

FAMILIES OF INSTRUMENTS



FAMILIES OF INSTRUMENTS

In past years you have been taught that there are four main types of instruments.

They are:

1. Strings
2. Woodwinds
3. Brass
4. Percussion

We are going to refine our types by placing the instruments in categories.

Categories of Instruments

NAME	HOW SOUND IS PRODUCED
Aerophone	✓ Instruments that produce sound by a vibrating column of air
Idiophone	✓ Simple solid instruments that produce sound by being struck, scraped or shaken
Membranophone	✓ Instruments that produce sound by striking or rubbing a skin or membrane stretched across a resonating air chamber
Chordophones	✓ Instruments that produce sound by striking, rubbing or plucking a tight string
Electrophones	✓ Instruments that produce sound with the aid of electricity.

Some instruments may span more than one category. For example, an electric guitar may be an electrophone, chordophone and, in some circumstances, an idiophone. The next page classifies many of the instruments by their type. The list is certainly not complete but does deal with the instruments that many schools have in their inventory. Feel free to add others as you see fit.

Types of Instruments		
NAME	INSTRUMENTS	NEEDS
Woodwind	Single reed: ✓ Clarinets ✓ Saxophones Double Reed: ✓ Oboes (English horns) ✓ Bassoons No Reed: ✓ Piccolos ✓ Flutes	✓ Sound is produced by a vibrating air column ✓ Reeds or lips are used to set up the air column
Brass	✓ Trumpets ✓ French horns ✓ Trombones ✓ Baritones ✓ Euphoniums ✓ Tubas	✓ Sound is produced by a vibrating air column ✓ Cup mouthpiece and vibrating lips set up the air column.
Percussion	Definite pitch: when you hit the instrument you get a specific note. ✓ Timpani ✓ Xylophones ✓ Vibraphones ✓ Orchestra bells Indefinite pitch: when you hit or shake or rub the instrument you do not get a specific note. ✓ Bass drum ✓ Snare drum ✓ Woodblocks ✓ Maracas There are many more.	✓ Hitting, scraping or rubbing the instrument produces sound.
Strings	✓ Violin ✓ Viola ✓ Cello ✓ Double bass ✓ Acoustic guitar ✓ Mandolin	✓ Sound is produced by vibrating the string(s) by bowing or plucking ✓ Lengthening or shortening the string by using different finger position changes sound.
Electronic	✓ Electric guitars ✓ Synthesizers ✓ Computers (midi)	✓ You need a power source to make a sound. (Electricity)
Keyboard	✓ Piano ✓ Organ ✓ Harpsichord	✓ Striking a key that in turn strikes or plucks a string produces sound.
72		

ASSIGNMENTS/ACTIVITIES

Here are some activities that you can use with your class to make connections between care of the instruments and the family of instruments. I use these for homework assignments, for enrichment and for students having difficulty making connections. Sometimes I take these up in class, or check them for completion only, or mark them for content and completion. I have included a marking scheme with all the assignments and a breakdown of the categories of assessment that I use. Feel free to change these for your use.

KNOW YOUR INSTRUMENT

NAME: _____ DATE: _____

Use a musical dictionary or encyclopedias to help you find the answers to the questions given below. You may also use your method book, instrument catalogues or guide, or ask a musician who plays your instrument.

1. What instrument do you play? _____(1)
2. What category of instrument is it? _____(1)
3. What type of instrument is it? _____(1)
4. What other instruments are in the same family of instruments as your instrument?

_____(3)
5. When and where was your instrument invented?

_____(2)
6. How do you clean your instrument?

_____(3)
7. What effect will eating gum or candy before or during playing of your instrument have on your instrument?

_____(2)
8. Why should you never 'lend' your instrument to a friend or family member?

_____(2)

TOTAL = /15

T (Note: this rubric can be used for the next two assignments also)

Level Achieved: _____

Name: _____

Teacher: _____

Date: _____

Course: The Arts, Music

Families of Instruments

Answering basic questions about categories and types of instruments.

