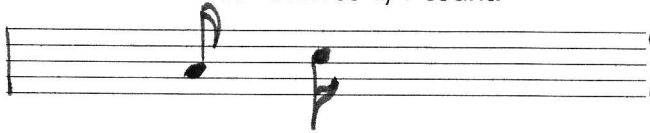
(d) Eighth Note

An *eighth note* receives 1/2 count.



(e) Sixteenth Note

A **sixteenth note** receives 1/4 count.



(f) Triplet

A **triplet** receives 1/3 count.

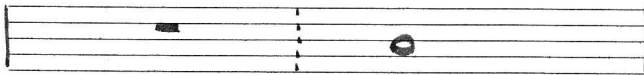


3. Rests

Rests are used to show periods of silence.

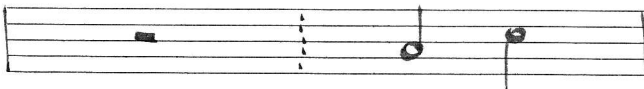
(a) Whole Note Rest

A **whole note rest** receives 4 counts.



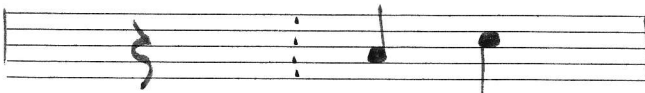
(b) Half Note Rest

A **half note rest** receives 2 counts.



(c) Quarter Note Rest

A **quarter note rest** receives 1 count.



(d) Eighth Note Rest

An **eighth note rest** receives 1/2 count.



(e) Sixteenth Note Rest

A **sixteenth note rest** receives 1/4 count.

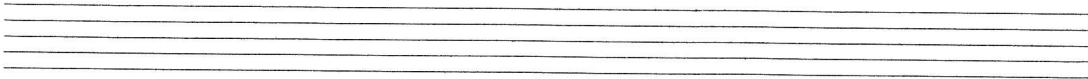


EX. 14

Draw the notes and rests on the staff below.

(a) Whole Note

(a) Whole Note Rest



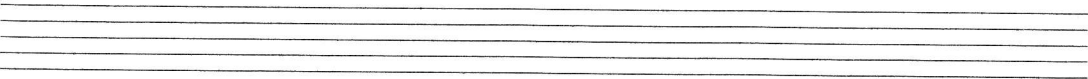
(b) Half Note

(b) Half Note Rest



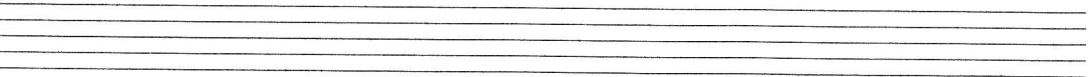
(c) Quarter Note

(c) Quarter Note Rest



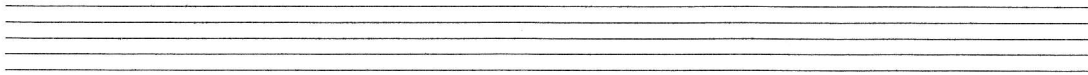
(d) Eighth Note

(d) Eighth Note Rest



(e) Sixteenth Note

(e) Sixteenth Note Rest



Ex. 15

Fill in the blanks.

0	=	2	
	=	4	♪
	=	8	♪
♪	=	4	
♪	=		♪
	=	2	♪
0	=	4	
	=	8	♪
♪	=	2	
♪	=	2	

♪	=	2	
♪	=	2	
	=	4	♪
0	=	16	
♪	=		♪
	=	8	♪
0	=	2	
♪	=		♪
♪	=	4	
	=	4	♪

4. Beams







Beams are used to group notes (eighth, sixteenth, triplet etc.) together in order to make them easier to read.







This is the usual case in **instrumental music**, however in **vocal music** the beams are generally **left out** to enable the singer to see each syllable more clearly.

Notes are **beamed** in such a way that the "middle" of the bar can be seen easily.

Ex. 16




















Fill in the blanks. Beam notes where necessary.














	=	2	
	=	1	
	=	4	
	=	2	
	=	1	
	=	2	

	=	4	
	=	1	
	=	4	
	=	4	
	=	8	
	=	4	

Ex. 17

Fill in the blanks.

	=		
	=		
	=		
	=		
	=		
	=		
1	=		
	=		
4	=		
2	=		

4	=		
2	=		
	=		
	=		
	=		
1	=		
3	=		
4	=		
2	=		
1	=		

5. Bar (or Measure)

Music is almost always divided into small manageable sections called **bars**. These **bars** generally contain a regular number of beats. A bar may also be called a **measure**.

6. Bar Lines

Bar lines are used to section off each **bar** in written music.

7. Time Signature

The **time signature** (see below) shows how many beats (or counts) are in each bar.

There are 2 numbers in the time signature.



(a) Upper Number

This number tells **how many beats** in the bar.

In 4/4 time there are **4 beats** in the bar.

(b) Lower Number

This number tells which **type of note** receives 1 beat.

In 4/4 time a **quarter note receives 1 beat**.

Ex. 18

Add bar lines to the music so that the beats in each bar add up to the time signature.

Ex.19

Add one note to each bar so that it adds up to the correct number of beats as given by the time signature.

The exercise consists of four staves, each with a time signature and a sequence of notes with gaps for completion:

- Staff 1:** Time signature 2/4. Notes: quarter, eighth, eighth, quarter, quarter, eighth, eighth, quarter. There are gaps after the first and fifth notes.
- Staff 2:** Time signature 3/4. Notes: quarter, quarter, quarter, quarter, quarter, quarter, quarter, quarter. There are gaps after the first, second, and seventh notes, and a whole rest in the third bar.
- Staff 3:** Time signature 4/4. Notes: quarter, quarter, quarter, quarter, quarter, quarter, quarter, quarter, quarter, quarter. There are gaps after the first, second, fourth, sixth, eighth, and tenth notes.
- Staff 4:** Time signature 4/4. Notes: quarter, quarter, quarter, quarter, quarter, quarter, quarter, quarter, quarter, quarter. There are gaps after the first, second, fourth, sixth, eighth, and tenth notes. A triplet of three eighth notes is shown in the third bar.

Objectives for Unit 2:

- Be able to draw accurately the basic notes (whole, half, quarter, eighth and sixteenth notes).
- Be able to notate time signatures accurately and be able to maintain the proper number of beats in each bar.
- Know the beat value of each note studied in unit 2.

Unit 3

Major Scales

1. Scale

In Unit 1 we studied the *Chromatic scale*.