Expectations: C3.2

Criteria:	Level 1 (50% - 59%)	Level 2 (60% - 69%)	Level 3 (70% - 79%)	Level 4 (80% - 100%)
Understanding of Concepts				
describe the history, construction and use of an instrument	describes the history, construction and use of an instrument providing limited information	describes the history, construction and use of an instrument providing adequate information	describes the history, construction and use of an instrument providing good information	describes the history, construction and use of an instrument providing thorough information
Critical Analysis and Appreciation				
identify required knowledge	identifies required knowledge with limited success	identifies required knowledge with some success	identifies required knowledge with considerable success	identifies required knowledge with excellent success
Communication				
use correct musical terminology	rarely uses correct musical terminology	sometimes uses correct musical terminology	often uses correct musical terminology	consistently uses correct musical terminology

☐ Student did not meet the expectations of this assignment.

COMMENTS:

NEXT STEPS:

NAME: _____ DATE: _____

Place the following list of instruments in the correct category of instruments.

1. AEROPHONES: a) _____ (5)
b) _____
c) _____
d) _____
e) _____

2. IDIOPHONES: a) _____ (5)
b) _____
c) _____
d) _____
e) _____

3. MEMBRANOPHONES: a) _____ (5)
b) _____
c) _____
d) _____
e) _____

4. CHORDOPHONES: a) _____ (5)
b) _____
c) _____
d) _____
e) _____

5. ELECTROPHONES: a) _____ (5)
b) _____
c) _____
d) _____
e) _____

Word Bank: gong castanet harp snare drum saxophone
 synthesizer computer rattle tuba piano
 xylophone oboe tambourine electric guitar
 electric organ dulcimer bassoon woodblock
 trumpet harpsichord tom-tom electric piano
 field drum clavichord bass drum

You may have to do some research for the instruments with which you are not familiar.

TOTAL = /25

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CLASSIFYING INSTRUMENTS BY TYPE

NAME: _____ DATE: _____

Classify the instruments from the work bank according to type.

1. WOODWIND: a) _____
 b) _____
 c) _____
2. BRASS: a) _____
 b) _____
 c) _____
3. PERCUSSION: a) _____
 b) _____
 c) _____
4. STRING: a) _____
 b) _____
 c) _____
5. KEYBOARD: a) _____
 b) _____
 c) _____
6. ELECTRONIC: a) _____
 b) _____
 c) _____

Word Bank:

cymbals	organ	electric guitar	trumpet
viola	flute	snare drum	computer
piano	tuba	harpsichord	French horn
woodblock	violin	synthesizer	saxophone
bassoon	cello		

TOTAL = /18

INSTRUMENT QUIZ

NAME: _____ DATE: _____

Answer T (true) or F (false) to each of the following statements: Place your answer in the blank provided at the beginning of each statement.

- _____ 1. To make a sound on an idiophone you hit this simple, solid instrument.
- _____ 2. On a definite pitch instrument you can produce a specific note.
- _____ 3. To play a stringed instrument you need a solid column of air.
- _____ 4. The piano could be classified as a percussion instrument.
- _____ 5. The oboe is a double reed brass instrument.
- _____ 6. The bass drum is a definite pitch percussion instrument.
- _____ 7. You need electricity to play a membranophone.
- _____ 8. A chordophone produces sound by plucking a tight string.
- _____ 9. To play a brass instrument your lips set up vibrations using a cup mouthpiece.
- _____ 10. The flute is a no reed woodwind instrument.

TOTAL = /10

INSTRUMENTS

NAME: _____ DATE: _____

Fill in the blanks with the appropriate word that completes each of the following statements.