A	A#	B	C	C#	D	D#	E	F	F#	G	G#
	Bb			Db		Eb			Gb		Ab

A *scale* is a series of notes that generally move in a *stepwise* motion.

The most common of these is the *major scale*.

A *C major scale* contains these notes:

C D E F G A B C

2. Octave

Notice that it starts and finishes on a C note.

These 2 C notes are said to be 1 *octave* apart. (octo = 8)

3. Root Note

The 1st note of the scale is called either the *root note* or the *tonic note* and provides a '*home base*' for songs written using that scale.

In a C major scale, the root note is C.

In a G major scale the root note is G.

A major scale can start on *any note* of the chromatic scale and proceed stepwise through a *set sequence* (the major scale formula), until arriving at the starting note name that is 1 octave higher than the root note.

4. Scale Degrees

Scale notes can be numbered from 1 through to 8. These are called *scale degrees* or *scale step numbers*.

5. Interval

Interval is the term given to the distance between notes.

6. Semitones & Tones (Half, Whole Steps)

A **semitone** is also called a **half-step** and is the interval between **2** consecutive notes on the chromatic scale.

C-C# is 1 semitone or half-step.

C#-D is 1 semitone or half-step.

A **tone** is also called a **whole step** and is the interval between **3** consecutive notes on the chromatic scale.

C-D is 1 tone or whole step.

D-E is 1 tone or whole step.

Ex. 20

On the staff below, write either T (tone) or ST (semitone) under the notes.

7. Major Scale Formula

The **major scale formula** is the set sequence that allows us to accurately construct the major scale regardless of the starting note.

Ex 21

On the staff below, draw the notes starting on C, (2nd ledger line below the staff) and proceeding up to the C on the 3rd space.

Play the scale you have just written.

It should have the familiar sound of Do Re Mi Fa So La Ti Do.

If it does **not** have this sound, check that the notes are written correctly.

Ex. 22

On the scale you wrote in Ex 20, number all notes from 1-8.

The series of note you wrote in Ex 20 is called the **C major scale**.
The note names are:

C	D	E	F	G	A	B	C
		1				1	

- Refer to the chromatic scale below and **count** how many semitones there are between C - D. Write your answer in the space provided above.
- Proceed with counting from D to E.
Write your answer.
- Continue this process until you have completed the formula for the major scale.

The formula for the major scale is:

2 2 1 2 2 2 1

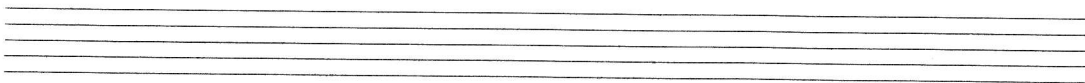
There are always 2 **semitones** (or half-steps) between the 1st and 2nd scale degrees in the major scale.

A	A#	B	C	C#	D	D#	E	F	F#	G	G#
	Bb			Db		Eb			Gb		Ab

Ex.23

On the staff below write the C major scale.

- Include scale step numbers and also write in **2212221** above the appropriate notes.



Ex.24

On the scale you have completed, mark with square brackets the notes that are 2 semitones apart.

- Use a 'V' for the notes that are 1 semitone apart.

The 1 semitone intervals **always** occur between which scale steps in a major scale?

_____ & _____ _____ & _____

Ex. 25

Write the major scale formula in 3 ways;

- Using **semitones** to show the intervals between the notes. (Fill in the blanks.)

2	2				2	
----------	----------	--	--	--	----------	--

- Using **tones** to show the intervals between the notes. (Fill in the blanks.)

1		1/2				1/2
----------	--	------------	--	--	--	------------

- Using **whole-steps** and **half-steps** to show the intervals between the notes. (Fill in the blanks: 'W' for whole step and 'H' for half step.)

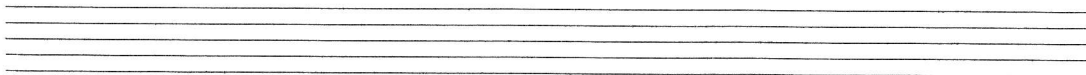
W		H				
----------	--	----------	--	--	--	--

8. Building the Major Scale

Ex. 26

On the staff below, write the notes from G (2nd line) through to G (above the staff). The notes should read:

G A B C D E F G



- Number the scale degrees 1-8. (The 8th note is both the **end** of this octave and the **beginning** of the next.)
- Mark the notes that are a **whole step** apart with a **square bracket**.
- Mark the notes that should be a **half step** apart with a 'V'.
- Check the notes with the major scale formula and the chromatic scale and adjust the notes, (if necessary) by using an accidental in front of the offending note.

A	A#	B	C	C#	D	D#	E	F	F#	G	G#
	Bb			Db		Eb			Gb		Ab

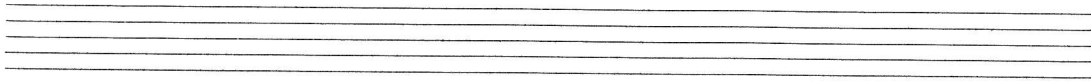
- What note required adjustment to make the G scale fit the formula? _____

Ex. 27

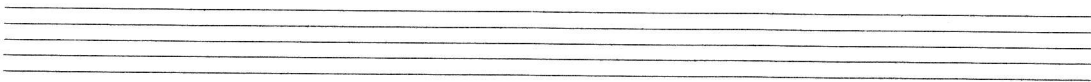
Build the major scales listed below.

- Remember to check your scale with the major scale formula.
- These scales only require the use of *sharps*.

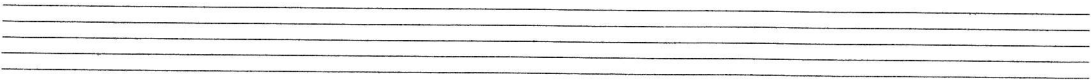
G Major



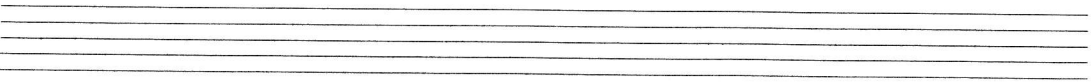
D Major



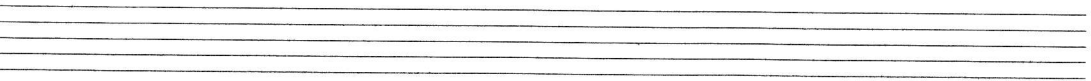
A Major



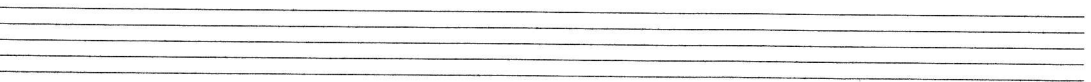
E Major



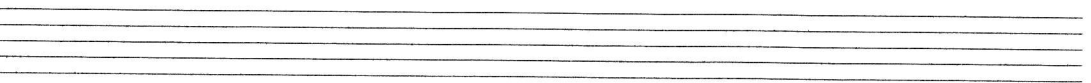
B Major



F# Major



C# Major



9. Keys

If a piece of music is in the **key of C**, this means that the notes in the **melody** (tune), and the **harmony** (chords) are mostly from the **C major scale**.

A composer may add other notes for colour, but the C scale would be the basis for most of the music.

It follows then that a song in the **key of G** will use mostly notes of the **G major scale**.

10. Key Signature

The **key signature** tells the musician which notes will need to be made **sharp** or **flat** to maintain the correct sound.

It is found at the beginning of each line or at the beginning of the piece of music.

Ex. 28

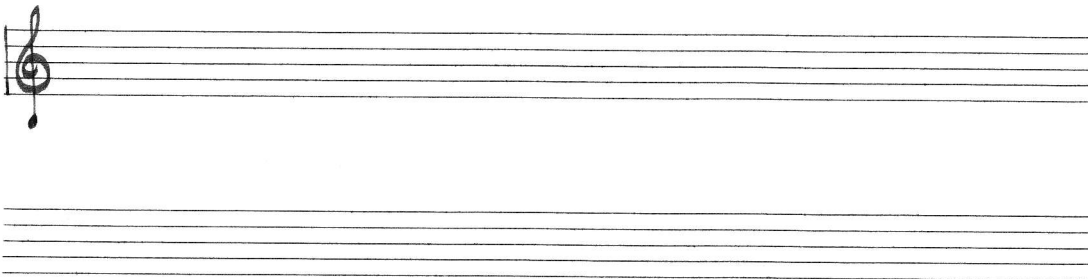
Look at the musical example below.

- Which notes are sharped? _____
- What key is this melody in? _____



Ex. 29

Add the correct **key signature** to the staff and rewrite the melody from Ex. 28 *without* the accidentals.



11. Sharp Key Signatures

Ex. 30

Look back to Ex. 27 and write the correct key signatures for each of the scales as indicated below.

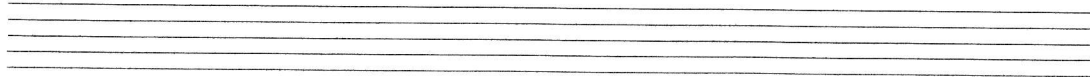
- Take special care with the placement and order of each new sharp.

C Major (no#)

G Major (1#)

D Major (2#)

A Major (3#)



E Major (4#)

B Major (5#)

F# Major (6#)

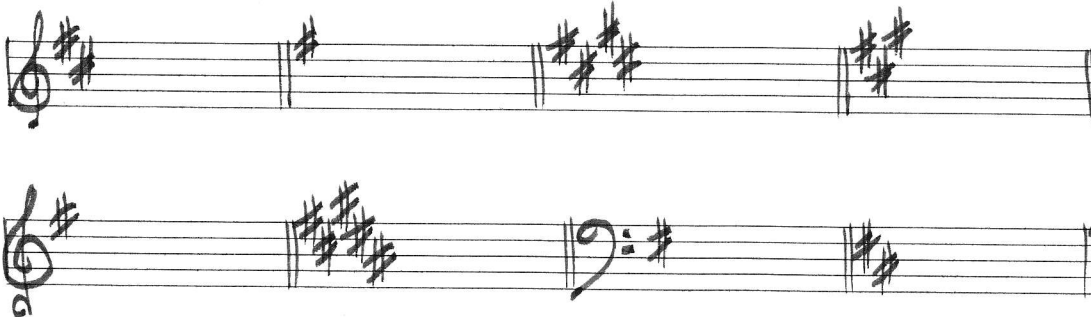
C# Major (7#)



- It is good practice to peruse books of music and name the keys of each piece.
- Knowledge of key signatures will speed up all the areas of 'data processing' that the brain is required to do when dealing with the various aspects of music theory.

Ex. 31

Name the keys represented by the following key signatures.



Ex. 32

Write the notes in the following scales *without* key signatures.

- Add the sharps before the appropriate notes in each case.

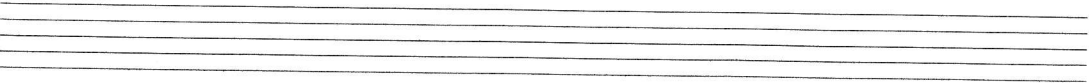
G Major



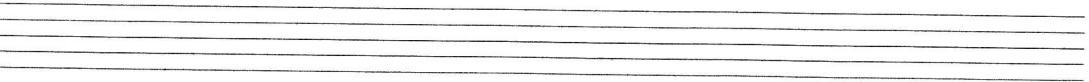
C Major



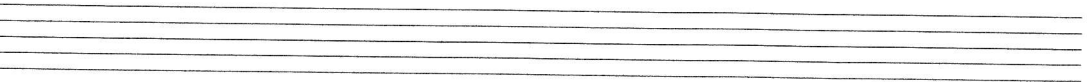
D Major



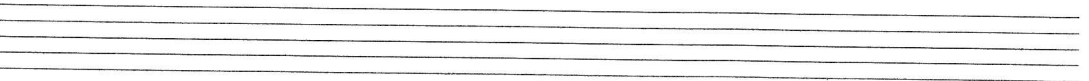
F# major



B Major



E Major



Ex.33

Write out the *letter names* of the notes in the following scales. (Fill in the blanks)

Key	1	2	3	4	5	6	7	8
C			E				B	
G				C				
D						B		
A		B						
E	E							
B								
F#		G#						
C#					G#			

Objectives for Unit 3:

- Be able to construct a major scale using the interval formula.
- Be able to recognize a sharp key signature on the page and from it name the key.
- Be able to write the sharp key signatures, with the sharps in the right order.

Unit 4

More Major Scales

1. Flat Keys

Follow the same process for *flat keys* as for sharp keys. Review sharp keys if necessary.