1. A clarinet is a _____ reed woodwind.
2. Sound on an Aerophone is produced by a vibrating _____.
3. When you hit, shake or rub a percussion instrument of _____ pitch you do not get a specific note. An example is the _____.
4. On a violin you get different notes by _____ or _____ the string.
5. Sound is produced on a _____ by hitting a skin stretched across a resonating air chamber.
6. An _____ is a solid instrument that produces a sound by being hit.
7. The viola is a member of the _____ family.
8. Timpani are members of the _____ family.

TOTAL = /10

INSTRUMENTS

NAME: _____ DATE: _____

Fill in the blanks with the appropriate word FROM THE WORD BANK that completes each of the following statements.

1. A clarinet is a _____ reed woodwind.
2. Sound on an Aerophone is produced by a vibrating _____.
3. When you hit, shake or rub a percussion instrument of _____ pitch you do not get a specific note. An example is the _____.
4. On a violin you get different notes by _____ or _____ the string.
5. Sound is produced on a _____ by hitting a skin stretched across a resonating air chamber.
6. An _____ is a solid instrument that produces a sound by being hit.
7. The viola is a member of the _____ family.
8. Timpani are members of the _____ family.

WORD BANK:

IDIOPHONE
STRING
INDEFINITE
SHORTENING

LENGTHENING
MEMBRANOPHONE
AIR COLUMN

PERCUSSION
BASS DRUM
SINGLE

TOTAL = /10
modified

T

TEACHER ANSWER SHEET:

Place the following list of instruments in the correct category of instruments.

1. AEROPHONES: saxophone (5)
tuba
oboe
bassoon
trumpet
2. IDIOPHONES: castanet (5)
gong
woodblock
xylophone
rattle
3. MEMBRANOPHONES: snare drum (5)
tambourine
tom-tom
bass drum
field drum
4. CHORDOPHONES: harp (5)
piano
dulcimer
harpsichord
clavichord
5. ELECTRPHONES: synthesizer (5)
computer
electric guitar
electric organ
electric piano

Word Bank: gong castanet harp snare drum saxophone
synthesizer computer rattle tuba piano
xylophone oboe tambourine electric guitar
electric organ dulcimer bassoon woodblock
trumpet harpsichord tom-tom electric piano
field drum clavichord bass drum

You may have to do some research for the instruments with which you are not familiar.

TOTAL = /25

CLASSIFYING INSTRUMENTS BY TYPE

TEACHER ANSWER SHEET:

Classify the instruments from the word bank according to type.

- | | |
|----------------|--|
| 1. WOODWIND: | flute
saxophone
bassoon |
| 2. BRASS: | trumpet
tuba
French horn |
| 3. PERCUSSION: | cymbals
snare drum
woodblock |
| 4. STRING: | viola
violin
cello |
| 5. KEYBOARD: | organ
harpsichord
piano |
| 6. ELECTRONIC: | electric guitar
synthesizer
computer |

Word Bank:

cymbals	organ	electric guitar	trumpet
viola	flute	snare drum	computer
piano	tuba	harpsichord	French horn
woodblock	violin	synthesizer	saxophone
bassoon	cello		

TOTAL = /18

T

INSTRUMENT QUIZ

TEACHER ANSWER SHEET:

Answer T (true) or F (false) to each of the following statements: Place your answer in the blank provided at the beginning of each statement.

- T 1. To make a sound on an idiophone you hit this simple, solid instrument.
- T 2. On a definite pitch instrument you can produce a specific note.
- F 3. To play a stringed instrument you need a solid column of air.
- T 4. The piano could be classified as a percussion instrument.
- F 5. The oboe is a double reed brass instrument.
- F 6. The bass drum is a definite pitch percussion instrument.
- F 7. You need electricity to play a membranophone.
- T 8. A chordophone produces sound by plucking a tight string.
- T 9. To play a brass instrument your lips set up vibrations using a cup mouthpiece.
- T 10. The flute is a no reed woodwind instrument.

TOTAL = /10

INSTRUMENTS

TEACHER ANSWER SHEET:

Fill in the blanks with the appropriate word that completes each of the following statements.