Ex. 34

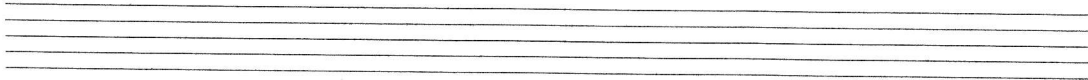
Write the scale notes from F-F. on the staff that follows.

- Number the scale steps 1-8.
- Compare the notes with the major scale formula and the chromatic scale and adjust notes where necessary by using the *flat* sign.
- What note needs to be changed to maintain the correct major scale formula? _____



Ex. 35

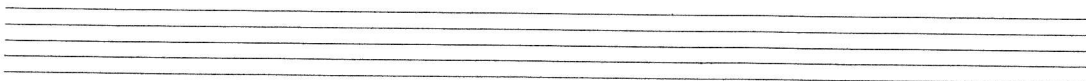
Draw the correct F major scale on the staff below.



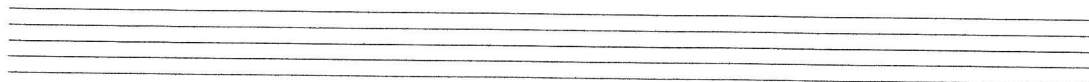
Ex. 36

Build the scales as indicated in the following flat keys.

F Major



Bb Major



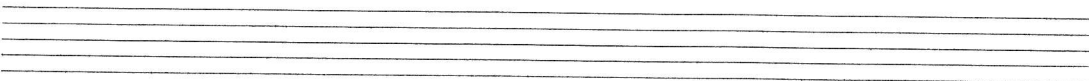
Eb Major



Ab Major



Db Major



Gb Major



Ex. 37

Write the key signature for each of the scales constructed in Ex. 36 on the staff below.

F Major (1b)

Bb Major (2b)

Eb Major (3b)

Ab Major (4b)



Db Major (5b)

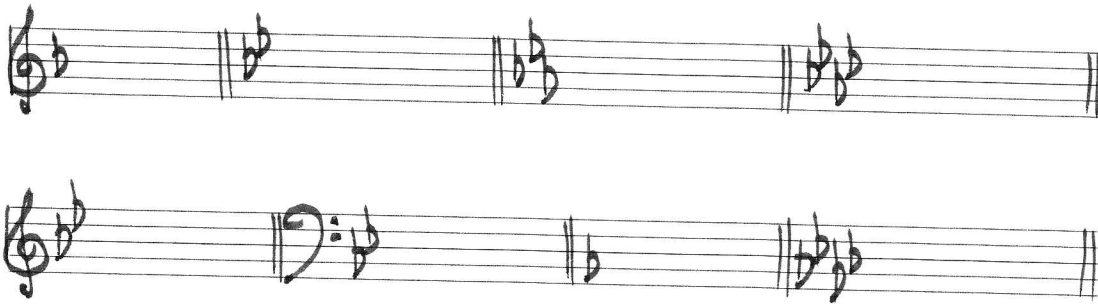
Gb Major (6b)

Cb Major (7b)



Ex. 38

Name the keys represented by the following flat key signatures.



Ex. 39

Write the notes in the following scales **without** key signatures.

- Add the flats before the appropriate notes in each case.

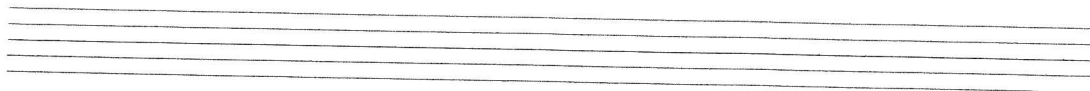
F Major



E_b Major



B_b Major



A_b Major



D_b Major



Gb Major



Ex.40

Write out the **letter names** of the notes in the following scales. (Fill in the blanks)

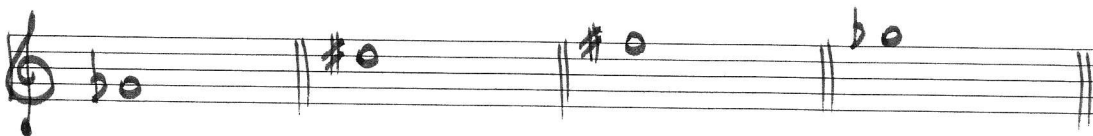
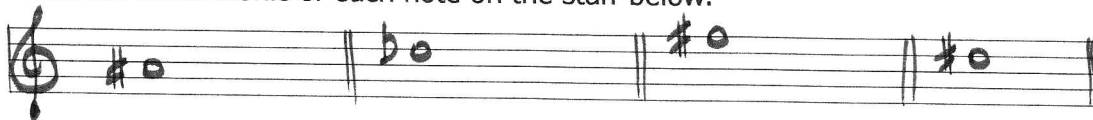
Key	1	2	3	4	5	6	7	8
F			A				E	
Bb				Eb				
Eb						C		
Ab		Bb						
Db	Db							
Gb							F	
Cb		Db						

2. Enharmonics

Enharmonics are 2 notes (or scales) which have the same pitch but are written differently or called by different names.

Ex. 41

Write the enharmonic of each note on the staff below.



Ex. 42

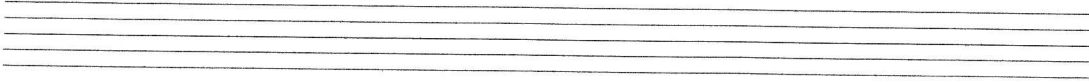
Write the Db and C# major scales on the staff below.

- Compare them note for note.
- Are the scales enharmonic?

Db major



C# major



Objectives for Unit 4:

- Be able to build a major scale in any flat key.
- Be able to write the correct key signature for all flat keys.

Unit 5

Intervals

1. Intervals

An **interval** is the distance between 2 notes.

Intervals are always measured from the **lowest** pitch to the **highest**.

They are named according to their **relationship with the major scale** that starts on the lower of the 2 notes.

2. Quality

Each interval is named with a combination of **quality** and **quantity**.

The **quality** of an interval refers to the type of interval.

These are generally classified as:

- major
- minor
- perfect
- augmented
- diminished

3. Quantity

The **quantity** is the **size** of an interval.

These are named:

- 2nd
- 3rd
- 4th
- 5th
- 6th
- 7th
- 8th (or Octave)

Since intervals are always measured relative to the major scale built from the lowest note, the following chart should prove helpful.

The intervals in this example are based on the C major and G major scales.

Lowest	Highest	Quality	Quantity
C	D	major	2nd
C	E	major	3rd
C	F	perfect	4th
C	G	perfect	5th
C	A	major	6th
C	B	major	7th
C	C	perfect	Octave
G	A	major	2nd
G	B	major	3rd
G	C	perfect	4th
G	D	perfect	5th
G	E	major	6th
G	F#	major	7th
G	G	perfect	Octave

Ex. 43

Which of the intervals on the chart above are *perfect*? _____

Which of the intervals on the chart above are *major*? _____

Ex. 44

Write the *quantity* of each of the intervals listed below.

- Remember to treat the *lowest note* of the two as the root note of a major scale.

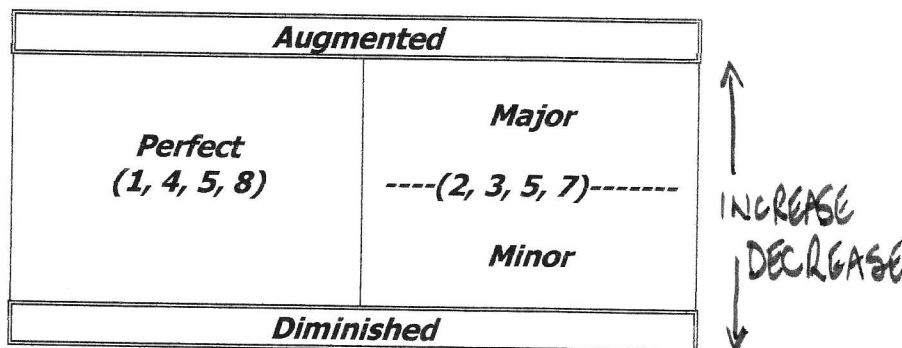
The image shows three musical staves, each containing a series of intervals between two notes. The first staff starts with a C4 (middle C) and shows intervals to D4, E4, F4, G4, A4, B4, and C5. The second staff starts with a G4 and shows intervals to A4, B4, C5, D5, E5, F5, and G5. The third staff starts with an F4 and shows intervals to G4, A4, B4, C5, D5, E5, and F5. Each interval is represented by two notes on a five-line staff.

4. Interval Quality Rules

- When a **major** interval is *decreased* by 1 semitone it becomes **minor**.
- When a **minor** or **perfect** interval is *decreased* by 1 semitone it becomes **diminished**.
- When a **major** or **perfect** interval is *increased* by 1 semitone it becomes **augmented**.
- When a **minor** interval is *increased* by 1 semitone it becomes **major**.

The following charts should help clarify these rules before proceeding to the interval naming exercises.

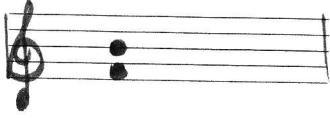
Lowest	Highest	Quality	Quantity
C	Db	minor	2nd
C	D	major	2nd
C	D#	aug	2nd
C	Eb	minor	3rd
C	E	major	3rd
C	F	perfect	4th
C	F#	aug	4th
C	Gb	dim	5th
C	G	perfect	5th
C	G#	aug	5th
C	Ab	minor	6th
C	A	major	6th
C	A#	aug	6th
C	Bb	minor	7th
C	B	major	7th
C	C	perfect	Octave



5. Procedure for Naming Intervals

(a) Establish the Quantity

- Count how many letter names between the notes.



- The **quantity** of this interval is _____.

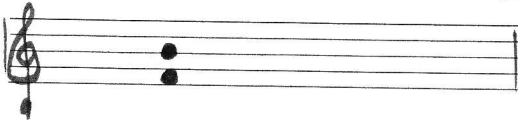
(b) Establish the Quality

- If the **top** note of the interval **belongs to the major scale** of the lower note, then the interval is either **perfect** or **major**.
- If the top note does **not** belong to the major scale of the lower note, you will need to figure out whether it is **larger** or **smaller** than the scale tone with the **same letter name** and by **how much**.

Ex. 45

Look at the 2 notes on the staff below and answer the following questions.

- Is the top note of the two **in the major scale** of the lower note? _____
- If not, is it **higher** or **lower** than the scale tone that has the **same letter name**? _____ By how much? _____
- What is the name of the interval? _____



Ex. 46

Identify the following intervals.

Use these abbreviations:

Abbreviation	Interval
Ma	major
mi	minor
P	perfect
A	augmented
d	diminished

Handwritten musical staff with notes and intervals. The first interval is labeled P5 and the second is labeled P4.

Handwritten musical staff with notes and intervals.

Handwritten musical staff with notes and intervals.

Handwritten musical staff with notes and intervals.

Handwritten musical staff with notes and intervals.

Ex. 47

Write the intervals as indicated *above* the notes on the staff.

Handwritten musical staff with notes and interval labels above them. The labels are: P5, mi3, mi7, ma6, P4, P5, mi6, P.8, mi3, ma6, mi3, MA3, mi7, MA3, mi3, MA2, mi7, mi6, A4, d5, MA7, MA7, mi7, MA6, mi3, MA3, MA3, mi3, MA6, MA7, mi7, mi2.

Ex. 48

Write the indicated intervals *below* the notes on the staff.

- Simply count down the lines and spaces to find '1', then make any adjustments to the note to fit the required *quality*.

P.5. mi² mi³ MA³ mi⁶ MA⁷ mi⁷
 P.5. P.4 P.4 mi³ MA³ P4 mi⁷
 MA⁶ P.5 MA³ mi³ MA⁷ mi⁶ MA⁷
 P.4 P.5 P.8 mi⁶ dim MA⁷ mi⁷ MA⁷

This concludes the Theory Workbook Units 1-5.

Remember that a working knowledge of the various elements of music theory and harmony presented here take practice and review.

With this in mind I have prepared a theory test based on the work covered in this module.

You should aim to complete it in the shortest time possible, thereby training your mind to think clearly and accurately in musical terms with no instrument.

There is much more to learn, however if the materials in these first units have been understood and completed, the task of learning theory and harmony is greatly accelerated.

On successful completion of the theory test, you should proceed immediately to Theory Workbook Units 6-10.

Theory Test

Units 1-5

Pitch

Pitch is defined as: _____

Rhythm

Rhythm can be defined as: _____

Pitch

The Musical Alphabet

The musical alphabet is also known as the _____

- Fill in the blanks.

A	A#	B		C#	D			F		G	
						Eb			Gb		

The Staff

The _____ lines and _____ spaces on which the notes are drawn in traditional music notation.