1. A clarinet is a **SINGLE** reed woodwind.
2. Sound on an Aerophone is produced by a vibrating AIR **COLUMN**.
3. When you hit, shake or rub a percussion instrument of **INDEFINITE** pitch you do not get a specific note. An example is the **B.D./S.D./WOODBLOCK/MARACAS**.
4. On a violin you get different notes by **LENGTHENING** or **SHORTENING** the string.
5. Sound is produced on a **MEMBRANOPHONE** by hitting a skin stretched across a resonating air chamber.
6. An **IDIOPHONE** is a solid instrument that produces a sound by being hit.
7. The viola is a member of the **STRING** family.
8. Timpani are members of the **PERCUSSION** family.

TOTAL = /10

T

INSTRUMENTS

TEACHER ANSWER SHEET:

Fill in the blanks with the appropriate word FROM THE WORD BANK that completes each of the following statements.

1. A clarinet is a **SINGLE** reed woodwind.
2. Sound on an Aerophone is produced by a vibrating **AIR COLUMN**.
3. When you hit, shake or rub a percussion instrument of **INDEFINITE** pitch you do not get a specific note. An example is the **BASS DRUM**.
4. On a violin you get different notes by **LENGTHENING** or **SHORTENING** the string.
5. Sound is produced on a **MEMBRANOPHONE** by hitting a skin stretched across a resonating air chamber.
6. An **IDIOPHONE** is a solid instrument that produces a sound by being hit.
7. The viola is a member of the **STRING** family.
8. Timpani are members of the **PERCUSSION** family.

WORD BANK:

IDIOPHONE
STRING
INDEFINITE
SHORTENING

LENGTHENING
MEMBRANOPHONE
AIR COLUMN

PERCUSSION
BASS DRUM
SINGLE

TOTAL = /10
modified

Instrument Word Search

Find the hidden words within the grid of letters.

```

R B E C D R A O B Y E K O J E
E W E L X J S O B O E N Z L J
Z X N A M M A P O Y A Q E Y C
I O O R T E E A D I R C D Y A
S Z B I E M N N P Z T R Z E W
E T M N P B D O O R O A R T L
H A O E M R E N O H P O I D I
T M R T U A B P C S P I V M K
N B T K R N H I S H S O X H P
Y O W M T O S K O T I A X P Y
S U Z I N P U N B R F G B A J
U R U E R H E A W H Q Q V B S
V I E A I O B A R I T O N E R
Y N H D E N O H P O D R O H C
R E Y G P E R C U S S I O N C
  
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aerophone

piano

electrophone

trumpet

oboe

idiophone

clarinet

trombone

membranophone

bassoon

synthesizer

percussion

keyboard

baritone

saxophone

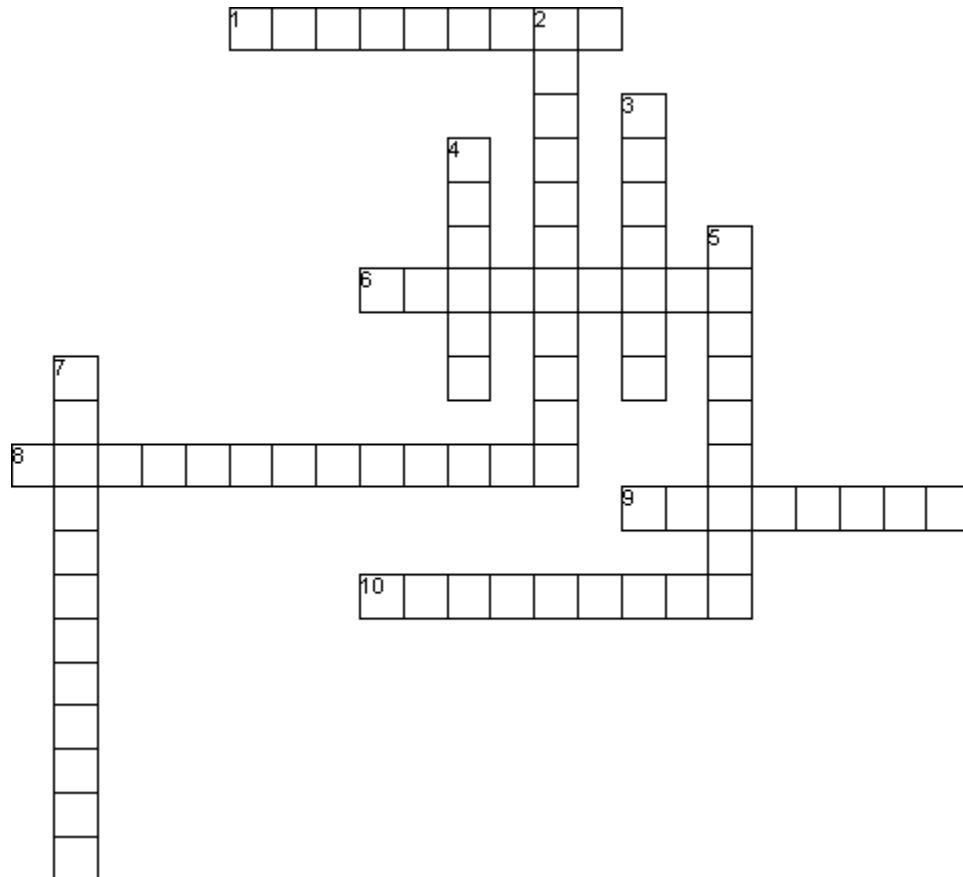
harpsichord

chordophone

tambourine

Categories of Instruments

Complete the puzzle using the clues shown below.



Across

1. an indefinite pitch percussion instrument
6. this instrument is a definite pitch percussion instrument
8. you must hit this type of instrument to get a sound
9. a brass aerophone
10. solid instrument that creates a sound by being scraped

Down

2. sound is produced by hitting a tight string
3. a double reed woodwind instrument
4. a member of the string family
5. instrument that produces sound by a vibrating air column
7. instrument that produces sound using electricity

Instrument Double Puzzle

Unscramble each word.

Then use the numbered letters to solve the second puzzle.

NOPREEHAO

--	--	--	--	--	--	--	--	--	--

7

RONHDHOPOCE

--	--	--	--	--	--	--	--	--	--	--	--

15

BOANSSO

--	--	--	--	--	--	--

3 12

BANOMHMNEERPO

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

1

6

XOYNLHEPO

--	--	--	--	--	--	--	--	--	--

10

17

RESAN UMDR

--	--	--	--	--

--	--	--	--

2 13

GNGO

--	--	--	--

11

EOPNAOHSX

--	--	--	--	--	--	--	--	--	--

9

RICNTLEA

--	--	--	--	--	--	--	--

18 4

16

OOHIDPNIE

--	--	--	--	--	--	--	--	--	--

8

TLERTA

--	--	--	--	--	--

14

PHOTELNERECO

--	--	--	--	--	--	--	--	--	--	--	--

5

--	--	--	--	--

1 2 3 4 5

		k		
--	--	---	--	--

6 7 8 9

--	--	--

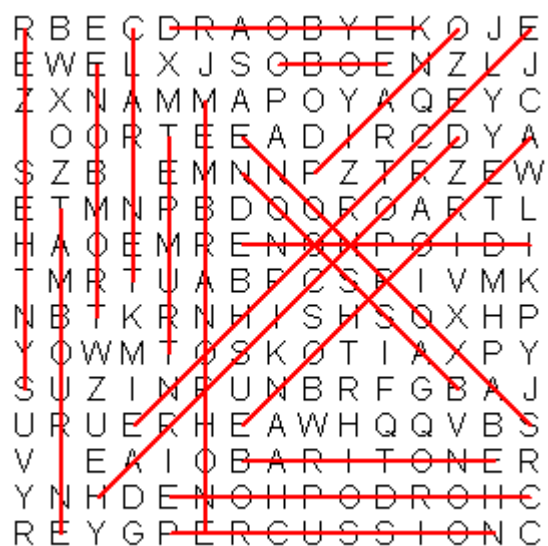
10 11 2

--	--	--	--	--	--	--	--	--	--

12 13 14 15 16 17 18