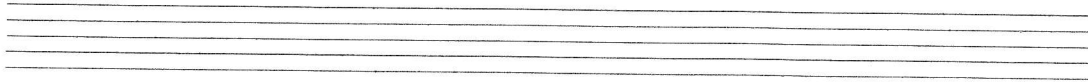
Number the ***lines*** and ***spaces*** on the staff.



Notes on combined Lines and Spaces



Draw notes on the staff as indicated



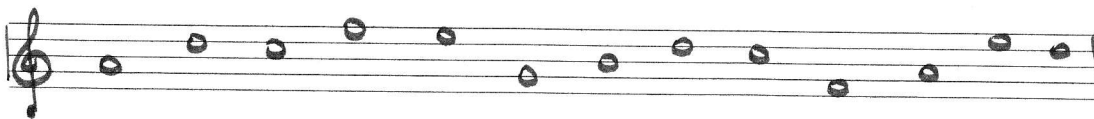
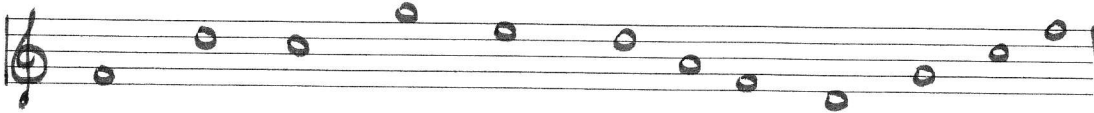
Example 1 2 3 4 5 6 7 8 9 10

• Draw these notes:

Example: D, 4th line

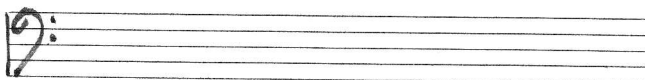
- | | |
|-----------------------|-----------------|
| 1. A, 2nd space | 6. F, 1st space |
| 2. E, 4th space | 7. B, 3rd line |
| 3. D, below the staff | 8. E, 1st line |
| 4. G, above the staff | 9. D, 4th line |
| 5. C, 3rd space | 10. F, 5th line |

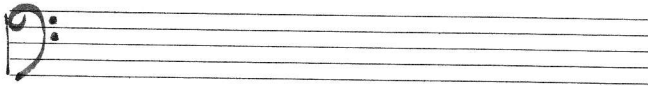
Write the names of the notes below the staff.



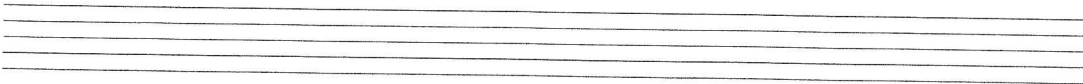
Bass Clef

Notes on the Lines (Good Boys Deserve Fruit Always)



Notes in the Spaces (All Cows Eat Grass)**Notes on combined Lines and Spaces**

Draw the bass clef on the staff that follows and write the notes as indicated.



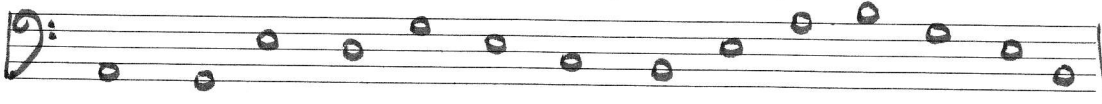
Example 1 2 3 4 5 6 7 8 9 10

- Draw these notes.

Example: F, 4th line

- | | |
|-----------------------|------------------|
| 1. D, 3rd line | 6. C, 2nd space |
| 2. G, 1st line | 7. G, 4th space |
| 3. B, above the staff | 8. B, 2nd line |
| 4. A, 1st space | 9. A, 5th line |
| 5. F, below the staff | 10. E, 3rd space |

Write the names of the notes under the staff. (Watch clef!!)



Ledger Lines

Draw a treble clef and write the notes as required using ledger lines, above or below the staff.



Example 1 2 3 4 5 6 7 8 9 10

- Draw these notes:

Example: C, above the staff

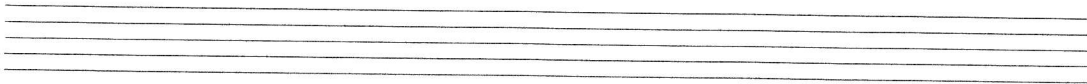
Above the staff

1. D
2. C
3. B
4. A
5. E

Below the staff

6. C
7. G
8. B
9. A
10. E

Draw a bass clef and write the notes as required using ledger lines.



Example 1 2 3 4 5 6 7 8 9 10

Above the staff

1. C
2. D
3. E
4. F
5. G

Below the staff

6. E
7. C
8. D
9. A
10. B

Accidentals

(a) The Sharp (#)

The **sharp** sign _____ the pitch of a note by 1 fret (or semitone or half-step).

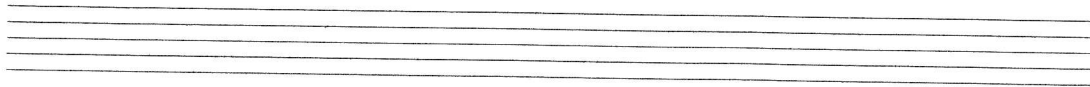
(b) The Flat (b)

The **flat** sign _____ the pitch of a note by 1 fret (or semitone or half-step).

(c) The Natural Sign ()

The **natural** sign _____ the note to its original pitch.

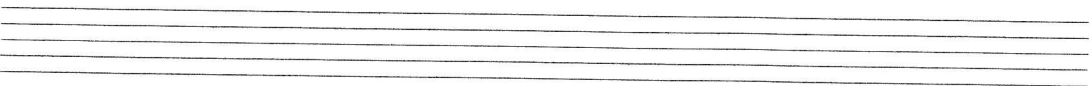
Draw a **sharp, flat** and **natural** sign on each line and space on the staff below.



Write the following notes on the staff below. Include any necessary accidentals.

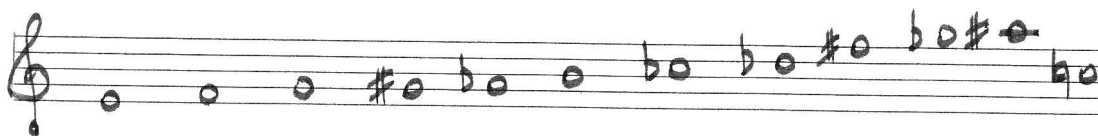
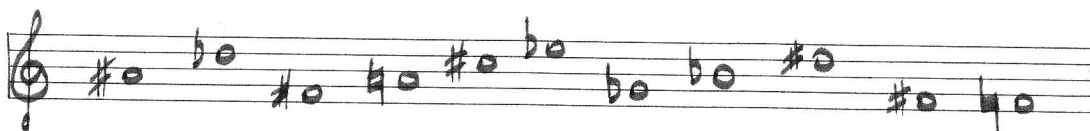


G Db B Ab F# A# E# Eb G# Bb C#



E F Bb A# D# B Ab D G# Cb Eb

Write the name of each note beneath the staff.



Unit 2

Rhythm (1)

The Notation of Rhythm

There are 2 symbols in use for writing rhythm. These are _____ and _____.

A **whole note** receives _____ counts.

A **half note** receives _____ counts.

A **quarter note** receives _____ count.

An **eighth note** receives _____ count.

A **sixteenth note** receives _____ count.

A **triplet** receives _____ count.

Rests

Rests are used to show periods of _____.

A **whole note rest** receives _____ counts.

A **half note rest** receives _____ counts.

A **quarter note rest** receives _____ count.

An **eighth note rest** receives _____ count.

A **sixteenth note rest** receives _____ count.

Draw the notes and rests on the staff below.

(a) Whole Note

(a) Whole Note Rest

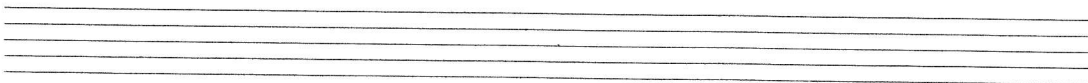
(b) Half Note

(b) Half Note Rest



(c) Quarter Note

(c) Quarter Note Rest



(d) Eighth Note

(d) Eighth Note Rest



(e) Sixteenth Note

(e) Sixteenth Note Rest



Fill in the blanks.

	=	4	
	=	2	
	=	2	
	=		4
	=	4	4
	=	4	
	=		
	=		
	=		
	=		
	=	2	

	=	2	3
	=	4	4
	=	2	
	=	2	
	=	2	
	=	2	
	=		
	=	4	
	=		

Fill in the blanks. Beam notes where necessary.

	=	1	
	=	2	
	=	2	
	=		
	=	2	
	=		

4	=		
3	=	2	
0	=	4	
	=	4	
	=	1	
	=	2	

Fill in the blanks.

	=		
	=		
	=		
	=		
	=		
	=		
	=		
	=		
	=		
	=		

3	=		
2	=		
2	=		
	=		
3	=		
0	=		
	=		
	=		
3	=		
4	=		

Bar (or Measure)

Music is almost always divided into small manageable sections called _____.

Bar Lines

Bar lines are used to section off each _____ in written music.

Time Signature

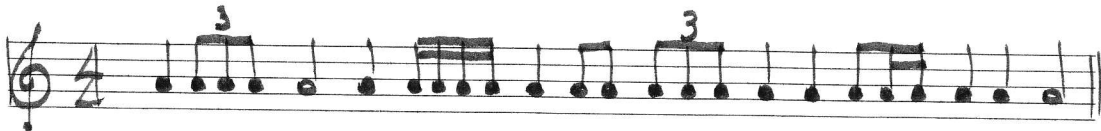
(a) Upper Number

This number tells _____ in the bar.

(b) Lower Number

This number tells which _____ receives 1 beat.

Add bar lines to the music so that the beats in each bar add up to the time signature.



Add one note to each bar so that it adds up to the correct number of beats as given by the time signature.



Unit 3

Major Scales

Scale

A **scale** is a series of notes that generally move in a _____ motion.

Octave

Notice that it starts and finishes on a C note.

These 2 C notes are said to be 1 _____ apart. (octo = 8)

Root Note

The 1st note of the scale is called either the **root note** or the _____ **note** and provides a '**home base**' for songs written using that scale.

In a C major scale, the root note is _____

In a G major scale the root note is _____

Interval

Interval is the term given to the _____ between notes.

Semitones & Tones

A **semitone** is also called a _____ and is the interval between **2** consecutive notes on the chromatic scale.

C-C# is 1 _____ or half-step.

C#-D is 1 semitone or _____.

A **tone** is also called a _____ and is the interval between **3** consecutive notes on the chromatic scale.

C-D is 1 _____ or whole step.

D-E is 1 tone or _____.

Major Scale Formula

The formula for the major scale is:

On the staff below write the C major scale.



The 1 semitone intervals **always** occur between which scale steps in a major scale?

_____ & _____ & _____

Write the major scale formula in 3 ways;

- Using **semitones** to show the intervals between the notes. (Fill in the blanks.)

2	2				2
----------	----------	--	--	--	----------

- Using **tones** to show the intervals between the notes. (Fill in the blanks.)

1		1/2			1/2
----------	--	------------	--	--	------------

- Using **whole-steps** and **half-steps** to show the intervals between the notes. (Fill in the blanks: 'W' for whole step and 'H' for half step.)

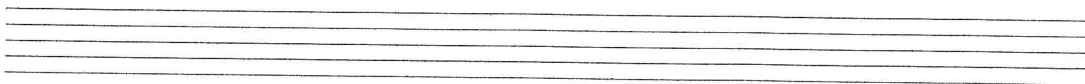
W		H			
----------	--	----------	--	--	--

Building the Major Scale

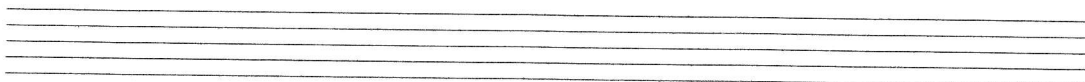
Build the major scales listed below.

- Remember to check your scale with the major scale formula.
- These scales only require the use of **sharps**.

G Major



D Major



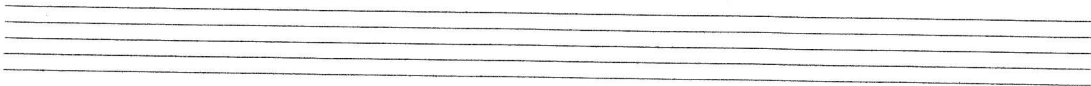
A Major



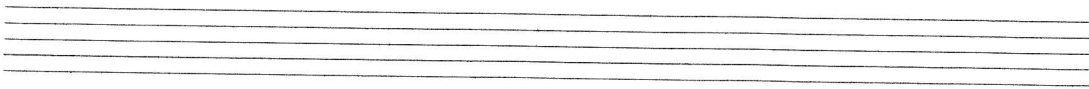
E Major



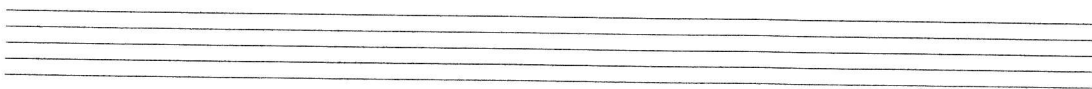
B Major



F# Major



C# Major



Keys

If a piece of music is in the **key of C**, this means that the notes in the _____ (tune), and the _____ (chords) are mostly from the **C major scale**.