Instrument Word Search

Find the hidden words within the grid of letters.



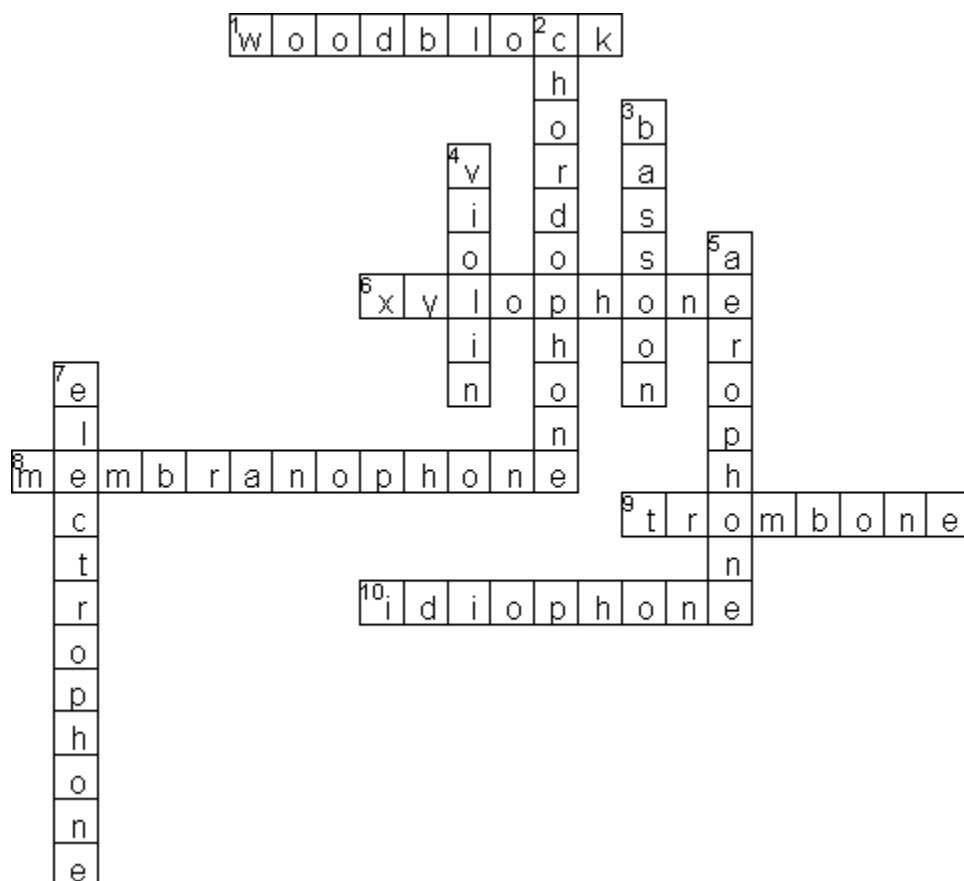
aerophone
piano
electrophone
trumpet
oboe
idiophone

clarinet
trombone
membranophone
bassoon
synthesizer
percussion

keyboard
baritone
saxophone
harpsichord
chordophone
tambourine

Categories of Instruments

Complete the puzzle using the clues shown below.



Across

1. an indefinite pitch percussion instrument
6. this instrument is a definite pitch percussion instrument
8. you must hit this type of instrument to get a sound
9. a brass aerophone
10. solid instrument that creates a sound by being scraped

Down

2. sound is produced by hitting a tight string
3. a double reed woodwind instrument
4. a member of the string family
5. instrument that produces sound by a vibrating air column
7. instrument that produces sound using electricity

Instrument Double Puzzle

Unscramble each word.

Then use the numbered letters to solve the second puzzle.

NOPREEHAO	A E R O P H O N E	7	
RONHDHOPOCE	C H O R D O P H O N E	15	
BOANSSO	B A S S O O N	3 12	
BANOMHMNEERPO	M E M B R A N O P H O N E	1 6	
XOYNLHEPO	X Y L O P H O N E	10 17	
RESAN UMDR	S N A R E D R U M	2 13	
GNGO	G O N G	11	
EOPNAOHSX	S A X O P H O N E	9	
RICNTLEA	C L A R I N E T	18 4 16	
OOHIDPNIE	I D I O P H O N E	8	
TLERTA	R A T T L E	14	
PHOTELNERECO	E L E C T R O P H O N E	5	
MUSIC	MAKES	YOU	SMARTER
1 2 3 4 5	6 7 8 9	10 11 2	12 13 14 15 16 17 18

INSTRUMENT PROJECT I

NAME: _____ DATE: _____

This project is about the instrument that you play in class. In your project you are required to do the following.

1. Create a title page. Include a title, your name and the date. The art work on your title page is up to you.
2. Write about your instrument based on the following topics:
 - a) describe the history of your instrument
 - b) describe how it is constructed
 - c) describe how your instrument is used today
 - d) describe the care and cleaning of your instrument
3. Include a picture of your instrument in your project, and label all the essential parts.
4. Your project must be at least two pages long, plus the title page and a reference page at the end.
5. It will be due on _____.
6. Include all the sources (i.e. books, internet) on the reference page at the end of your project.



INSTRUMENT PROJECT II

NAME: _____ DATE: _____