Key Signature

The **key signature** tells the musician which notes will need to be made _____ or _____ to maintain the correct sound.

Sharp Key Signatures

Name the keys represented by the following key signatures.



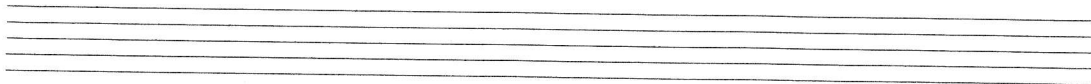
Write the notes in the following scales **without** key signatures.

- Add the sharps before the appropriate notes in each case.

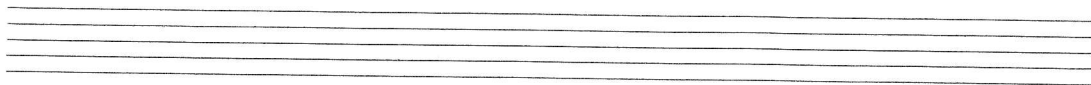
G Major



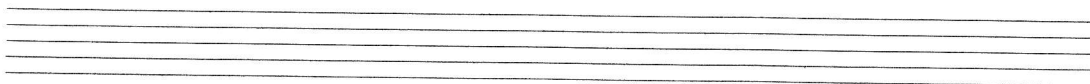
C Major



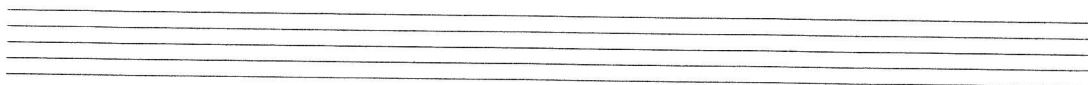
D Major



F# major



B Major



Write out the **letter names** of the notes in the following scales. (Fill in the blanks)

Key	1	2	3	4	5	6	7	8
C			E				B	
G				C				
D						B		
A		B						
E	E							
B								
F#		G#						
C#					G#			

Unit 4

More Major Scales

Flat Keys

Draw the correct F major scale on the staff below.

Build the scales as indicated in the following flat keys.

F Major

Bb Major

Eb Major



Ab Major



Db Major



Gb Major



Name the keys represented by the following flat key signatures.



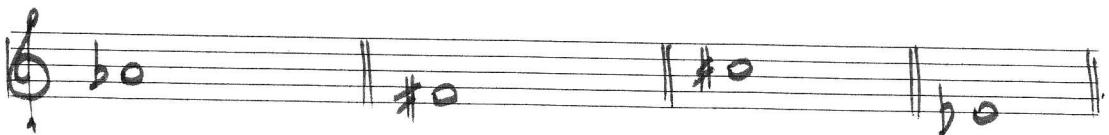
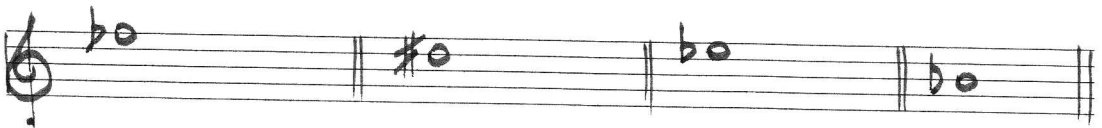
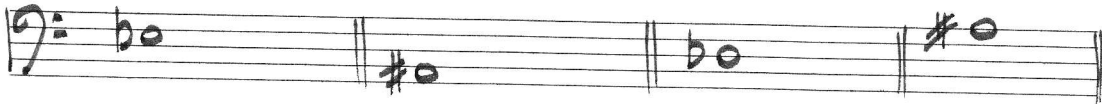
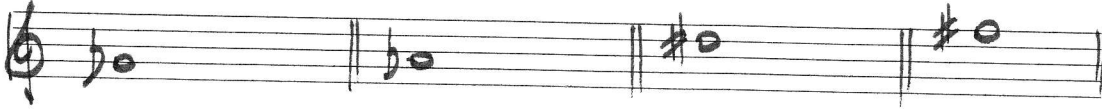
Write out the **letter names** of the notes in the following scales. (Fill in the blanks)

Key	1	2	3	4	5	6	7	8
F			A				E	
Bb				Eb				
Eb						C		
Ab		Bb						
Db	Db							
Gb							F	
Cb		Db						

Enharmonics

Enharmonics are 2 notes (or scales) which have the _____ pitch but are written differently or called by different names.

Write the enharmonic of each note on the staff below.



Unit 5

Intervals

Intervals

An **interval** is the distance between _____ notes.
Intervals are always measured from the _____ pitch to the _____.

Interval Quality Rules

- When a **major** interval is *decreased* by 1 semitone it becomes _____.
- When a **minor** or **perfect** interval is *decreased* by 1 semitone it becomes _____.
- When a _____ or **perfect** interval is *increased* by 1 semitone it becomes **augmented**.
- When a **minor** interval is *increased* by 1 semitone it becomes _____.

Identify the following intervals.
Use these abbreviations:

Abbreviation	Interval
Ma	major
mi	minor
P	perfect
A	augmented
d	diminished

MA3

Write the intervals as indicated **above** the notes on the staff.

MA3 mi3 ma2 ma6 mi6 P5 P4 ma6 P5 P4

ma6 mi2 ma2 mi6 P4 P5 mi3 MA3

MA2 P5 MA3 mi3 mi3 MA2 MA2 MA3 mi3
MA6 MA6 MA6 mi6 MA6 mi7 mi7 mi7 mi3

Write the indicated intervals **below** the notes on the staff.

mi3 P5 P4 MA3 mi6 P4 MA6 mi3 P4 P5
P5 MA6 mi7 MA7 MA3 mi3 MA3 MA3
MA6 mi7 MA7 mi7 mi2 MA3 MA3 mi3
mi7 MA6 MA7 P4 P5 mi3 mi6 mi7