This project is about you finding out about some of the older instruments that were used in the past. Choose from the list that has been provided below and then follow the outline for the project.

If you play a woodwind instrument in class choose from one of the following:

- a) Recorder
- b) Crumhorn
- c) Racket
- d) Shawm
- e) Curtal

If you play a brass instrument in class choose from one of the following:

- a) Circular and post horns
- b) Slide trumpet
- c) Ophicleide
- d) Sackbut
- e) Serpent
- f) Cornett

If you play a percussion instrument in class choose from one of the following:

- a) Timbrel
- b) Tabor
- c) naker
- d) Side drum
- e) Tambourine

Include in your project the following:

- a) a brief history of when, where and how the instrument was used
- b) How was the instrument constructed?
- c) What modern day instrument did your choice lead to?
- d) Include a picture of the old instrument?
- e) What type of music did the instrument play?
- f) Name at least one composer who used the instrument when he/she wrote music.
- g) Any other interesting facts that you find.

Your project is due on _____.

T

Level Achieved _____

Name: _____

Teacher: _____

Date: _____

Course: The Arts, Music grade 7

Instrument project I and II

Research your instrument's history as per instructions

Expectations: C3.2

Criteria:	Level 1 (50% - 59%)	Level 2 (60% - 69%)	Level 3 (70% - 79%)	Level 4 (80% - 100%)
Understanding of Concepts				
describe the history, construction and use of an instrument	describes the history, construction and use of an instrument providing limited information	describes the history, construction and use of an instrument providing adequate information	describes the history, construction and use of an instrument providing good information	describes the history, construction and use of an instrument providing thorough information
Communication				
use correct musical terminology	rarely uses correct musical terminology	sometimes uses correct musical terminology	often uses correct musical terminology	consistently uses correct musical terminology
following instructions	able to follow the instructions with limited ability	able to follow the instructions with adequate ability	able to follow the instructions with considerable ability	able to follow the instructions exactly as stated

☐ Student did not meet the expectations

Comments:

Next Steps: