THE PROBLEM

Background of the Problem

For sighted students who are learning to play a musical instrument, print music notation eventually becomes an integral part of their music education. Whether they learn to read as they play (the 'traditional method') or by an aural based method (Suzuki or Kodaly), eventually all students will be required to read and/or write music. In both these methods however, sighted students are exposed to print music long before they become proficient readers of music notation and are aware therefore of the signs and symbols used, before they are actually taught to read. In much the same way a small child is exposed to print and may be able to recognize their name before actually learning to read or write. Sighted students are introduced to print music notation gradually and at an early age and have developed the concept that it relates to the sounds they are playing.

Visually impaired students are prevented from acquiring a prior knowledge of braille music notation, even though they may be at the same level of performance as their sighted peers.

The development of tactual skills, braille readiness and finally interpreting and completing the literary and maths braille codes, is a priority during these early years.

Although the visually impaired student will understand the
concepts of rhythm, pitch, tempo and the other basic elements of music, this student has no means of communicating in a musical language.

Visually impaired students have been disadvantaged by this imbalance. There are several reasons for it.

a) The need for the literary braille code to be well understood before the introduction of braille music notation would preclude the learning of this skill at an early age. For the student with average ability, readiness to begin to learn braille music would appear to be during Year 4 or Year 5, especially if the student is learning a musical instrument. Braille music teachers seem to agree that the criteria for beginning braille music notation depends on the student being proficient in grade 2 of the English braille code, as well as being able to work in basic maths braille.

b) Most Music Teachers (both private and high school) do not know braille music notation, and are therefore unable to assist their visually impaired student to be musically literate.

c) Itinerant Support Teachers of the visually impaired who are adept in both the Braille Literary and Maths Codes have no knowledge either of music or its print notation and are reluctant
to learn braille music, as it is very different from the other two braille codes.

d) Recent changes in educational philosophy and policy have made correspondingly significant changes to the educational direction for visually impaired students. With the integration of these students into mainstream classes, they have been 'taken away' from specialist schools that include teachers of music that teach braille music notation. The visually impaired student now relies on the skills of the Itinerant Teacher and the Classroom teacher for the main input of information and the private music teacher for music instruction.

e) For a visually impaired student entering Year 7 (the first year of High School) at his local High School, this problem becomes more pronounced. Most visually impaired students will have had some experience in music throughout their Primary School Years although not all of them will have had the opportunity to learn to play an instrument. For such a student the music lesson in Year 7 would be very difficult to comprehend as it is highly unlikely that the School Music Teacher would know braille music notation.

f) The Board of School Studies states that each student, to fulfil
their requirements for the School Certificate need to attend at least 100 hours of music on a non-elective basis and that they should show "some proficiency in music notation" (BSS, Non-elective Music Syllabus, Yrs 7-10 1987).

g) Inservice Courses on braille music notation for Itinerant Teachers of visually impaired students have proved to be more confusing than helpful. The complexity of learning print music notation, relating these symbols to braille music notation proved to be difficult even though these teachers were proficient at the literary braille code. (Braille music notation does not follow the literary code: the letter 'C' in the literary code becomes 'D' in the music code). The braille music transcriber instructing an Inservice Course at which the author was present did not anticipate having to explain musical concepts to the participants and finally decided that it is very difficult to teach braille music notation without a sound knowledge of music.

This view is held by most braille music transcribers and teachers. Itinerant Teachers are apprehensive to assist their students in learning braille music notation because of their lack of musical ability.

After much extensive research no evidence has come forward that presents a satisfactory solution to this problem, and as
visually impaired students are continuing to be integrated into the mainstream classroom it will continue to be a problem for them, their Itinerant Teacher and the Classroom Teacher.

This problem became a challenge for the author after learning of a student in a similar situation as described by Lam and Wang (1982) (1.) who was attending musical theory workshops in a group situation with her sighted peers (students of the piano teacher). the method of instruction was purely visual and the students mother sat with her and described the symbols and signs of print music notation as the workshop progressed.

As these workshops were conducted on a regular basis, it was becoming very obvious that the student needed her own medium of reading and writing music.

1. See Literature Review.
Statement of the Problem

The question now arises of how to fulfil the needs of both Itinerant Teachers and their visually impaired students, to provide a program of braille music instruction and assist the Itinerant Teacher to become competent and confident in transcribing and writing basic braille music and encouraging their students to become musically literate so they are able to:

a) learn basic braille music notation with the assistance of their respective Itinerant Teacher.

b) integrate successfully into the music classroom.

c) satisfy their own professional needs and the requirements for the School Certificate.
Aim of the Project

The project aimed to design, implement and evaluate an instructional program for the purpose of:

a) teaching a Support Teacher of Visually Impaired Students who had no prior knowledge of music notation, print and braille music notation.

b) enabling such a teacher to teach braille music notation to a blind student, in a musical not theoretical context, developing an appreciation of the elements of music.

Description

The program is based on a direct instruction model. The instructor provides a model, in this case the information on the work to be learned.

Errorless practice is achieved with a set of comprehensive exercises followed by a test.

As each 'new' element is introduced the 'old' or previous information is also practised, providing repetition for retention of learning.

This theoretical model was chosen because it appeared to be efficient in terms of learning time available and the repetition
to retain information is very important.

This program is complete and does not require the presence of an instructor. It allows the Teacher and the student to progress at their own pace.

Rationale and Theoretical Framework

The decision to use a single-case experimental design was based on a literature search of experimental designs using visually impaired subjects. The single-case design proved to be preferred for two reasons.

a) it is difficult to find a 'control' or a 'perfectly matched sample' amongst this small incidence group.

b) it is inappropriate to instruct students in braille music notation using an alternate method which could result in a disinclination to learn braille music notation.

The direct instruction model used to plan and implement the program was chosen because of its suitability and continual assessment of the work being learned. Carnine and Silbert (1979) maintain that using a direct instruction approach gave optimum results when applied to teach reading to students with a learning
disability. This method incorporates instructional goals controlled by the teacher, the material chosen is "appropriate for the students ability level and paces the instructional episode. Interaction is characterised as structured but not authoritarian". (Rosenshine 1978, cited Carnine and Sibert 1979, p.7)

Though mostly used as a remedial tool, the difficulty of the material being presented required this type of model.

Limitations of the Study

This program must be used in a withdrawal situation because braille music notation is so unlike print music notation that a separate method of instruction is required.

When the student has mastered the basic notation and is able to use it effectively, it is desirable to be used in the classroom.

To be eligible to use this program, students must first be secure in their knowledge of the literary braille code. by the time this is achieved, the student would be at a stage in their school lives where withdrawal for specific purposes is being gradually reduced as their braille and work skills are becoming more efficient.
The withdrawal of a student from the class to learn music may not be considered a priority by the classroom teacher. The disadvantages of withdrawal would apply to this program.

Its application and justification depend on the philosophy and policy of the school the student attends.

The results of this single-case research, as with any similar design, cannot be generalized to other subjects and their students.

Although the author purposefully 'stayed away' from the lessons so as not to invalidate the study, the subject and student were able to discuss and assess the elements of the program with the author as it progressed. This was necessary, during the administering of the probes, and the pre and post tests.

It is not anticipated that the use of this program will prepare the subject to understand and teach the more complex elements in music. Thus the problem will reoccur should the student wish to study music in greater depth.
LITERATURE REVIEW

Application of Braille Music Notation

Little emerged from research on methods of teaching braille music notation. (See Appendix 1.) Lam and Wang (1982) reported on a project involving the integration of a blind student. This project began as an experiment to teach one of their piano students in a group (music workshop) situation. As Lam is a braille music transcriber and Wang is an associate professor of music at the University of Kentucky in Lexington, there seems to have been an abundance of resources and facilities at their disposal. Even braille music notation, its rules and intricacies, usually such a rare commodity, was one of these resources.

This group consisted of a eight to ten private piano students, elementary school age, who were brought together for music workshops at "four-to-six week intervals."

Lam and Wang found that the ability of the visually impaired child to read music was fulfilling three important objectives:
1. To help the visually impaired child develop to his fullest potential.
2. To teach the class as a whole without singling out or making special provisions for the visually impaired student.
3. The visually impaired student was accepted and treated by
the sighted peers as ones whose "needs and behaviours were the same".

These objectives, similar in many ways to the aims and objectives expressed in the 'Integration Policy' of the N.S.W. Department of School Education, are only possible to achieve for a visually impaired student whose needs include the learning of braille music notation, if there is a braille music teacher close at hand.

To implement this program Lam and Wang introduced the student to both the print and braille music notations. For print notation, they devised many ways to 'illustrate' the stave, clefs and notes, in a tactile form.

To introduce braille music notation games with both printed and brailled music symbols were used enabling the student to participate in an integrated setting.

Lam and Wang found that there was little need for any special adjustments in aural exercises such as "echo clapping, tonal or rhythmic pattern recognition, or other aural differentiation exercises."

Lam and Wang went to great lengths to devise games and modifications to demonstrate musical concepts. The description of a model created by the authors to illustrate major and minor scale construction, shows the extent of their ingenuity. For the
twelve half-steps (I presume they mean semitones), of an octave they glued thirteen empty adhesive tape-reels onto a board, used calculator reels inserted between the tape-reels to represent the thirteen black and white keys. these calculator reels could begin on any note and be arranged in either the minor or major semitone and tone sequence, thus giving a very practical example of major or minor patterns.

A large portion of this report is devoted to the outlining of games and teaching aids that were modified and adapted and used by these students and to a lesser extent a description of the teaching techniques applied to use these games.

The authors implied that because the "students enjoyed playing the games" that the project was successful.

A pilot project set up by Burrows and Krolick in 1984, was conducted for six visually impaired students during three weeks of the summer vacation. These students attended mainstream schools during the school term. The ages of the students ranged from 11 to 25 years, their diversity in age matched the diversity in their musical ability.

The pre-requisites for selection for this project were:

a) good literary braille skills. (Braille maths skills is not mentioned).

b) average to high intelligence.
c) probable age range from 11 to 17 years.

Obviously this third criteria was not considered important as two of the students chosen were over the age limit. (One student being 19 years, the other 25 years).

The aim of this project was to teach these students "fluent use of braille music notation and enable them to read music, take part in school music activities and develop sufficient proficiency for private study on equal terms with their peers."

The text for this project was written by Burrows and Krolick (1984), this text introduced braille music in as "logical an order as possible", it contained written examples of music in both print and braille notation. A supplementary section with additional exercises was also supplied and the lessons lent themselves to many aural activities. e.g. sight singing, round singing and music dictation. The students were also introduced to "basic conducting techniques" although the report does not define 'basic', nor does it state the progression or the "logical order" used to introduce the braille music symbols.

The authors reported the students showed a "considerable increase in knowledge and experience". Not only had they learned the basics of music reading in braille notation, but a whole new world had opened up for them.

The text used during this course was subsequently revised as
the authors found it necessary to "simplify the assimilation of the new information" (Burrows and Krockick, 1984, p.7). It was found that the original rate of progression was "too rapid for young students with no previous experience" (Burrows and Krockick, 1984, p.7). As a result the sequence of presentation was changed. Supplementary exercises were added to reinforce each concept and "to give the student practical experience with new material" (Burrows and Krockick, 1984 p.8).

Despite the lack of 'concrete evidence' i.e. statistical analysis, to support the findings in both these reports, the authors reported that their projects were successful and 'necessary' for the students involved.

These projects were very different but were conducted outside school hours and with selective groups. Thus they are not comparable to a mainstream class containing its visually impaired student.

Research Issues:

The remainder of this paper will focus on issues commonly raised when working with visually impaired students:

a) in an integrated setting.

b) as subjects for research.
1. The Role of the Itinerant Teacher in Curriculum Adaptation.

Visually impaired children have unique educational and developmental needs that are direct results of their disability. Teachers of visually impaired children are responsible for many aspects of development, while concentrating on their academic needs and the constantly changing curriculums that are occurring in the current educational climate, they also play a decisive role in the development of social skills, interaction with peers, orientation and mobility skills, living skills and assistance in career guidance. Tuttle (1987) highlights the role of Counsellor meeting the needs of the visually impaired student............."the teacher must be able to distinguish between the informational counselling and self-esteem needs of the students and the deeper psychological needs." (p.160). Some would argue that Specialist Teachers are involved in counselling whether or not they are aware of this aspect of their role, and most would agree that there are times when it is necessary to meet the self-concept and self-esteem needs of the student. While most teachers of visually impaired students have an empathy and understanding of their students' psychological needs there are limitations to the involvement in this area and if any serious doubts or questions arise a professional counsellor should be consulted.
What does the teacher of a visually impaired student need to know and understand in helping to decide on the path to be taken by the student they are working with?

A major part of the Specialist Teachers work is to minimise the disadvantages that the student encounters by adapting and modifying lessons, units of work and curricula.

The Specialist Teacher also is required to implement programs for the students individual needs, in consultation with their supervisor or class teacher. Often these adaptations or modifications result from the enterprise of the teacher and the understanding they have of their students needs.

Hatlin and Curry (1987) divide the learning needs of blind and visually handicapped children into three categories.

a) needs that are met by adapting the curriculum but do not require a change of methodology or objective.

b) needs that require a change in methodology but not in the curriculum or the objective.

c) needs that are the direct result of blindness or visual impairment, which are urgent because of the lack of "incidental, casual visual learning." (p.7)

The problems in adaptation mentioned by Hatlin and Curry include the visually impaired students lack of experiential awareness, in particular reference to measuring items with a ruler.
containing braille or raised braille numbers, compared with the 'regular' ruler used by sighted students. This would seem to be a similar task for both the sighted and visually impaired student, except for the 'previous experience' e.g. watching others measure, of the sighted student. The specialist teacher has to assess the ability of the student and program a means to compensate for the students lack of experience.

Hatlin and Curry (1987) agree that the "adaptations of the curriculum, changes in methodology require the expertise and time of a teacher of the visually impaired if blind and visually impaired children are to benefit from them while remaining in the regular classroom." (p.9) They also see the need for some segregated programs and the application of a program teaching a visually impaired student how to read a braille ruler may be a reason to withdraw the student from the class until the students' skill has developed sufficiently to enable him to learn successfully in the classroom.

It is difficult to analysis and modify every curriculum area. As Hatlin and Curry (1987) state "some curriculum areas defy adaptation". (p.9).

Hatlin and Curry (1987) conducted an extensive search of the curricula and methods of instruction including braille reading and writing. However, they do not mention music.
Napier (1973) in her work on "Teaching Visually Handicapped Children" declares that if sighted students are expected to read music notation (print) at a "given grade level" (p.255), then visually impaired students should have the same opportunity.

However, "music notation in braille is entirely different from the stave format", (p.255) and classroom teachers of music are probably not conversant with braille music notation and "cannot use it without help". (p.255). Napier adds that Special Education Teachers are responsible for teaching their students braille and it is "fortunate for such teachers that the children only learn a limited amount of notation each year and so are able to keep abreast of the child's needs in learning braille music notation". (p.256). This article does not mention the musical ability of the "special teacher" or the process by which this to be taught, it dumps the responsibility for teaching braille music notation on the specialist teacher.

What is involved in, what needs to be assessed when adapting or modifying curricula?

Hamp and Caton (1984) look at the regrouping of the grade 2 English Braille Code and the steps it took them to produce 'Patterns: The Primary Braille Reading Program'. This program analysed and developed a method of teaching the English Braille Code using a linguistic approach. The literature available to
the young blind student is print based.

Hamp and Caton (1984) chose to go "back to basics" and design adequate learning materials by initially isolating the main problem areas. In their ensuing internal analysis of the braille code, the visual print code is segregated as a separate system, thus eliminating initial confusion. Later print is contrasted with braille, defining the relationship between the scripts.

Contrary to the findings of Hamp and Caton, Lam and Wang (1982), introduced braille music notation simultaneously with print music notation and believed it to be successful with one student. They argued that a "blind child equipped with the knowledge of printed music symbols can better understand the teacher in an integrated setting". (p.44).

The learning of braille music notation is best studied in a segregated setting, culminating in integration, as outlined by Hatlin and Curry. (1987).

Hatlin and Curry (1987) insist that it is "not enough to expect visually impaired children to assimilate skills by being in an integrated classroom" (p.8), and emphasis in their findings that as these children learn differently, their "experiential differences" (p.8), need to be catered for so they can learn the same material as their sighted peers.

This learning situation may take place in either an
integrated setting or a segregated one, as the most efficient learning of the material dictates.

In preference to introducing print and braille music notation simultaneously as did Lam and Wang (1982), the rationale described by Hamp and Caton (1984) in their pursuit of a new English braille training method is equally applicable to braille music notation. i.e. braille music should be taught by itself, the print music notation being introduced only after braille music and music concepts are properly understood.

In fact print music notation is required by the braille music student only for the purposes of public examinations and communication with print music users.

When this need arises, the resources developed by Lam and Wang would be appropriate.

b) Curriculum Requirements of the N.S.W. School Certificate.
Music in N.S.W. Schools has no longer become an optional extra and intensive development of Curricula has taken place at both Primary and Secondary levels. The Music (K-6) Syllabus and Support Statements have been developed to provide a range of musical experiences for all students in singing, playing, organizing sound (composition) and listening. These activities are based on providing the students with skills in performance and composition.
The Secondary Music Syllabus now provides an extension of the activities used in Primary Schools and the students are encouraged to become involved in performance and composition of all types and styles of music ranging from the traditional to the modern genres. Visually impaired students are expected to participate in all aspects of the curriculum, as a great deal of emphasis is currently placed on 'graphic notation' (a graph used for recording various sounds and vibrations, each sound has its own code and a key is drawn up, these codes are not conventional music notation but a series of squares, dots, squiggles or arrows). Hinton (1987) describes the use of graphic notation in the mainstream class as becoming a "stepping stone" (p.19) to reading conventional music scores.

This type of program is visually orientated and would be extremely difficult and confusing for the braille user, in fact it would be more like a 'stumbling block' rather than a 'stepping stone'. Barton (1987) in her article concerning musical literacy looks at the requirements of the Board of Studies in the Faculty of Music in London, the Board considers that there "should be a meaningful relationship between sounds and symbols"........and that......"musical literacy, should stem from the perception of such relationships, should be fostered by reference to conventional staff notation, as well as pictorial or graphic representations of
sound." (p.15). If sighted students are expected to read music through the course of their school life, then programs need to be devised for the use of visually impaired students.

The Department of school Education in N.S.W. stipulates that students attend 100 hours of instruction in Music during the Junior Years of Secondary School. At the end of this time they should have had experience in all aspects of the Syllabus, i.e. performance, composition, and musicology. The compliance with this requirement leads to their being awarded the School Certificate.

c) Research Designs and their application to visually impaired students.

Van Hasselt and Hersen (1981) conducted a single-case experimental design as an alternative to group comparison designs in research with visually impaired individuals. Their research found severe limitations and flaws in other designs when applied to this unique section of the population. The main concern was the lack of experimental control. They found that traditional research designs which involved using experimental groups, control groups, statistical analysis and comparison studies, did not lend themselves easily to research with the visually impaired. As Bonfanti (1979) has pointed out, "perfectly
matched samples, pre-requisites to testing in group designs, are often difficult to obtain in the field of blindness". (p.8).
Van Hasselt and Hersen (1981) studied single-case designs that had been used for behavioural strategies, e.g. encouraging eye contact in a partially blind, retarded male (using the A-B Design), addressing inappropriate behaviours (using a multiple baseline, but still in an A-B-A format). The authors found that these designs "deserved serious consideration in future research with visually impaired individuals." (p.152). Van Hasselt and Hersen (1981) found that the limitations evident in these designs although consistent with limitations found in other designs became less of a problem in presenting a concise research program, however the inability to to 'generalise' the findings was a serious consideration in the decision to use these designs. Miller (1977) found that the "lack of research, insufficient validation studies, poor or restricted standardization and confusing effects in test administration" (p.152), have not served the visually impaired person satisfactorily and shown their true abilities. Miller's justification in using a factor analysis is based on a number of these studies being carried out on sighted groups. This research produced an insight into the inadequacies of testing blind individuals, and recommends that there is "a need for nonverbal or performance
measures of intelligence to compliment verbal testing". (p.145). Miller's criticism of psychological tests that had been modified or revised for "purely empirical" (p.147) reasons, rely on verbal intelligence and are interpreted and related to other areas of behaviour according to an operative for sighted groups.

These concerns are also shared by Van Hasselt and Hersen (1981) and Hamp and Caton (1984).

Miller (1977) also found that it was not possible to control for age (his group ranged from 16 to 35 years), this did not present a problem in the design, as the group had the required age range required for the research being conducted. Miller (1977) acknowledges "that there have been numerous well-intended approaches to test development and test adaptation in this field... these have fallen short because of the need for valid and reliable measures". (p.152).

Silberman (1981) lists the factors in formative assessment, the types of data to be collected and the most appropriate measurements and evaluations. For an assessment and learning program Silberman advocates that "all learning tasks for visually handicapped children.......be refined into small steps". (p.109). This paper lists several factors that need to be taken into consideration when measuring the success of programs for visually impaired students.
1. The test should be based directly on the task being taught. It should be appropriate for the visually impaired student.

2. The test should provide information about the final task to be learned.

3. The tests need to be sensitive enough to reflect changes, and advocates the use of a frequency scale, also to monitor the results.

4. Tests should be taken daily or as regularly as possible, these regular scores will either demonstrate or confirm the validity of the test.

5. Tests would be reliable and should be carried out by more than one person.

Silberman's assessment tasks and measurements mainly apply to behaviour modification or the teaching of self-help skills, they can also be applied to the gaining of academic skills for the visually impaired student, faced with an entirely new set of objectives such as learning braille music notation.

The development of appropriate assessment instruments is the responsibility of the teacher, and Silberman (1981) states that the assessment instrument is best developed by the person who will use it.

Bruscia and Levinson (1982) developed a curriculum to
instruct students in reading print music with the Optacon. The main purpose of this research was to determine the extent to which "speed in reading music with the Optacon was related to the following score and subject variables: Number of voices, voice movement, number of staves, figure complexity, figure difficulty, chronological age, Optacon word-reading speed, and amount of training in Optacon music-reading." (p.310). The subjects chosen were seven legally blind individuals of average or above-average intelligence, their ages ranged from 11 to 24 years, all had prior knowledge of braille music notation and were trained to use the Optacon for reading print. All were able to play a musical instrument.

The length of the study, in some cases, was two years, especially for the younger subjects with instruction being given once a week; the older subjects were given more concentrated lessons over a shorter period of time.

One finding, perhaps the most surprising to sighted musicians was that the single-line melodies were not the easiest or the quickest to read with the Optacon. As the notes of a musical score do not move in a straight line and a great deal of time was spent in 'looking' for the notes on the stave. With more complex musical scores the task became easier even though the complexity of the music was more difficult. Bruscia and Levinson (1982) note
however, that some findings were more a test of the subjects ability to use the Optacon rather than a test of musical efficiency.

Other findings indicated the "positive relationship between age and speed of reading" (p.312) although this correlation was not high enough to be statistically significant. There was a small correlation was noted between fast word-print readers with fast music-print reading. This work was found to be extremely beneficial for the subjects concerned as reading print-music with the Optacon gave the subjects access to a large amount of printed music material.

The pre-requisites to participate in a course of this nature would exclude those students without Optacon skills. Optacon instruction is a highly specialized skill and the teaching of it is a time consuming exercise. It does not have a wide spread use and for these reasons is not considered a priority nor is it currently taught by Itinerant Teachers in the Department of School Education of New South Wales.

Conclusion

The dearth of literature in the field chosen, coupled with the finding that the literature 'discovered' was 'well meaning', unsubstantiated and at times contradictory, was disappointing and
thwarted the progress of the project.

The role of the Support Teacher is widely discussed and debated. The student is dependent on the ability of the support teacher to adapt and modify curricula according to the students requirements. The need for resources and specialist programs, as Hamp and Caton (1984) discovered, is very much a high priority in this field. In the absence of a braille music teacher, it became apparent that braille music instruction is considered to be part of the responsibilities of the Itinerant or Support Teacher. Napier (1973) suggests that the support teacher 'keep abreast' of the student while they are learning braille music notation. This type of music instruction may result in 'bad' habits and distorted concepts and is an undesirable method of learning a creative art form.

The limitations of the research designs was clearly indicated by many authors conducting experimental designs in this field. The literature, although showing problem areas, was instrumental in the final decision to use a 'single-case' study as the experimental design for this project.

The generous amount of literature concerning music instruction for sighted students affirmed the need for specific documentation and experimentation in the field of braille music, especially for junior braille students, so their experiences not only match
those of their sighted peers but also give them the opportunity to become successful braille music readers and writers.
DESIGN AND METHODOLOGY

Method

The A-B-A Design was applied to the subject and the student being instructed.

The baseline or the 'A' phase included two pre-tests, two weeks apart. These tests were designed to measure the extent of the knowledge of the subject in print and braille music notation and the student in braille music notation.

a) by aural recognition of simple rhythms and pitch dictations.

b) writing and reading single line melodies of print and braille notation for the subject and braille notation for the student.

c) transcribing print music into braille music notation, using the bass and treble clef.

The treatment or the 'B' phase consisted of four units of the program.

After each unit of work was completed a probe was administered. This probe assessed the progress of the subject and the student by testing the accuracy and the mastery of the work being studied.

Second baseline or 'A' consisted of two post tests. The
first post test being administered two weeks after the completion of the program and the second one five weeks after completion. It was felt that two post tests would be more satisfactory and with the added space of five weeks, would ascertain more satisfactorily whether or not the knowledge had been sustained. The post tests were based on examples of the pre-tests, and were administered by the author. See fig. 1.

Figure 1. Placement of pre-tests, probes and post tests.
SUBJECT

The subject is an Itinerant Support Teacher of the Visually Impaired whose caseload includes a nine year old student enrolled at her neighbourhood school.

The subject is allocated ten hours per week with the student for either in-class support or withdrawal for specific purposes. The subject has been working with the student for the past three years, has completed the Literary Braille Code (grade 2) with her student and introduces the elements of the Maths Braille Code as the need arises from her work in the classroom.

The subject has not studied music before except in the non-elective classroom during her High School Years. She does not know the Braille Music Code.
STUDENT

The following information concerning the students visual loss is the latest comprehensive report from the Royal Blind Society, dated 30th June, 1985.

Visual Loss:

- Diagnosis of Lebers Amaurosis
- Visual Acuity: None
- Functional Vision: Light Perception with projection.

BRAILLE ABILITY:

Has completed Grade 2 Braille Code. This is maintained by constant use for both educational and private purposes. The Maths Braille Code is also used by the student during the course of Maths lessons in the classroom.

MUSIC ABILITY:

The student has been learning the piano for the past four years. She has been studying the Suzuki method, with a private piano teacher who has no knowledge of any of the braille codes.
SETTING

Permission was sought and granted from the Principal of the school concerned. Appendix 2.

All instruction was individual and carried out by the subject and the student in a withdrawal situation. The project was provided by the author and consisted of a Teachers Manual, Students Manual (in both print and braille mediums), a cassette tape with recorded examples. The subject provided a cassette player, brailer and braille paper.

CONSTRUCTION OF PROJECT

The plan, construction and content of the project was devised by the author. Production of the project included analysing the basic elements of music into a series of simple learning sequences. Each of these sequences consisted of a instruction for the a) Teacher (subject) b) Student and a cassette tape on which musical examples had been recorded for use during the instructional period.

For the basis of this research, much of the material and production techniques were drawn from the authors own personal library, resources and experience as a High School Music Teacher in the Department of School Education and the Catholic Education
System in New South Wales.

Many strategies and teaching points were modified and adapted from Music Syllabuses currently in use by the New South Wales Department of School Education. Any published text that has presented ideas for this project has been duly acknowledged in the bibliography, however after eighteen years of reading music textbooks and adapting relevant material, there may be duplication of material of which the author is unaware.

The musical examples used to illustrate various teaching points were excerpts only and constituted less than a quarter of the whole piece.

OUTLINE OF THE PROJECT

The project was divided into five units of work.
1. Introduction: 'Music Is........', describing the five elements of music and how they are organised to produce many styles and moods in music. Appendix 3.

2. Unit One - Rhythm One: Notes and their Value. Beginning with the 'crotchet', this unit of work introduced the five most commonly used notes in music. The notes that were not included, the demi-semiquaver and smaller values can be more easily dealt with after more knowledge has been acquired.
The notes were introduced in the following order: crotchet, minim, quaver, semibreve and semiquaver. As rhythm exercises were supplementing the learning of these notes, it was considered that this order would provide contrast for the different note values and avoid confusion with the faster notes. e.g. the quaver and semiquaver. (Appendix 4.)

3. Unit One - Pitch One: The Musical Alphabet.

This unit of work introduced the five lines of music and the treble clef to the Subject as well as the middle or 4th braille octave. Because of the accuracy required in writing musical notes and transcribing into braille, these pitch notes were introduced gradually, beginning with 'C' and 'D'. The exercises on tape now included rhythm dictations, revising from the previous unit of work, and with each lesson a new pitch note. For musical reasons these notes were introduced in the two tetrachords of the 'C' major scale. C, D, E and F with revision on these four notes. 'Going Solo With 'G'' was extended to include 'A' and 'B'. The final octave 'C' was not included because it moved into the 5th braille octave.

A pentatonic mode was used for pitch dictation. The starting note was given and Subject and student were expected to work out both rhythm and pitch by the end of the unit. (Appendix 5)
4. Unit Two – Rhythm Two: Time Signatures.

Dividing rhythm into equal bars in following time signatures:

\[
\begin{array}{ccc}
2 & 3 & 4 \\
4 & 4 & 4
\end{array}
\]

Three short pieces were played to introduce these three rhythms. The subject was introduced to the print music dividers (the barlines) and the braille music dividers (the space) and also to the double barline for print music notation and the contraction 'GH' and 'K' for the braille equivalent. The time signatures were treated in the same method as previously used, reinforcing the work given in previous units. Writing and reading exercises using this information was also given. (Appendix 6)

5. Unit Two – Pitch Two: Braille Octave Signs.

With the introduction of Octave Signs used in braille music notation it is necessary to introduce the bass clef, leger lines and 8va signs used in print music notation.

It was also necessary to introduce intervals as an introduction to the rules governing the use of octave signs. It was felt by the author, by working through the print bass clef (new for the subject) and the 1st, 2nd and 3rd Octave Signs, the subject and student would then be prepared for this additional information. The exercises on these octaves were restricted to
conform with braille music notation rules on the use of octave signs.

The 4th Octave had already been used in the two previous chapters.

Exercises including the use of the rules governing the octave signs were then used with the introduction of the 5th, 6th and 7th Octaves. (Appendix 7)

PRE AND POST TESTS

The subject and student were each presented with two pre-tests (Appendix 8 & 9) and two post tests (Appendix 10 & 11). The first pre-test was administered three weeks before commencing the program, the second pre-test one week prior to commencement. The pre-tests analysed the extent of musical knowledge of subject and student including both music notations for the subject.

The first post test was administered one week after the completion of the program and then a similar post test was given six weeks later. The pre-tests and post tests were similar in content, and were testing only the elements learned in the program.
Probes, Assessments and Exercises

Revision exercises and assessments were inbuilt into the program and were based on material previously studied. These were conducted by the subject during the course of instruction and reported back with documentation and results.

Probes were additional tests, based on the material that had been studied and were administered by the author after the completion of each of the units of work. (Appendices 12 to 15)

PROCEDURE

Following pre-testing the subject and student were placed on an instructional program designed to assist the subject to learn and understand braille and print music notation and the student to learn and understand braille music notation.

The program was conducted over two terms during the school year and the sequence of implementation is shown in the time schedule. (See fig. 2)
Figure 2. Time schedule
RESULTS

The continual assessment present in the program made it possible for the subject to monitor her own and the students progress. The progress was discussed and reviewed by the author, with the subject and the student.

Tests and probes were administered by the author.

The subject and student completed the four units of the program during Term III and Term IV 1991, with the exclusion of the two week holiday between Terms. Breaks also occurred for a School Camp, Examinations, change of Classroom Teacher, and Sickness. Each lesson was conducted during school hours, in a withdrawal situation and was approximately 20 minutes in length.

The work on the exercises in each phase and the assessment checks within each unit shows the high performance level of the subject and the student.

Performance in Exercises.

The first unit of work introduced the names and values of the notes. It introduced aural listening skills to illustrate different lengths of the notes in sound. The print notation in this unit was not unknown to the subject, but had not
been studied for some time. The aural treatment of this material was a new approach and required the subject realise the relationship between the notes in sound. Braille music notation was also introduced as a 'new' element in this unit.

The results of the exercises and the assessment in braille notation and print notation of the first unit of work is shown in table 1.

Table 1. Subject Performance in Unit One - Rhythm One

<table>
<thead>
<tr>
<th>TASK</th>
<th>TIME TAKEN</th>
<th>NO. OF EXERCISES</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CROTCHET</td>
<td>1 LESSON</td>
<td>1 BRL/3 PRINT</td>
<td>100%</td>
</tr>
<tr>
<td>MINIM</td>
<td>1 LESSON</td>
<td>3 BRL/3 PRINT</td>
<td>100%</td>
</tr>
<tr>
<td>QUAVER</td>
<td>1 LESSON</td>
<td>2 BRL/4 PRINT</td>
<td>100%</td>
</tr>
<tr>
<td>QUAVER (REVISED)</td>
<td>1 LESSON</td>
<td>2 BRL/4 PRINT</td>
<td>100%</td>
</tr>
<tr>
<td>ASSESSMENT</td>
<td></td>
<td>3 BRL/3 PRINT</td>
<td>100%</td>
</tr>
<tr>
<td>SEMIBREVE</td>
<td>1 LESSON</td>
<td>4 BRL/2 PRINT</td>
<td>100%</td>
</tr>
<tr>
<td>SEMIQUAVER</td>
<td>1 LESSON</td>
<td>4 BRL/3 PRINT</td>
<td>100%</td>
</tr>
</tbody>
</table>

Comments.

The repeat of the quaver lesson in this section was necessary because the student had obviously not grasped this concept well enough to proceed to the next lesson. The subject felt that this
was not due to the program but to outside pressures influencing the student at the time of the lesson. e.g. the student had spent a week at a camp, the classroom teacher had been transferred and the replacement teacher was having difficulty in adjusting to a visually impaired student. The students anxiety to succeed and the frustration that was evident during this lesson was a concern for the subject. The repeated lesson was successful. The difficulty for the student during this unit of work was the inability to 'braille' and listen at the same time as the noise of the brailler prevented the tape being heard. The student displayed an exceptional ability to memorize quickly after listening to the exercises. Student performance in the exercises for the first unit is shown in table 2.

Table 2. Student Performance in Unit One - Rhythm One

<table>
<thead>
<tr>
<th>TASK</th>
<th>TIME TAKEN</th>
<th>EXERCISES</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CROTCHET</td>
<td>1 LESSON</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>MINIM</td>
<td>1 LESSON</td>
<td>6</td>
<td>100%</td>
</tr>
<tr>
<td>QUAVER</td>
<td>1 LESSON</td>
<td>6</td>
<td>50%</td>
</tr>
<tr>
<td>QUAVER (REVISED)</td>
<td>1 LESSON</td>
<td>6 (SAME)</td>
<td>96%</td>
</tr>
<tr>
<td>ASSESSMENT</td>
<td></td>
<td>6</td>
<td>90%</td>
</tr>
<tr>
<td>SEMIBREVE</td>
<td>1 LESSON</td>
<td>6</td>
<td>98%</td>
</tr>
<tr>
<td>SEMIQUAVER</td>
<td>1 LESSON</td>
<td>4</td>
<td>98%</td>
</tr>
</tbody>
</table>
The second unit of work was difficult for the subject. As the number of pitch notes to be recognised aurally increased, the subject found it difficult to name the pitch of the notes. The braille notation also became confusing as the names of the notes were 'changing' from literary braille to braille music. The scores were still relatively high. The subject found print notation presented no problem, and was able to transcribe from print to braille successfully. Braille errors included the omission of dot 5 to represent the 4th Octave.

The results of the second unit of work is shown in table 3.

Table 3. Subject Performance in Unit One - Pitch One

<table>
<thead>
<tr>
<th>TASK</th>
<th>TIME TAKEN</th>
<th>EXERCISES</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>'C' &amp; 'D'</td>
<td>1 LESSON</td>
<td>3 BRL/3 PRINT</td>
<td>96%</td>
</tr>
<tr>
<td>'C', 'D' &amp; 'E'</td>
<td>1 LESSON</td>
<td>2 BRL/2 PRINT</td>
<td>94%</td>
</tr>
<tr>
<td>'C', 'D', 'E' &amp; 'F'</td>
<td>1 LESSON</td>
<td>2 BRL/1 PRINT</td>
<td>87%</td>
</tr>
<tr>
<td>ASSESSMENT</td>
<td></td>
<td>3 BRL/3 PRINT</td>
<td>85%</td>
</tr>
<tr>
<td>'G'</td>
<td>1 LESSON</td>
<td>2 BRL/2 PRINT</td>
<td>100%</td>
</tr>
<tr>
<td>'G' &amp; 'A'</td>
<td>1 LESSON</td>
<td>2 BRL/2 PRINT</td>
<td>98%</td>
</tr>
<tr>
<td>'G', 'A' &amp; 'B'</td>
<td>1 LESSON</td>
<td>2 BRL/2 PRINT</td>
<td>97%</td>
</tr>
<tr>
<td>ASSESSMENT</td>
<td></td>
<td>2 BRL/3 PRINT</td>
<td>90%</td>
</tr>
</tbody>
</table>
The student displayed an exceptional ability to recognise pitch in this unit of work. The pitch exercises were thoroughly enjoyed. The 'change' of letter names caused problems. The student admitted to "thinking" the 'old name' (literary braille) and changing it to its 'new' musical name. Reading exercises also became difficult because of this. The student began to read the braille music notation at a slower pace, compared with her literary and maths braille skills. As this unit of work progressed the problems that existed with rhythm, from the first unit of work, diminished. Results of the exercises and assessments from this unit of work is shown in table 4.

Table 4. Student Performance in Unit One - Pitch One

<table>
<thead>
<tr>
<th>TASK</th>
<th>TIME TAKEN</th>
<th>EXERCISES</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>'C''D'</td>
<td>1 LESSON</td>
<td>4</td>
<td>96%</td>
</tr>
<tr>
<td>'C''D''E'&amp;'E'</td>
<td>1 LESSON</td>
<td>4</td>
<td>95%</td>
</tr>
<tr>
<td>'C''D''E'&amp;'F'</td>
<td>1 LESSON</td>
<td>3</td>
<td>95%</td>
</tr>
<tr>
<td>ASSESSMENT</td>
<td></td>
<td>2</td>
<td>95%</td>
</tr>
<tr>
<td>'G'</td>
<td>1 LESSON</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>'G' &amp; 'A'</td>
<td>1 LESSON</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>'G''A'&amp;'B'</td>
<td>1 LESSON</td>
<td>4</td>
<td>97%</td>
</tr>
<tr>
<td>ASSESSMENT</td>
<td></td>
<td>5</td>
<td>100%</td>
</tr>
</tbody>
</table>
The use of time signatures introduced in the third unit of work was easily understood. The subject is familiar with maths braille fractions. The braille music time signatures use these, i.e. the number sign, the higher number for the number of beats in each bar, with the lower number for the type of beat, to represent higher and lower number of time signatures. Dividing the rhythms into bars for print and braille notations and recognition of the time signatures for the excerpts played on tape was handled without difficulty.

Table 5. Subject Performance in Unit Two - Rhythm Two

<table>
<thead>
<tr>
<th>UNIT TWO</th>
<th>RHYTHM TWO</th>
</tr>
</thead>
<tbody>
<tr>
<td>TASK</td>
<td>TIME TAKEN</td>
</tr>
<tr>
<td>2 4</td>
<td>1 LESSON</td>
</tr>
<tr>
<td>3 4</td>
<td>1 LESSON</td>
</tr>
<tr>
<td>ASSESSMENT</td>
<td>1 LESSON</td>
</tr>
<tr>
<td>4 4</td>
<td>1 LESSON</td>
</tr>
</tbody>
</table>

The student also found this unit of work to be 'easy' and discovered that it was "like maths". The division of the notes made it easier to read the notation, this was still slow in
comparison with her ability in the other two codes. This unit of revised all work previously studied and had a 'plateau' effect after the intensity of the previous units.

Table 6. Student Performance in Unit Two – Rhythm Two

<table>
<thead>
<tr>
<th>UNIT TWO  – RHYTHM TWO</th>
<th>TIME TAKEN</th>
<th>EXERCISES</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 4</td>
<td>1 LESSON</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>3 4</td>
<td>1 LESSON</td>
<td>4</td>
<td>94%</td>
</tr>
<tr>
<td>ASSESSMENT</td>
<td></td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>4 4</td>
<td>1 LESSON</td>
<td>5</td>
<td>96%</td>
</tr>
</tbody>
</table>

The subject was required to learn the braille octave signs as well as the bass clef and 8va signs used in print music in the fourth unit of work. The fourth octave had been used for all other units of work, except the first unit. Pitch and rhythm dictations were progressing well. The subject was still showing a preference for rhythm dictations, while the student preferred pitch dictations. As the first three octaves used only pitch and rhythm dictations in their implementation, the subject was able to work through these successfully. Intervals were initially
confusing, as were the rules governing the use of octave signs. The final three octaves illustrated the octave sign rules. The results of this unit of work are shown in table 7.

Table 7. Subject Performance in Unit Two - Pitch Two

UNIT TWO - PITCH TWO

<table>
<thead>
<tr>
<th>TASK</th>
<th>TIME TAKEN</th>
<th>EXERCISES</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCTAVES 1/2</td>
<td>1 LESSON</td>
<td>3 BRL/3 PRINT</td>
<td>95%</td>
</tr>
<tr>
<td>3RD OCTAVE</td>
<td>1 LESSON</td>
<td>2 BRL/1 PRINT</td>
<td>96%</td>
</tr>
<tr>
<td>INTERVALS/</td>
<td>2 LESSONS</td>
<td>3 BRL/3 PRINT</td>
<td>90%</td>
</tr>
<tr>
<td>OCTAVE RULES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASSESSMENT</td>
<td></td>
<td>3 BRL/3 PRINT</td>
<td>90%</td>
</tr>
<tr>
<td>OCTAVES 4/5</td>
<td>1 LESSON</td>
<td>3 BRL/3 PRINT</td>
<td>98%</td>
</tr>
<tr>
<td>6TH OCTAVE</td>
<td>1 LESSON</td>
<td>1 BRL/2 PRINT</td>
<td>97%</td>
</tr>
<tr>
<td>7TH OCTAVE</td>
<td>1 LESSON</td>
<td>2 BRL/1 PRINT</td>
<td>98%</td>
</tr>
</tbody>
</table>

The student had not previously encountered intervals in music lessons. Time was spent by the subject explaining and counting intervals before proceeding to the octave sign rules. The first three octaves presented no problems. The student had no difficulty understanding and working through the fifth, sixth and seventh octaves. The rhythm and pitch dictation in the seventh octave, in 6 was difficult.
Table 8. Student performance in Unit Two - Pitch Two

<table>
<thead>
<tr>
<th>TASK</th>
<th>TIME TAKEN</th>
<th>EXERCISES</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCTAVES 1&amp;2</td>
<td>1 LESSON</td>
<td>5</td>
<td>97%</td>
</tr>
<tr>
<td>3RD OCTAVE</td>
<td>1 LESSON</td>
<td>3</td>
<td>96%</td>
</tr>
<tr>
<td>INTERVALS/OCTAVE RULES</td>
<td>2 LESSONS</td>
<td>6</td>
<td>94%</td>
</tr>
<tr>
<td>ASSESSMENT</td>
<td>5</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>OCTAVES 4&amp;5</td>
<td>1 LESSON</td>
<td>6</td>
<td>98%</td>
</tr>
<tr>
<td>6TH OCTAVE</td>
<td>1 LESSON</td>
<td>3</td>
<td>99%</td>
</tr>
<tr>
<td>7TH OCTAVE</td>
<td>1 LESSON</td>
<td>3</td>
<td>97%</td>
</tr>
</tbody>
</table>

Assessment of the students' work did not include both codes of music, i.e. Print and Braille notation, however the exercises included aural skills as well as learning to read and 'write' Braille music notation. At the end of the project the students' reading ability began to improve. The student and subject continued to think of the notes in their literary form first before translating into the Braille music name. This problem became less evident with practice.
Probes and Assessments

Assessments were placed in the program to assist the subject with a form of measurement. They were not called 'assessments' but were written as revision exercises, in some cases they were additional exercises of work added at the end of a section. These assessments were recorded after their completion by the subject and the results relayed to the author. Results of the assessments are included in tables 1 to 8, and compared in with the probes in fig. 3 (subject responses) and fig. 4 (student responses).

The four probes used in the program were each based on the unit of work previously studied. As each unit of work used the knowledge gained in the previous unit, the results became more significant.

The probes were useful in providing the author with information on the progress of subject and student, their understanding of the elements being studied and application to reading and writing braille music for the student and reading and writing braille and print music notation for the subject. (See Appendices 11 to 14).

The assessments had the effect of positive reinforcement and became were used as a 'test run' by the subject and student.
Errors occurring during the assessments were able to be marked and revised. The same type of error was usually not present in the probes. e.g. The subject failed to use dot 5 in the course of the second assessment, this error was not repeated in the subsequent probe. Except for the third probe, the number of correct answers improved. Results of the probes are displayed in fig.3 and fig.4.

Figure 3. Subject: Results of Assessments and Probes
Figure 4. Student: Performance in Assessments and Probes.

Probes also showed a high incidence of correct responses by the subject and student.

**Subject:** Range 95-100%.  
**Student:** Range 95-100%.  
**Average:** 96.25%  
**Average:** 98.75%
Pre and Post Tests

Performance in initial testing, the pre tests, tested the subject in three elements, musical knowledge, knowledge of print music notation and knowledge of braille music notation. All these elements were restricted to the limits of the project. The pre tests were given with both written and verbal instructions; these required aural and writing skills. (see Appendices 8 & 9).

Analysis of Pre and Post Tests.

Q 1. Rhythm Dictation: aural recognition of length of notes, and the ability to write them in braille and print music notation.
Q 2. Pitch Dictation: rhythm pattern given, subject and student were required to write correct pitch of the notes, either in braille or print music notation.
Q 3. Time signatures: Aural recognition of the three time signs used in the program 2, 3 or 4. Writing these in print and \( \frac{4}{4} \), \( \frac{4}{4} \), \( \frac{4}{4} \) braille notation. Writing a four bar rhythm in one of the above time signatures.
Q 4. Octave signs: used only in braille notation, to cover the range of pitch. Bass and Treble clefs used in print music notation. The subject was tested in both these aspects, while the student's pre test only covered the octave signs.
Q 5. Transcribing: the subject was asked to transcribe a short
melody from print music notation into braille, the student was asked to braille a piece of music as it was described to her.

Both pre tests and post tests were based on the same format, the questions were changed to reduce the chance of retention.

Results of the pre tests are shown in Table 3. (subject) and Table 4. (student)

Table 9. Performance of Subject in pre-tests and post tests.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>PRE TESTS</th>
<th>RESULT</th>
<th>POST TESTS</th>
<th>POSS.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1.a)</td>
<td>7</td>
<td>8.5</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>b)</td>
<td>3</td>
<td>4</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>2.</td>
<td>5</td>
<td>6</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>3.</td>
<td>4</td>
<td>3</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>4.a)</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>b)</td>
<td>7</td>
<td>6</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>5.</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26</td>
<td>26.5</td>
<td>95</td>
<td>83</td>
</tr>
</tbody>
</table>

Further analysis of pre tests showed the subject gained marks in questions related to print notation and musical knowledge that she recalled learning during the time spent
in Year 7 at High School. Her knowledge of the braille music notation was therefore not able to be tested, and accordingly placed at zero on the baseline in the final analysis.

The student had a better musical knowledge than her Itinerant Teacher, but had no means of writing this down. Question 2, (pitch dictation) proved to be very easy for the student, but again the transcribing to notation and reading it braille notation was not able to be done.

Question 3 was easily recognised by the student, but again was unable to be written. See Table 10.

Table 10. Performance of student in pre-tests and post tests.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>PRE TESTS</th>
<th>POST TESTS</th>
<th>POSS.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>1. a)</td>
<td>7</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>b)</td>
<td>5</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>2.</td>
<td>10</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>3.</td>
<td>6</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>4. a)</td>
<td>0</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>b)</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>5.</td>
<td>0</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL</td>
<td>28</td>
<td>33</td>
<td>99</td>
</tr>
</tbody>
</table>
Table 11. Combined results of Pre-tests and Post Tests

<table>
<thead>
<tr>
<th>TEST</th>
<th>PRETESTS</th>
<th>POST TESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBJECT</td>
<td>1</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>26.5</td>
</tr>
<tr>
<td>STUDENT</td>
<td>1</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>33</td>
</tr>
</tbody>
</table>

Intervening Variables

As the program progressed the author became aware of several factors that were affecting the outcome of the project.

1. The repeat of the 'quaver' lesson in Unit One of the program was a problem not anticipated but resolved by both the author and the subject.

2. The author became aware of a intervening variables during the application of the probes, which could partly account for the low incidence of errors.

a) The probes became a challenge for the subject and student, as both responded to the 'competition' of tests.

b) The initial probes gave the subject and student a sense of achievement after their performance in the pre tests.
3. The student's mother reported that the student was beginning to participate in music theory lessons she attended and seemed to be understanding music notation. The student also discussed the theory lessons with her piano teacher. This indirect reinforcement of concepts under instruction in the program could not be controlled for.

Conclusions of the Study

The overall outcome of the program can be best evaluated by comparing the pre and post tests. The effect of positive reinforcement of probes present in the treatment also seemed to give an added impetus to the program and provided support for the effectiveness of the learning situation. The treatment was also presented in a very simple instructional format, with only one concept being emphasised in each lesson. The results of the study are displayed in Fig. 5 (subject), and Fig. 6 (student).
Figure 5. Subject: Results of the Study.
The data from this study (fig. 5 and fig. 6) show the second baseline levels are high. The result of the second post test was insignificantly lower than the first post test, indicating that the subject and student retained most of the knowledge they learned during the treatment.

An alternative analysis of results achieved by the subject showed the level of braille ability learnt during the
course of the program. The pre-tests showed the subject had no knowledge of braille music notation, and some general knowledge of music notation. As the program progressed this reversed. The subject was able to understand braille music notation and achievements during the probes show more errors being made in the musical content rather than braille.

Figure 7. Subject: comparison between braille and music components of the program.

Key: ○ = Musical knowledge
     × = Braille Music Notation knowledge.
DISCUSSION

This program was successful in teaching and training an Itinerant Support Teacher, who had no musical background to understand and instruct a visually impaired student, rudimentary braille music notation. The author emphasises that this method is not a preferred option for teaching music notation. It is preferable for these skills to be taught by a musically trained teacher. Ultimately the student in this program will require the assistance of a braille music instructor to enable her to continue any serious study of music.

To begin to meet this need the program has been constructed to ensure that learning occurs in a musical context. Rhythm and pitch in the exercises and examples were emphasised to compensate for the lack of an experienced music teacher. Built into the program were aspects of training in critical listening and musical analysis. Many music teachers do not recognise the importance of this training and exclude this element in their teaching practice. In fact they teach the theory of music in a way that divorces it from the sound it represents.

The program involving the learning of ONE element during each lesson, and its later reinforcement developed the skills of
subject and student, at the same time assisting the subject to relate sounds to both print and braille music notation.

Many of the terms and concepts were familiar to the student. However the process of being able to associate them in a 'written' (braille) format was previously unknown. At times the relationship of these sounds was uncertain; this program clarified many aspects of music for the student.

To be eligible to participate in this braille music program the student required a sound knowledge of grade 2 literary braille for two reasons:

a) braille music notation uses literary braille contractions.

b) the 'music' notes do not correspond with their literary braille counterparts.

There is no comparison between print music notation and braille music notation. The symbols used in print music are quite different from the printed word. The braille literary code and braille music notation use the same set of symbols but give them different meaning.

One of the main problems found in this program was the difficulty the student experienced in reading the music notation despite the repetition and gradual introduction of the symbols.
The student described this as having to read first in literary braille and then having to translate it into music braille. This could be eliminated to some degree if more reading exercises were included especially in the first pitch unit of work.

The subject also found difficulty in assigning musical language to literary symbols.

Utilisation of the skills acquired by the student in the program has been limited as there is insufficient musical material available that is relevant to the students age and performance ability. Suzuki piano students are not required to learn print notation until they are able to read and write in their 'mother tongue'. As the student becomes more proficient at reading and writing, music notation is introduced, usually in association with the practical pieces being studied. The student involved in this project had not previously been exposed to braille music notation, even to follow simple pieces from the Suzuki repertoire.

The need for braille music educators to analyse and design methods of instruction for younger and musically illiterate students is urgent. Attention also needs to be focused on the availability of appropriate material, so that students have access to brailled scores or pieces of music that are relevant to their
age and level of performance.

Large quantities of music are available internationally. For e.g. The Library of Congress features Chopin 'Nocturnes', Bach 'Preludes and Fugues' and Beethoven 'Sonatas'. It does not, however, provide the young student with material that is relevant to their needs. Furthermore, Braille Music even within Australia is inaccessible because it is either not catalogued correctly or not catalogued at all.

Finally this author does not envisage this program being an 'end product' for braille music lessons. The program needs to be extended and revised. More reading, writing and transcribing and testing need to be included. It would also be an advantage if the program could involve group work.

Since the completion of the study, the author has continued the program at the request of the subject and student so that already further units of work have been developed.
BIBLIOGRAPHY


The Principal,
Warwick Farm Primary School
Lawrence Hargrave Road
Warwick Farm

Dear Mrs Hyland,

As part of a Master of Special Education Course at The University of Western Sydney, I am working on a Braille Music Project. To complete this project I have to conduct an experiment on an Itinerant Teacher for Vision in conjunction with the student. After consultation with Gail Constable, she has agreed to work through the project with Naomi to help them both learn the Braille Music Code. This project would be done during school time during Naomi’s withdrawal time with Gail. A minimum amount of time would be spent on the project so that Naomi’s academic work will not be affected.

As Principal of the school, I need to obtain your written permission for this experiment to proceed. I hope this does not in any way inconvenience you.

I hope you have a lovely last year in teaching and a great retirement.

Yours sincerely,

Ann Clark

Ann Clark
Ms Ann Clark  
63 Churchill Avenue  
STRATHFIELD N.S.W. 2135

Dear Ann,

In reply to your request to trial your Braille Music Program with Naomi Grubica and her Intinerant Teacher, Gail Constable, I have discussed the matter with Gail and as it is not going to interfere with her other work I can see no problem. I feel that Naomi would benefit greatly.

Yours faithfully,

[Signature]

M.A. HYLAND  
PRINCIPAL
Dear Ms Clark,

I have been working on the query you have left us concerning the teaching of braille music to children. We have little to help you from our own resources apart from the Library of Congress catalogues which at least indicate what is available. You could perhaps write to the National Library Service for the Blind and Physically Handicapped, Library of Congress, Washington DC 20540 for details of any publications they could recommend.

On the second part of the printout is a reference to an item by Ross Bowden (I think all the other items are actually in Braille). This is published by the Canberra Blind Society, Burda Street, Canberra City, (065) 247 4580 and may also be worth contacting.

Finally, I have rung the Sydney Royal Blind Society whose music teacher, Helen Porter, would be happy to speak to you on this matter.

I hope this information is of use to you.

Yours sincerely,

Kay Young
for Manager
General Reference Library
APPENDIX 3.

INTRODUCTION

THIS SECTION WAS DESIGNED TO INTRODUCE THE ELEMENTS OF MUSIC AND ILLUSTRATE THE DIVERSITY OF MUSICAL STYLES THAT EXIST AND FLOURISH TODAY. USING THE BASIC ELEMENTS OF MUSIC THAT WILL BE INTRODUCED DURING THE COURSE OF THE PROGRAM.

SHORT EXERPTS IN THE FOLLOWING STYLES WERE PLAYED AND THE STUDENT WAS ENCOURAGED TO NAME THE STYLE: JAZZ; AFRICAN; CLASSICAL; FOLK; POP.

LISTING DIFFERENT WAYS TO MAKE SOUNDS: BLOWING; HITTING; SCRAPING; ELECTRICITY, AND FINDING INSTRUMENTS TO MATCH THE ACTIVITY.

INTRODUCING THE NAMES OF THE ELEMENTS OF MUSIC: PITCH; RHYTHM; TEMPO; VOLUME; TONAL COLOURS OR TIMBRE, AND THEIR MEANINGS.

LISTENING TO THE THEME FROM 'JAWS' TO ILLUSTRATE THE ABILITY OF A COMPOSER TO USE THE ELEMENTS OF MUSIC TO CREATE ATMOSPHERE.
APPENDIX 4.

UNIT ONE – RHYTHM ONE

THIS UNIT OF WORK COVERS THE FOLLOWING INFORMATION.

NOTES AND THEIR VALUE.

<table>
<thead>
<tr>
<th>NOTE</th>
<th>NAME</th>
<th>VALUE</th>
<th>BRAILLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>♫</td>
<td>SEMIBREVE</td>
<td>4 BEATS</td>
<td>DOTS 3 &amp; 6</td>
</tr>
<tr>
<td>♩</td>
<td>MINIM</td>
<td>2 BEATS</td>
<td>DOT 3</td>
</tr>
<tr>
<td>♩♩</td>
<td>CROTCHET</td>
<td>1 BEAT</td>
<td>DOT 6</td>
</tr>
<tr>
<td>♩♩♩</td>
<td>QUAKER</td>
<td>1/2 BEAT</td>
<td>NO DOTS</td>
</tr>
<tr>
<td>♩♩♩♩</td>
<td>SEMIQUAVER</td>
<td>1/4 BEAT</td>
<td>DOTS 3 &amp; 6</td>
</tr>
</tbody>
</table>

NOTE: THE USE OF THE PITCH NOTE 'C' WHEN WRITING RHYTHM WITHOUT PITCH IS ALSO INTRODUCED AT THIS POINT.

THE UNIT OF WORK BEGINS WITH THE CROTCHET. THE SUBJECT AND STUDENT RECOGNISING THIS AS BEING EQUAL TO 1 BEAT. EXAMPLES ON THE TAPE ILLUSTRATE THE TEXT.

THE BRAILLE NOTATION IS INTRODUCED TO BOTH SUBJECT AND STUDENT. PRINT NOTATION INTRODUCED TO THE SUBJECT.

THE REMAINING NOTES WILL BE INTRODUCED IN THE FOLLOWING ORDER:
MINIM: QUAKER: SEMIBREVE: SEMIQUAVER.
APPENDIX 4.

As each note is introduced the previous notes will be revised in the context of the rhythms used. This will reinforce the learning of these and aid in the development of the concept of the different values.

Each section of work has exercises that are graded in order of difficulty. These are heard on the tape and then written out in Braille by both subject and student. The subject is also required to write some exercises in print music notation.

E.g.

PRINT

\[\text{music notation}\]

BRAILLE

\[\text{Braille notation}\]
APPENDIX 5.

UNIT ONE - PITCH ONE

THIS UNIT OF WORK COVERS THE FOLLOWING INFORMATION.

PRINT MUSIC NOTATION

\[ \text{Music notation image} \]

BRAILLE MUSIC NOTATION

\[ \text{Braille notation image} \]

BEGINNING WITH THE NOTES 'C' AND 'D', PITCH IS ADDED TO LISTENING SKILLS FOR BOTH THE SUBJECT AND STUDENT. RHYTHM DICTATIONS ARE USED TO INTRODUCE THE NOTES AND PITCH DICTATIONS FOLLOW USING THE NOTES THAT ARE INTRODUCED.

THE NOTES ARE INTRODUCED IN THE FOLLOWING ORDER:
'C', 'D', 'E' & 'F', WITH RHYTHM AND PITCH DICTATIONS. THE NOTES MOVE IN STEP AND RHYTHMS ARE GIVEN TO DEVELOP THE USE OF MORE COMPLEX RHYTHM PATTERNS.

'G', 'A' & 'B' ARE INTRODUCED AS THE SECOND GROUP OF NOTES. TO KEEP THE PITCH WORK SIMPLE AND TO FIT IN WITH THE MUSICAL CONCEPT OF TETRACHORDS, IT WAS CONSIDERED TO KEEP THE PITCH DICTATIONS
APPENDIX 5.

UNIT ONE — PITCH ONE

LIMITED TO FOUR DIFFERENT NOTES

THE SUBJECT WILL IS ASKED TO USE BOTH BRAILLE AND PRINT MEDIUMS, WHILE THE STUDENT CONCENTRATES ONLY ON THE BRAILLE.

NOTE: IN BRAILLE MUSIC NOTATION THE NOTES DO NOT USE THE SAME NOTES USED IN THE BRAILLE LITERARY CODE

LITERARY BRAILLE CODE:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BRAILLE MUSIC NOTATION

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 6.

UNIT TWO – RHYTHM TWO

THIS UNIT OF WORK COVERS THE FOLLOWING INFORMATION

TIME SIGNATURES: 2, 3, & 4 OR C (COMMON TIME)
\[
\begin{array}{ccc}
4 & 4 & 4
\end{array}
\]

THIS INCLUDES THE INTRODUCTION OF BARLINES AND THE DOUBLE BARLINE.
PRINT MUSIC NOTATION USES A VERTICAL STROKE FOR THE BARLINE.
AND PARALLEL VERTICAL STROKES FOR THE DOUBLE BARLINE.
BRAILLE MUSIC NOTATION USES A SPACE FOR THE BARLINE AND THE
LITERARY BRAILLE CONTRACTION FOR 'GH' FOLLOWED BY THE LETTER 'K',
FOR THE DOUBLE BARLINE.
E.G. PRINT
\[
\begin{array}{cccc}
2 & \cdot & \cdot & \cdot \\
\end{array}
\]

BRAILLE
\[
\begin{array}{cccccc}
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\end{array}
\]

AS THE MUSIC IS DIVIDED INTO EQUAL BARS. REVISION OF THE PREVIOUS
RHYTHM UNIT AND EXERCISES ON DIVIDING BOTH CODES OF NOTATION INTO
BARS IS ALSO PRESENTED. RHYTHM DICTATIONS NOW REQUIRE A TIME
SIGNATURE AND BARLINES WHEN COMPLETED.
APPENDIX 6.

UNIT TWO - RHYTHM TWO

PITCH DICTATIONS ARE ALSO GIVEN WITH EACH OF THE TIME SIGNATURES. OR DIFFERENT PITCH NOTES ARE USED FOR THE RHYTHM DICTATIONS, TO CONTINUALLY REVISE THE NOTES. IN BOTH PRINT AND BRAILLE MUSIC NOTATIONS.

TIME SIGNATURES ARE WRITTEN IN BRAILLE MUSIC NOTATION AS FRACTIONS ARE WRITTEN IN BRAILLE MATHS. THE TIME SIGNATURE IS PLACED ABOVE THE LINE OF MUSIC NOTATION IN BRAILLE MUSIC NOTATION. NOT AS IT IS PLACED IN PRINT MUSIC, BEFORE THE LINE OF MUSIC.

\[
\begin{align*}
2 & \quad \text{becomes} \quad \begin{array}{c}
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\end{array} \\
4 & \\
\end{align*}
\]

\[
\begin{align*}
3 & \quad \text{becomes} \quad \begin{array}{c}
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\end{array} \\
4 & \\
\end{align*}
\]

\[
\begin{align*}
4 & \quad \text{becomes} \quad \begin{array}{c}
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\end{array} \\
4 & \quad \text{or 'C' (common time) is represented by} \\
& \quad \text{ITALIC 'C' in literary Braille.}
\end{align*}
\]

\[
\begin{align*}
\text{PRINT} \\
\end{align*}
\]

\[
\begin{align*}
\text{BRAILLE} \\
\end{align*}
\]
APPENDIX 7.

UNIT TWO - PITCH TWO

THIS UNIT OF WORK COVERS THE FOLLOWING INFORMATION

THE OCTAVE SIGNS: THE OCTAVE SIGNS ARE USED IN BRAILLE MUSIC NOTATION TO INDICATE HIGH OR LOW PITCH. THESE SIGNS REPLACE THE CLEF SIGNS (BASS, TREBLE, ALTO AND TENOR) USED IN PITCH MUSIC NOTATION.

FIRST OCTAVE:

PRINT

\[ \text{\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet} \]

BRAILLE - THIS OCTAVE SIGN IS REPRESENTED BY DOT 4.

SECOND OCTAVE:

PRINT

\[ \text{\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet} \]

BRAILLE - REPRESENTED BY DOTS 4 & 5.
APPENDIX 7

UNIT TWO - PITCH TWO


PRINT

[Musical staff image]

BRAILLE

FOURTH OCTAVE (UNIT ONE)

INTERVALS: C to D = 2nd
C to E = 3rd
C to F = 4th
C to G = 5th
C to A = 6th
C to B = 7th

OCTAVE SIGN RULES: ALWAYS USE AN OCTAVE SIGN FOR A 6TH OR 7TH.

NEVER USE AN OCTAVE SIGN FOR A 2ND OR 3RD.

SOMETIMES USE AN OCTAVE SIGN FOR A 4TH OR 5TH.

THE OCTAVE SIGN IS USED FOR THE 4TH OR 5TH IF THE NOTES MOVE INTO ANOTHER OCTAVE.
APPENDIX 7.

UNIT TWO - PITCH TWO

THE OCTAVE SIGN MUST ALWAYS PRECEDE THE NOTE IT IS GOVERNING.
WORK ON THE FOLLOWING OCTAVES INCLUDED RULES GOVERNING THE OCTAVE
SIGNS, BASS AND TREBLE CLEFS FOR THE SUBJECT, AND TESTS ON THE
OCTAVE SIGNS.

FIFTH OCTAVE DOTS 4 & 6

PRINT

\[\text{\includegraphics[width=0.5\textwidth]{fifth_octave.png}}\]

BRAILLE

\[\text{\includegraphics[width=0.5\textwidth]{fifth_octave_braille.png}}\]

SIXTH OCTAVE DOTS 5 & 6

PRINT

\[\text{\includegraphics[width=0.5\textwidth]{sixth_octave.png}}\]

BRAILLE NOTATION

\[\text{\includegraphics[width=0.5\textwidth]{sixth_octave_braille.png}}\]
APPENDIX 7

UNIT TWO - PITCH TWO

SEVENTH OCTAVE - 6 TIME WAS ALSO INTRODUCED AT THIS POINT.

PRINT

\[ \text{\textcopyright} \]

BRAILLE

\[ \text{\textcopyright} \]
APPENDIX 8.

PRE-TEST 1.

1. RHYTHM DICTATION

\[
\frac{3}{4} \quad \frac{3}{4} \quad \frac{3}{4} \quad \frac{3}{4} \quad \frac{3}{4} \quad \frac{3}{4} \quad \frac{3}{4} \quad \frac{3}{4}
\]

2. PITCH DICTATION

\[
\begin{array}{c}
\text{\#4} \\
\text{\#4} \\
\text{\#4} \\
\end{array}
\]

3. TIME SIGNATURES

a) \[
\frac{5}{4} \quad \frac{5}{4} \quad \frac{5}{4} \quad \frac{5}{4} \quad \frac{5}{4} \quad \frac{5}{4} \quad \frac{5}{4}
\]

b) C

c) \[
\frac{3}{4}
\]

4. OCTAVE SIGNS

\[
\begin{array}{c}
\text{\#4} \\
\text{\#4} \\
\end{array}
\]

5. TRANSCRIBING

FROM PRINT

\[
\begin{array}{c}
A \quad d \quad F \quad d \\
\end{array}
\]

TO BRAILLE

\[
\begin{array}{c}
\text{\#4} \\
\text{\#4} \\
\end{array}
\]
APPENDIX 9.

PRE-TEST 2.

1. RHYTHM DICTATION

\[ \begin{array}{c}
\frac{2}{4} \quad \text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\end{array} \]

2. PITCH DICTATION

\[ \begin{array}{c}
\begin{array}{c}
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\end{array} \\
\begin{array}{c}
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\end{array} \\
\end{array} \]

3. TIME SIGNATURES

a) \[ \begin{array}{c}
3 \quad \text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\end{array} \]

b) \[ \begin{array}{c}
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\end{array} \]

c) \[ \begin{array}{c}
\frac{4}{4} \quad \text{or 'C'} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\end{array} \]

4. OCTAVE SIGNS

\[ \begin{array}{c}
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\end{array} \]

5. TRANSCIBING

FROM BRAILLE

\[ \begin{array}{c}
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\end{array} \]

TO PRINT

\[ \begin{array}{c}
\begin{array}{c}
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \\
\end{array} \]
\end{array} \]
APPENDIX 10

POST-TEST 1.

1. RHYTHM DICTATION

\[ \frac{3}{4} \quad \text{dotted quarter notes} \]

2. PITCH DICTATION

\[ \frac{\#4}{\text{quarter notes}} \quad \text{diagram of notes} \]

3. TIME SIGNATURES

a) \[ \frac{3}{4} \quad \text{dotted quarter notes} \] = \[ \frac{3}{4} \quad \text{dotted quarter notes} \]

b) \[ \frac{4}{4} \]

c) \[ \frac{3}{4} \]

4. OCTAVE SIGNS

\[ \text{Octave signs} \]

5. TRANSCRIBING

FROM BRAILLE

\[ \text{music notation} \]

TO PRINT

\[ \text{music notation} \]
APPENDIX 11

POST-TEST 2.

1. RHYTHM DICTATION

\[ \begin{array}{c}
\text{2} \\
\text{4} \\
\end{array} \]

2. PITCH DICTATION

3. TIME SIGNATURES

a) \[ \begin{array}{c}
\text{3} \\
\text{4} \\
\end{array} \]

b) \[ \begin{array}{c}
\text{2} \\
\text{4} \\
\end{array} \]

c) \[ \begin{array}{c}
\text{1} \\
\text{4} \\
\end{array} \]

4. OCTAVE SIGNS

5. TRANSCRIBING

FROM PRINT

TO BRAILLE
APPENDIX 12.

PROBE 1.

1. NAMES OF THE NOTES
   \( \text{\textbackslash l} = \text{crotchet} \quad \text{\textbackslash s} = \text{semiquaver} \)
   \( \text{s} = \text{semibreve} \quad \text{\textbackslash q} = \text{quaver} \)
   \( \text{\textbackslash m} = \text{minim} \)

2. RHYTHM DICTATION

\[ \\text{\textbackslash l} \text{\textbackslash l} \text{\textbackslash l} \text{\textbackslash l} \text{\textbackslash l} \text{\textbackslash q} \text{\textbackslash q} \text{\textbackslash q} \text{\textbackslash q} \text{\textbackslash q} \]

3. THE NUMBER OF:
   a) \text{crotchets in a semibreve}
   b) \text{quavers in a crotchet}
   c) \text{minims in a semibreve}
   d) \text{semiquavers in a crotchet}
APPENDIX 13

PROBE 2.

1. RHYTHM DICTATION

\[ \text{\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet} \]

2. NAMES OF THE NOTES

\( \text{\textbullet} = \text{minim} \quad \text{\textbullet\textbullet} = \text{crotchet} \quad \text{\textbullet\textbullet\textbullet} = \text{semiquaver} \)

\( \text{\textbullet\textbullet\textbullet\textbullet} = \text{quaver} \quad \text{o} = \text{semibreve} \)

3. PITCH DICTATION

\[ \text{\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet} \]

4. RHYTHM AND PITCH DICTATION

\[ \text{\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet} \]
APPENDIX 14.

PROBE 3.

1. RHYTHM DICTATION INCLUDING BARLINES

\[
\begin{array}{cccc}
\frac{4}{4} & \frac{4}{4} & \frac{4}{4} & \frac{4}{4} \\
\end{array}
\]

2. PUT THESE RHYTHMS INTO BARS
   A) \[
   \begin{array}{cccc}
   \frac{3}{4} & \frac{3}{4} & \frac{3}{4} & \frac{3}{4} \\
   \end{array}
   \]
   B) \[
   \begin{array}{cccc}
   \frac{2}{4} & \frac{2}{4} & \frac{2}{4} & \frac{2}{4} \\
   \end{array}
   \]

3. WRITE A RHYTHM IN COMMON TIME
   C
APPENDIX 15.

PROBE 4.

1. RHYTHM DICTATION

\begin{eqnarray*}
\begin{array}{cccccccc}
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\end{array}
\end{eqnarray*}

2. LISTEN AND REWRITE THESE MELODIES WITH THE CORRECT OCTAV
SIGNS.

A) \begin{eqnarray*}
\begin{array}{cccccccc}
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\end{array}
\end{eqnarray*}

B) \begin{eqnarray*}
\begin{array}{cccccccc}
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\end{array}
\end{eqnarray*}
UNIT ONE

INTRODUCTION

THE SOUNDS OF MUSIC

1. LISTEN TO THE DIFFERENT TYPES OF MUSIC ON THE TAPE. SEE IF YOU CAN IDENTIFY THEIR STYLE FROM THE LIST BELOW.

JAZZ - CLASSICAL - ROCK N'ROLL - AFRICAN - FOLK

2. THE MUSIC YOU HAVE JUST LISTENED TO HAS ONE THING IN COMMON, EVEN THOUGH IT IS WRITTEN IN DIFFERENT STYLES. WHAT DO YOU THINK THIS COULD BE?

3. HOLD THE VIOLIN STRING TIGHTLY AND PLUCK IT. CAN YOU FEEL THE WAY THE STRING MOVES AFTER YOU HAVE PLUCKED IT? DO YOU KNOW WHAT THIS IS CALLED?

IT IS CALLED A V.......... 

VIBRATIONS CAN BE SET UP IN FIVE WAYS:

A. HITTING
B. BLOWING
C. PLUCKING
D. SCRAPING
E. ELECTRICITY

4. LISTEN TO SOME OF THESE ORDINARY HOUSEHOLD OBJECTS AND SAY HOW IT WAS MADE TO VIBRATE.

1. SAUCEPAN.........................
2. RUBBER BAND...................
3. BOTTLE.........................
4. KNIFE..........................
5. HAIRDRYER.....................
5. See if you can name a musical instrument that is made to vibrate by the same methods you just heard with the household objects.

1. BLOWING

2. SCRAPING

3. PLUCKING

4. ELECTRICITY

5. HITTING

6. Listen carefully to the tape. Four different sounds will be played. See if you can work out the differences between them.

1.  

2.  

3.  

4.  

7. Can you think of one word to describe the different sounds listed below.

1. HIGHNESS OR LOWNESS

2. LOUDNESS OR SOFTNESS

3. SHORT OR LONG

4. FAST OR SLOW

8. Listen to the sounds around you now (in your environment). Name all the sounds you can hear in one minute.
9. Do you think the environmental sounds you have just written down is music? See if you can complete the following sentence.

Environmental sounds occur a................., musical sounds are o..............

10. Listen to the piece of music on the tape, this music was written for a film about a shark gliding through the water, hunting for its prey. Listen and then work out how the composer has organised the elements of music.

A composer is a person who writes music. Timbre (tamber) is the different sounds of the instruments.

A. Pitch .................. (High/Medium/Low)
B. Volume..................(Loud/Moderate/Soft)
C. Tempo ..................(Fast/Medium/Slow)
D. Rhythm ..................(Long/Short)
E. Timbre ..................(Bright/Dark/Mellow)
INTRODUCTION - ANSWERS

1. THE DIFFERENT STYLES WERE:
   1. CLASSICAL  2. AFRICAN  3. ROCK N'ROLL  4. FOLK  5. JAZZ

2. IT IS ALL CREATED BY VIBRATIONS.

3. VIBRATION

4. 1. SAUCEPAN......HITTING
    2. RUBBER BAND....PLUCKING
    3. BOTTLE.......BLOWING
    4. KNIFE.......SCRAPING
    5. HAIRDRYER....ELECTRICITY

5. 1. BLOWING......TRUMPET OR FLUTE (WOODWIND/BRASS)
    2. SCRAPING.... VIOLIN OR GUIRO (STRINGS/PERCUSSION)
    3. PLUCKING.....GUITAR OR VIOLIN OR HARP (STRINGS)
    4. ELECTRICITY.. GUITAR OR KEYBOARD
    5. HITTING ......DRUMS OR TAMBOURINE (PERCUSSION)

6. 1. HIGH  2. LOW  3. FAST  4. SLOW

7. HIGHNESS OR LOWNESS..........PITCH
   LOUDNESS OR SOFTNESS..........VOLUME
   SHORT OR LONG..................RHYTHM
   FAST OR SLOW...................TEMPO
9. DO YOU THINK THE ENVIRONMENTAL SOUNDS YOU HAVE WRITTEN DOWN IS MUSIC? NO.

ENVIRONMENTAL SOUNDS OCCUR ACCIDENTALLY, MUSICAL SOUNDS ARE ORGANISED.

10. A. PITCH ........ LOW
    B. VOLUME ........ SOFT
        +C. LIVEN
    C. TEMPO ........ SLOW
    D. RHYTHM ........ LONG
        -SHORT
    E. TIMBRE ........ DARK
UNIT ONE - RHYTHM ONE

TEACHERS PAGE

A. DURATION ---- AS PER STUDENTS BOOK.

MUSIC NOTATION

SEMIBREVE

MINIM

CROTCHET

QUAVER

SEMIQUAVER

NO. 1. THE CROTCHET

BEGINNING WITH THE CROTCHET, DOT 6 IN BRAILLE OR \ in music notation. For music shorthand just use a vertical stroke, e.g. |. REMEMBER TO WRITE AS YOU LISTEN.

HAVE A PRACTICE, WRITE EIGHT STROKES E.G. ||||| | | | | THEN CONVERT THEM TO CROTCHETS. ☢☢☢☢☢☢☢☢
1. LISTEN TO EXERCISE ONE ON THE TAPE THREE TIMES AND THEN WRITE IN SHORTHAND THE NUMBER OF CROTCHETS THAT ARE PLAYED. HOW MANY BEATS WERE PLAYED ALTOGETHER?

LISTEN TO THE FOLLOWING THREE EXERCISES, THEY WILL BE PLAYED THREE TIMES EACH. WRITE EACH ONE AFTER THE THIRD PLAYING. DO EXERCISES 2 AND 3 AS MUSIC SHORTHAND AND EXERCISE 4 ON THE BRAILLER. MAKE SURE YOU BRAILLE 'C' ABOVE EACH OF THE CROTCHETS.

CHECK YOUR ANSWERS IN THE ANSWER SECTION

NO. 2 THE MINIM

THE MINIM IS DRAWN \( \uparrow \) IN MUSIC NOTATION, IN BRAILLE MUSIC NOTATION IT IS DOT 3. BECAUSE IT IS WORTH 2 BEATS THERE IS ENOUGH TIME TO WRITE THE NOTE CORRECTLY IN SHORTHAND. \( \uparrow \)

THE FOLLOWING EXERCISES IN THE STUDENTS BOOK CAN BE READ BY YOU OR THE STUDENT SO YOU CAN CHECK EACH OTHERS WORK.

1. \( \uparrow\uparrow\uparrow \uparrow\uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \)

READ AS CROTCHET, CROTCHET, MINIM ETC

2. \( \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \)

3. \( \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \)

LISTEN TO THE THIRD EXERCISE AS IT IS PLAYED ON THE TAPE - READ IT AS IT IS PLAYED.

THE FOUR EXERCISES ON THE TAPE WILL BE PLAYED THREE TIMES EACH WITH A SHORT BREAK BETWEEN THEM. LISTEN TO THE THREE PLAYINGS BEFORE YOU WRITE THEM. TRY TWO WITH SHORTHAND AND TWO ON THE BRAILLER.
TEACHERS PAGE

CHECK YOUR ANSWERS AND READ BACK EXERCISES FOUR AND FIVE TO YOUR STUDENT.

COUNT THE NUMBER OF BEATS IN EXERCISES SIX AND SEVEN.
HOW MANY BEATS HAS EXERCISE SIX?
HOW MANY BEATS HAS EXERCISE SEVEN?

NO.3 THE QUAVER

THE QUAVER IS DRAWN \( \dddot{\cdot} \) IN MUSIC NOTATION AND HAS NO DOTS IN BRAILLE NOTATION. IT IS WORTH HALF A BEAT AND IS USUALLY WRITTEN IN PAIRS.

\[ \dddot{\cdot} + \dddot{\cdot} = \dddot{\cdot}\dddot{\cdot} = 1 \text{ beat} \]

TO WRITE THE QUAVER IN SHORTHAND, THE FOLLOWING SYMBOL REPRESENTS THE QUAVER PAIRS \( \dddot{\cdot} \). THIS CAN THEN BE CONVERTED TO \( \dddot{\cdot} = \dddot{\cdot}\dddot{\cdot} \)

E.G. EXERCISE \( \text{ONE} \) WOULD LOOK LIKE THIS.

\[ \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \]

PRACTISE WRITING THIS WHILE THE EXERCISE IS PLAYING SO YOU GET THE FEELING OF THE SPEED OF THE QUAVERS.

2. \( \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \)

3. \( \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \dddot{\cdot} \)

THE FOLLOWING EXERCISES WILL BE PLAYED FOUR TIMES ON THE TAPE. TRY TO WRITE IN SHORTHAND WITH THE FOURTH PLAYING. THEN CONVERT YOUR SHORTHAND TO CORRECT MUSIC NOTATION.

WHILE YOUR STUDENT IS READING EXERCISES FOUR AND SIX - BRAILLE THEM HOW MANY BEATS ARE IN EXERCISES FOUR AND SIX?
TEACHERS PAGE

ANSWER THE FOLLOWING QUESTIONS.

AS PER STUDENTS PAGE. MAKE SURE YOU KNOW THE VALUE OF THE NOTES, THE MUSIC NOTATION AND THE BRAILLE NOTATION.

NO. 4 THE SEMIBREVE

THE SEMIBREVE IS WRITTEN \( \text{○} \) IN MUSIC NOTATION, DOTS 3 AND 6 IN BRAILLE NOTATION AND IS WORTH 4 BEATS. AS THE MINIM, IT IS POSSIBLE TO WRITE THE WHOLE OF THE NOTE AS IT IS PLAYED.

E.G. EXERCISE ONE

1. \( \text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \) \( \text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \) \( \text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \) \( \text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \)

WRITE EXERCISE ONE AS A PRACTICE AS YOUR STUDENT IS READING IT TO YOU,

2. \( \text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \)

3. \( \text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \)

LISTEN TO EXERCISE THREE AS IT IS PLAYED ON THE TAPE, FOLLOW IT CAREFULLY SO YOU CAN DISTINGUISH BETWEEN THE FOUR DIFFERENT NOTES.

LISTEN TO EXERCISES 4, 5, 6 AND 7 FIVE TIMES BEFORE YOU WRITE THEM.

BRAILLE EXERCISES 5 & 7 AS YOUR STUDENT READS THEM TO YOU. THEN GIVE THEM TO YOUR STUDENT FOR CHECKING!!

HOW MANY BEATS ARE IN EXERCISES 4 & 6?
NO. 5 THE SEMIQUAVER

The semiquaver is also represented by dots 3 and 6, and is drawn \( \cdot \) in music notation. It is worth one quarter of a beat, and is usually written in groups of four \( \dot{\text{Q}} \cdot \dot{\text{Q}} \cdot \dot{\text{Q}} \cdot \dot{\text{Q}} = \dot{\text{Q}} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \).

In music shorthand it is represented by the sign \( \-
\) which is then converted to \( \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \).

Practice writing exercise one in shorthand.

1. \( \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} = \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \)

Listen to the exercises one to three on the tape and see if you can follow the notes as they are played.

Try writing exercise three in shorthand and then converting it to the correct notation.

Listen to the following exercises six times (there are four exercises) before you write them, write first in shorthand and then convert them to correct music notation.

Braille exercises four and five.

Help your student to work out the rhythm patterns of the nursery rhymes.

Make sure you know all the notes before you move onto the next section.

2. \( \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \)

3. \( \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \cdot \text{Q} \)
UNIT ONE - RHYTHM ONE

STUDENTS PAGE

A. DURATION

DURATION IS THE LENGTH OF TIME A SOUND LASTS. AS SOUNDS DIFFER IT IS NECESSARY IN BRAILLE MUSIC TO HAVE SOUNDS OF DIFFERENT LENGTHS. THESE ARE CALLED NOTES

SEMIBREVE (WHOLE NOTE) EQUALS FOUR BEATS REPRESENTED BY DOTS 3 & 6
MINIM (HALF NOTE) EQUALS TWO BEATS REPRESENTED BY DOT 3
CROTCHET (QUARTER NOTE) EQUALS ONE BEAT REPRESENTED BY DOT 6
QUAVER (EIGHTH NOTE) EQUALS HALF A BEAT REPRESENTED BY NO DOTS
SEMQUAVER (SIXTEENTH NOTE) EQUALS A QUARTER OF A BEAT REPRESENTED BY DOTS 3 & 6

EACH OF THESE NOTES IS EQUAL TO HALF THE VALUE OF THE NOTE BEFORE IT.

THE SEMIBREVE AND THE SEMIQUAVER IS WRITTEN THE SAME IN BRAILLE MUSIC BUT CAN BE EASILY IDENTIFIED BECAUSE OF CONTEXT IN WHICH THEY ARE WRITTEN.

NO. 1 THE CROTCHET

LET'S LEARN THESE NOTES BEGINNING WITH THE CROTCHET. REMEMBER THE CROTCHET IS DOT 6 AND IS WORTH ONE BEAT. TO HELP YOU READ THE NOTES PROPERLY WE ARE GOING TO BRAILLE THE NOTE 'C' WITH THE CROTCHETS. 'C' IS REPRESENTED BY DOTS 1, 4 & 5. (THE SAME AS 'D' IN LITERARY BRAILLE).

HAVE A PRACTISE, BRAILLE EIGHT CROTCHETS WITH 'C'. CHECK YOUR WORK BEFORE YOU LOOK AT THE ANSWER.

YOU SHOULD HAVE BRAILLED DOTS 1, 4, 5, & 6, EIGHT TIMES.
1. LISTEN TO EXERCISE ONE ON THE TAPE THREE TIMES AND THEN BRAILLE THE NUMBER OF CROTCHETS THAT ARE PLAYED. HOW MANY BEATS WERE IN THAT EXERCISE?

CHECK YOUR ANSWER IN THE ANSWER BOOK.

EXERCISE TWO

LISTEN CAREFULLY TO THE FOLLOWING EXERCISES, THEY WILL BE PLAYED THREE TIMES EACH. BRAILLE EACH ONE AFTER THE THIRD PLAYING. THERE ARE THREE EXERCISES.

CHECK YOUR ANSWERS IN THE ANSWER BOOK.

NO. 2 THE MINIM — PAGE 3 STUDENT'S BOOK

THE MINIM IS DOT 3 AND IS WORTH TWO CROTCHETS OR TWO BEATS.

SEE IF YOU CAN READ THE FOLLOWING EXERCISES TO YOUR TEACHER. READ THE NOTES AS CROTCHETS AND MINIMS.

1.         
2.         
3.         

LISTEN TO THE THIRD EXERCISE AS IT IS PLAYED ON THE TAPE — READ IT AS IT IS PLAYED. CAN YOU HEAR THE DIFFERENCE BETWEEN THE CROTCHETS AND MINIMS?

FOUR MORE EXERCISES WILL BE PLAYED ON THE TAPE, EACH WILL BE PLAYED THREE TIMES. LISTEN TO THEM THREE TIMES BEFORE YOU BRAILLE THEM. DON'T FORGET TO PUT THE NOTE 'C' ABOVE TO HELP YOU READ IT BACK.
CHECK YOUR ANSWERS AND READ BACK EXERCISES SIX AND SEVEN TO YOUR TEACHER.

COUNT THE NUMBER OF BEATS IN EXERCISES FOUR AND FIVE.
HOW MANY BEATS HAS EXERCISE FOUR?
HOW MANY BEATS HAS EXERCISE FIVE?


THE QUAVER HAS NO DOTS AND IS WORTH HALF A BEAT.
THERE ARE TWO QUAVERS IN A CROTCHET AND THERE ARE FOUR QUAVERS IN A MINIM.
BECAUSE A QUAVER IS WORTH HALF A BEAT IT IS USUALLY WRITTEN IN PAIRS.

READ THE FOLLOWING EXERCISES TO YOUR TEACHER.

1. \( \text{ duration symbols } \)

2. \( \text{ duration symbols } \)

3. \( \text{ duration symbols } \)

LISTEN TO EXERCISE THREE AS IT IS PLAYED ON THE TAPE. CAN YOU HEAR THE DIFFERENCES BETWEEN THE CROTCHET, MINIM AND QUAVER?
LISTEN TO IT AGAIN AND FOLLOW IT AS IT IS PLAYED.

THE FOLLOWING EXERCISES WILL BE PLAYED FOUR TIMES ON THE TAPE.
LISTEN TO THEM CAREFULLY BEFORE YOU BRAILLE THEM. USE 'C' WITH THE NOTES AND CHECK OUR WORK WITH THE TAPE BEFORE YOU LOOK AT THE ANSWERS.

READ BACK EXERCISES FOUR AND SIX TO YOUR TEACHER.
HOW MANY BEATS ARE IN EXERCISES FIVE AND SEVEN?
STUDENTS PAGE

ANSWER THE FOLLOWING QUESTIONS:

HOW MANY CROTCHETS IN A MINIM?
HOW MANY QUAVERS IN A CROTCHET?
HOW MANY QUAVERS IN A MINIM?
HOW MANY BEATS DOES A MINIM HAVE?
HOW MANY BEATS DOES A CROTCHET HAVE?
HOW MANY BEATS DOES A QUAVER HAVE?

NO. 4 THE SEMIBREVE - Page 6 Students book

THE SEMIBREVE IS DOTS 3 AND 6 AND IS WORTH FOUR BEATS.

READ THE FOLLOWING EXERCISES TO YOUR TEACHER.

1. ♩♩♩♩ ♩♩♩♩
2. ♩♩♩♩ ♩♩♩♩
3. ♩♩♩♩ ♩♩♩♩


THE FOLLOWING FOUR EXERCISES WILL BE PLAYED FIVE TIMES. LISTEN TO EACH ONE FIVE TIMES BEFORE YOU BRAILLE IT.

READ BACK EXERCISES FIVE AND SEVEN TO YOUR TEACHER.
HOW MANY BEATS ARE IN EXERCISES FOUR AND SIX?
THE SEMIQUAVER IS ALSO REPRESENTED BY DOTS 3 AND 6. A SEMIQUAVER IS WORTH ONE QUARTER OF A BEAT.

USUALLY SEMIQUAVERS ARE WRITTEN IN GROUPS OF FOUR TO MAKE UP ONE BEAT. IN THIS UNIT ANY DOTS 3 AND 6 ON THEIR OWN WILL BE A SEMIBREVE, FOUR GROUPS OF DOTS 3 AND 6 WILL BE THE SEMIQUAVERS.

READ THE FOLLOWING EXERCISES TO YOUR TEACHER.

1. \( \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \)

2. \( \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \)

3. \( \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \frac{3}{4} \)

LISTEN TO THESE EXERCISES AS THEY ARE PLAYED ON THE TAPE AND SEE IF YOU CAN READ AND FOLLOW THEM AS THEY ARE PLAYED.

YOU MAY HAVE TO DO SOME EXERCISES MORE THAN ONCE - MAKE SURE YOU REALLY KNOW THESE NOTES BEFORE YOU TRY THE EXERCISES.

LISTEN TO THE FOLLOWING FOUR EXERCISES SIX TIMES BEFORE YOU BRAILLE THEM. DON'T FORGET TO USE 'C' AS A NOTE WITH THEM AND REMEMBER TO CHECK YOUR WORK BEFORE YOU LOOK AT THE ANSWERS.

NOW YOU KNOW ALL THE NOTES IN THE DURATION SECTION OF MUSIC, LISTEN TO THE SIMPLE TUNES ON THE TAPE AND SEE IF YOU CAN WRITE THE RHYTHM THEY USE.
UNIT ONE - RHYTHM ONE

ANSWERS

NO. 1 THE CROTCHET

1. \[\text{Braille} \quad \boxed{\ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d}} \quad (6 \text{ beats})\]

THERE ARE SIX BEATS.

2. \[\text{Braille} \quad \boxed{\ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d}}\]

3. \[\text{Braille} \quad \boxed{\ddot{d} \ddot{d} \ddot{d}}\]

4. \[\boxed{\ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d}}\]

NO. 2 THE MINIM

4. \[\boxed{\ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d}}\]

5. \[\boxed{\ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d}}\]

6. \[\boxed{\ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d}} \quad (12 \text{ beats})\]

7. \[\boxed{\ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d}} \quad (12 \text{ beats})\]

EXERCISE FOUR HAS EIGHT BEATS.

EXERCISE FIVE HAS TWELVE BEATS.

NO. 3 THE QUÄVER

4. \[\boxed{\ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d}} \quad = \quad 8 \text{ beats}\]

5. \[\boxed{\ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d}}\]

6. \[\boxed{\ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d}} \quad = \quad 12 \text{ beats}\]

7. \[\boxed{\ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d} \ddot{d}} \quad = \quad 12 \text{ beats}\]

EXERCISE SIX HAS EIGHT BEATS.

EXERCISE SEVEN HAS TWELVE BEATS.

THERE ARE TWO CROTCHETS IN A MINIM.
THERE ARE TWO QUÄVERS IN A CROTCHET.
THERE ARE FOUR QUÄVERS IN A MINIM.
A MINIM HAS TWO BEATS.
A CROTCHET HAS ONE BEAT.
A QUÄVER IS WORTH HALF A BEAT.
UNIT ONE - RHYTHM ONE

ANSWERS

NO. 4  THE SEMIBREVE

4. \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\]

5. \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\]

6. \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\]

7. \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\]

EXERCISE FOUR HAS SIXTEEN BEATS.
EXERCISE SIX HAS SIXTEEN BEATS.

NO. 5  THE SEMIQUAVER

4. \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\]

5. \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\]

6. \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\]

7. \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\] \[\ldots\]

NURSERY RHYMES.

NO. 1

NO. 2
UNIT ONE - PITCH ONE

TEACHERS PAGE

A. PITCH

THE MUSICAL ALPHABET USES THE FIRST SEVEN LETTERS OF THE LITERARY ALPHABET. A, B, C, D, E, F, G. THE BRAILLE MUSIC NOTES DO NOT CORRESPOND WITH THEIR LITERARY COUNTERPARTS. E.G. 'C' IS REPRESENTED BY DOTS 1, 4 & 5 WHICH REPRESENTS THE LETTER 'D' IN LITERARY BRAILLE. MUSIC NOTATION ALSO HAS AN ADDED DIMENSION. I.E. THE STAVE OR STAFF. THESE ARE THE 5 LINES THAT MUSIC IS WRITTEN ON.

THE SYMBOL USUALLY FOUND AT THE BEGINNING OF THESE SET OF LINES IS CALLED A CLEF. THIS GIVES PITCH TO THE STAFF. WE WILL BEGIN WITH THE TREBLE CLEF.

\[ \text{Cross on top line.} \]
\[ \text{Keep vertical line straight} \]

THIS SYMBOL REPLACES THE OCTAVE SIGN USED IN BRAILLE MUSIC. PRACTISE DRAWING A ROW OF TREBLE CLEFS. THIS IS SOMETIMES CALLED THE 'G' CLEF. USE YOUR MANUSCRIPT BOOK FOR PRACTICE.

THE MIDDLE OCTAVE........ AS PER STUDENTS BOOK.

\[ \text{Dot 6 each time represents the crotchet.} \]

PRACTICE WRITING THE MUSIC NOTATION IN YOUR MANUSCRIPT BOOK.. AS IT IS WRITTEN HERE.

\[ \text{C D E F G A B.} \]
TEACHERS PAGE

WHEN WRITING NOTATION ONTO THE STAFF IT IS VERY IMPORTANT TO BE ACCURATE. HAVE A LOOK AT THE DIAGRAMS, MAKE SURE YOUR NOTE IS EXACTLY ON THE CORRECT LINE OR SPACE.

REMEMBER 'C' CROTCHET IS WRITTEN  

OR :

'D' CROTCHET IS WRITTEN  

OR :

LISTEN TO THE TAPE AS 'C' IS PLAYED THREE TIMES AND 'D' IS PLAYED THREE TIMES. CAN YOU REMEMBER THEIR PITCH? HUM OR SING 'C' AND 'D' TO YOURSELF. VERY GOOD! NOW, WHICH ONE IS THE HIGHEST IN PITCH?

FOLLOW THE EXERCISE AS IT IS PLAYED.

COMPLETE EXERCISE 1. AND 2. AS PER STUDENTS BOOK.

EXERCISE 3. WRITE THE FOLLOWING RHYTHM WITH 'D' AS THE PITCH NOTE ON THE STAVE. DON'T FORGET TO USE A TREBLE CLEF.

CROTCHET/CROTCHET/QUAVER/QUAVER/CROTCHET
MINIM/MINIM/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER
MINIM/CROTCHET/SEMIBREVE.

NOW CHECK YOUR STUDENTS BRAILLED VERSION. HOW MANY BEATS HAVE YOU WRITTEN ALTOGETHER?
TEACHERS PAGE

ADDING 'E'

THE MUSICAL NOTE 'E' IS REPRESENTED IN BRAILLE BY DOTS 1, 2 & 4 AND IN MUSIC NOTATION BY DRAWING AROUND THE FIRST LINE OF THE STAVE. PRACTICE DRAWING AN 'E' IN YOUR MANUSCRIPT BOOK.

\[ \text{\includegraphics[width=0.5\textwidth]{image.png}} \]

LISTEN TO THE TAPE AS THE THREE NOTES ARE PLAYED. YOU SHOULD RECOGNISE 'C' AND 'D', NOW SING OR HUM 'E'.

THE EXERCISE YOU JUST HEARD IS WRITTEN BELOW. WITHOUT LOOKING AT THE STUDENTS PAGE SEE IF YOU CAN BRAILLE IT.

\[ \text{\includegraphics[width=0.5\textwidth]{image.png}} \]

LISTEN TO THESE EXERCISES SIX TIMES, WORK OUT THE RHYTHM FIRST AND THEN THE PITCH. REWIND THE TAPE IF YOU NEED TO LISTEN TO THEM MORE OFTEN. DO EXERCISES 1 AND 2 AS MUSIC NOTATION AND EXERCISE 3 IN BRAILLE MUSIC.

EXERCISE 1 - TAPE
EXERCISE 2 - TAPE
EXERCISE 3 - TAPE

EXERCISE 4 - WRITE THE FOLLOWING RHYTHM ON THE MANUSCRIPT WITH THE NOTE 'E' ON THE STAVE.

CROTCHET/QUAVER/QUAVER/MINIM/CROTCHET/CROTCHET
QUAVER/QUAVER/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER SEMibreve.
TEACHERS PAGE

ADDING 'F'

THE MUSICAL NOTE 'F' IS REPRESENTED BY DOTS 1, 2, 4 AND 5, AND IN MUSIC NOTATION BY DRAWING IN THE FIRST SPACE OF THE STAVE. PRACTICE DRAWING SOME F'S AND E'S IN YOUR MANUSCRIPT BOOK.

\[ \text{\textcopyright} \]

LISTEN TO THE TAPE AS C, D, E, AND F ARE PLAYED THREE TIMES EACH. SING OR HUM UP AND DOWN THE SCALE FROM C TO F.

\[ \text{\textcopyright} \]

LISTEN TO THE FOLLOWING RHYTHM AS IT IS PLAYED ON THE NOTE 'F', IT IS WRITTEN BELOW FOR YOU.

\[ \text{\textcopyright} \]

Ex. 2.

\[ \text{\textcopyright} \]

Ex. 3.

\[ \text{\textcopyright} \]
GOING SOLO WITH 'G'

THE MUSICAL NOTE 'G' IS REPRESENTED BY DOTS 1, 2 & 5 IN BRAILLE OR IN MUSIC NOTATION IT IS DRAWN ON THE SECOND LINE OF THE TREBLE STAVE.

YOU'LL NOTICE THE TREBLE CLEF BEGINS AND CIRCLES THE SECOND LINE - THIS GIVES THE CLEF ITS ALTERNATE NAME 'G' CLEF.

EXERCISE 1. - BRAILLE THE FOLLOWING USING THE NOTE 'G' AS THE PITCH NOTE.

CROTCHET/QUAVER/QUAVER/CROTCHET/CROTCHET/MINIM
QUAVER/QUAVER/CROTCHET/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER/CROTCHET/MINIM

NOW TRANSCRIBE THIS INTO YOUR MANUSCRIPT BOOK.

LISTEN TO THE NEXT THREE EXERCISES FOUR TIMES EACH, THEY ARE ALL BASED ON THE PITCH NOTE 'G' SO ALL YOU HAVE TO WORK OUT IS THE RHYTHM.

EXERCISE 1 - TAPE
EXERCISE 2 - TAPE
EXERCISE 3 - TAPE

EXERCISE 4 - WRITE THE FOLLOWING NOTES IN BRAILLE AND THEN INTO YOUR MANUSCRIPT BOOK.

A) G SEMibreve
B) D Minim
C) F Quaver
D) E Crotchet
E) C Semibreve
TEACHERS PAGE

ADDING 'A' TO 'G'

THE MUSICAL NOTE 'A' IS REPRESENTED BY THE DOTS 2 & 4 AND IN MUSIC NOTATION IT IS DRAWN IN THE SECOND SPACE.  

PRACTICE WRITING THE NOTE 'A' ON THE STAVE.

LISTEN TO THE TAPE AS 'G' AND 'A' ARE PLAYED THREE TIMES EACH. FOLLOW THE NOTES BELOW AS IT IS PLAYED AGAIN AND SEE IF YOU CAN REMEMBER THE SOUND OF G' AND 'A'.


EXERCISE 1 - TAPE
EXERCISE 2 - TAPE
EXERCISE 3 - TAPE

EXERCISE 4 - BRAILLE THE FOLLOWING RHYTHM WITH THE NOTE 'A'

MINIM/CROTCHET/CROTCHET/QUAVER/QUAVER/CROTCHET/CROTCHET/
SEMIQUAVER/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER/CROTCHET/MINIM

CHECK YOUR STUDENTS WORK
TEACHERS PAGE

ADDING 'B' TO 'A' AND 'G'

THE MUSICAL NOTE 'B' IS REPRESENTED BY THE DOTS 2 & 4 IN BRAILLE AND IN MUSIC NOTATION THE NOTE IS DRAWN AROUND THE THIRD LINE OF THE STAVE.

PRACTICE WRITING THE NOTES 'G', 'A' AND 'B' ON THE STAVE.

LISTEN TO THE TAPE AS EACH OF THE NOTES ARE PLAYED THREE TIMES. FOLLOW THE EXERCISE BELOW AS YOU LISTEN TO IT AGAIN AND TRY TO REMEMBER THE SOUND OF THE NOTES. KEEP 'G' IN YOUR MEMORY AS AN ANCHOR.

WHICH NOTE IS THE HIGHEST?

WHICH NOTE IS THE LOWEST?

LISTEN TO THE FOLLOWING EXERCISES SIX TIMES, WORK OUT THE RHYTHM FIRST AND THEN THE PITCH.

ONLY THE NOTES G, A AND B ARE USED. 'G' WILL BE THE STARTING NOTE EACH TIME.

WRITE EACH MELODY CORRECTLY INTO YOUR MANUSCRIPT BOOK.

EXERCISE 1 - TAPE
EXERCISE 2 - TAPE
EXERCISE 3 - TAPE

EXERCISE 4 - TRANSCRIBE THE FOLLOWING BRAILLE MELODY INTO MUSIC NOTATION.

EXERCISE 5 - WRITE THE FOLLOWING IN YOUR MANUSCRIPT BOOK.
DON'T FORGET TO USE A TREBLE CLEF.

a) ACE as MINIMS
d) CABBAGE as QUAVERS
b) BEAD as CROTCHETS
e) FADED as SEMIBREVES
c) EDGE as SEMIQUAVERS
UNIT ONE - PITCH ONE

STUDENTS PAGE

A. PITCH

NOW YOU KNOW THE NAMES OF THE NOTES, THEIR VALUE AND HOW THEY SOUND WHEN PLAYED TOGETHER, WE ARE GOING TO ADD PITCH TO THESE NOTES.

THE MUSICAL ALPHABET USES THE FIRST SEVEN LETTERS OF THE LITERARY ALPHABET. A B C D E F G. UNFORTUNATELY THE LETTERS DO NOT CORRESPOND WITH THEIR LITERARY COUNTERPARTS AS YOU PROBABLY GUESSED FROM YOUR USE OF 'C' IN THE LAST UNIT.

REMEMBER THE MUSICAL ALPHABET IS CONTINUOUS, I.E. ONCE YOU GET TO 'G' START AGAIN AT 'A'.

TO HELP YOU LEARN THESE NOTES WE ARE GOING TO DEAL WITH ALL THE NOTES IN THE MIDDLE OCTAVE. THE MIDDLE OCTAVE IS REPRESENTED BY DOT 5. THIS SIGN WILL BE PLACED AT THE BEGINNING OF THE LINE OF MUSIC.

THE MIDDLE OCTAVE BEGINS ON MIDDLE 'C' AND ASCENDS OR RISES IN PITCH TO THE NOTE 'B'. (EACH OCTAVE BEGINS ON 'C' AND ENDS ON THE 'B' ABOVE) LISTEN TO ALL THE NOTES AS THEY ARE PLAYED ON THE TAPE.

\[ \text{Written and first of all as:} \]

\[ \begin{align*}
\text{C} & \quad \text{D} & \quad \text{E} & \quad \text{F} & \quad \text{G} & \quad \text{A} & \quad \text{B} \\
\text{C} & \quad \text{D} & \quad \text{E} & \quad \text{F} & \quad \text{G} & \quad \text{A} & \quad \text{B}
\end{align*} \]
STUDENTS PAGE

BECAUSE YOU ALREADY KNOW THE NOTE 'C' WE WILL BEGIN WORKING ON TWO
NOTES, C AND D.
REMEMBER 'C' IS DOTS 1, 4 & 5.
'D' IS DOTS 1 & 5

LISTEN TO THE TAPE AS 'C' IS PLAYED THREE TIMES AND 'D' IS PLAYED
THREE TIMES. CAN YOU REMEMBER THEM?
WHICH NOTE IS THE HIGHER IN PITCH?

FOLLOW THE FOLLOWING EXERCISE AS IT IS PLAYED.

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\|\|\|\|\|\|
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READ THE NOTES AS 'C' CROTCHET, 'C' CROTCHET, 'C' MINIM.
'D' CROTCHET, 'D' CROTCHET, 'D' MINIM.

EXERCISE 1. LISTEN TO THE EXERCISE FOUR TIMES AND SEE IF YOU CAN
WRITE IT OUT. REMEMBER TO USE DOT 5 AT THE BEGINNING OF THE LINE
AND MAKE SURE YOU WRITE THEM ABOVE CROTCHETS ETC...........

EXERCISE 2. NOT HARDER, JUST DIFFERENT.

EXERCISE 3. BRAILLE THE FOLLOWING RHYTHM WITH THE NOTE 'D' ABOVE
IT. DON'T FORGET DOT 5.
CROTCHET/CROTCHET/QUAVER/QUAVER/CROTCHET
MINIM/MINIM/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER
MINIM/ CROTCHET/ SEMibreve.

HOW MANY BEATS HAVE YOU BRAILLED ALTOGETHER?
STUDENTS PAGE

ADDING 'E'

THE MUSICAL NOTE 'E' IS REPRESENTED BY THE DOTS 1, 2 & 4.

LISTEN TO THE TAPE AS 'C', 'D' AND 'E' ARE PLAYED THREE TIMES EACH. SEE IF YOU CAN REMEMBER 'C' AND 'D' AND LISTEN CAREFULLY TO THE NEW NOTE 'E'.

THE EXERCISE YOU JUST HEARD IS WRITTEN BELOW, LISTEN TO IT ONCE MORE AND FOLLOW IT AS IT IS PLAYED. ARE YOU SURE YOU CAN REMEMBER THE SOUND OF 'E'?

```
\[ \text{Note}\]
```

LISTEN TO THE EXERCISES SIX TIMES, WORK OUT THE RHYTHM FIRST AND THEN THE PITCH. IF YOU NEED TO LISTEN TO THEM MORE THAN SIX TIMES YOU WILL HAVE TO REWIND THE TAPE. DON'T FORGET DOT 5.

EXERCISE 1 - TAPE
EXERCISE 2 - TAPE
EXERCISE 3 - TAPE
EXERCISE 4. BRAILLE THE FOLLOWING RHYTHM WITH THE NOTE 'E' ABOVE IT. DON'T FORGET TO USE DOT 5.

CROTCHET/QUAVER/QUAVER/MINIM/CROTCHET/CROTCHET/
QUAVER/QUAVER/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER

GET YOUR TEACHER TO CHECK YOUR WORK OR CHECK THE ANSWER BOOK.
STUDENTS PAGE 7

ADDING 'F'

THE MUSICAL NOTE 'F' IS REPRESENTED BY DOTS 1, 2, 4 & 5.

LISTEN TO THE TAPE AS YOU HEAR THE FOUR NOTES C, D, E & F PLAYED THREE TIMES EACH.

FOLLOW THE MUSIC BELOW AS YOU LISTEN TO IT AGAIN, AND THEN BRAILLE IT FROM MEMORY. REMEMBER WE ARE STILL IN THE MIDDLE OR FOURTH OCTAVE SO YOU NEED TO BEGIN WITH DOT 5.

\[
\begin{array}{cccc}
\circ & \circ & \circ & \circ \\
\circ & \circ & \circ & \circ \\
\circ & \circ & \circ & \circ \\
\circ & \circ & \circ & \circ \\
\end{array}
\]

LISTEN TO THE FOLLOWING RHYTHM AS IT IS PLAYED ON THE NOTE 'F', IT IS WRITTEN BELOW FOR YOU.

\[
\begin{array}{cccccccc}
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\end{array}
\]

Name the rhythm notes.

EXERCISE 1.
THE NEXT TIME THIS RHYTHM IS PLAYED IT WILL USE THE PITCH NOTES YOU HAVE LEARNED. LISTEN TO IT SIX TIMES TO WORK OUT THE PITCH, THEN BRAILLE THE RHYTHM WITH THE CHANGED NOTES.
N.B. IT BEGINS AND ENDS ON 'C'.

EXERCISE 2 - SIMILAR TO EXERCISE 1.

EXERCISE 3 - SIMILAR TO EXERCISE 1.

EXERCISE 4. - READ THE FOLLOWING NOTES TO YOUR TEACHER

\[
\begin{array}{cccccccc}
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
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\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
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\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\end{array}
\]
GOING SOLO WITH 'G'

THE MUSICAL NOTE 'G' IS REPRESENTED BY THE DOTS 1, 2 & 5

EXERCISE 1. WRITE THE FOLLOWING RHYTHM USING THE NOTE 'G' FOR PITCH.

CROTCHET/QUAVER/QUAVER/CROTCHET/CROTCHET
MINIM/QUAVER/QUAVER/CROTCHET/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER/CROTCHET/MINIM.

HOW MANY BEATS ARE THERE IN THIS RHYTHM?

LISTEN TO THE NEXT THREE EXERCISES FOUR TIMES EACH, THEY ARE ALL BASED ON THE PITCH NOTE 'G', SO ALL YOU HAVE TO WORK OUT IS THE RHYTHM. GOOD REVISION FOR YOU.

EXERCISE 1 - TAPE
EXERCISE 2 - TAPE
EXERCISE 3 - TAPE

EXERCISE 4. - WRITE THE FOLLOWING NOTES IN BRAILLE.
A) G SEMibreve
B) D Minim
C) F Quaver
D) E Crotchet
E) C Semibreve

EXERCISE 5. - MAKE UP A TEST FOR YOUR TEACHER TO MAKE SURE THEY CAN REMEMBER ALL THE NOTES OF RHYTHM AND PITCH, WE HAVE DONE SO
ADDING 'B' TO 'A' AND 'G'

THE MUSIC NOTE 'B' IS REPRESENTED BY THE DOTS 2, 4 & 5.

LISTEN TO THE TAPE AS EACH OF THE NOTES ARE PLAYED THREE TIMES. FOLLOW THE EXERCISE BELOW AS YOU LISTEN TO IT AGAIN AND TRY TO REMEMBER THE SOUND OF THE NOTES. KEEP 'G' IN YOUR MEMORY AS AN ANCHOR FOR THE OTHER TWO.

WHICH NOTE IS THE HIGHEST?
WHICH NOTE IS THE LOWEST?

LISTEN TO THE FOLLOWING EXERCISES SIX TIMES, WORK OUT THE RHYTHM FIRST AND THEN THE PITCH. 'G' WILL BE GIVEN AS THE STARTING NOTE EACH TIME.

EXERCISE 1 - TAPE
EXERCISE 2 - TAPE
EXERCISE 3 - TAPE

EXERCISE 4 - BRAILLE THE FOLLOWING RHYTHM WITH THE NOTE 'B' AS THE PITCH NOTE.

MINIM/MINIM/QUAVER/QUAVER/CROTCHET/MINIM/
SEMIQUAVER/SEMIQUAVER/SEMIQUAVER/SEMIQUAVER
CROTCHET/MINIM/SEMIbreve

EXERCISE 5 - WRITE THE FOLLOWING IN BRAILLE MUSIC NOTATION.

a) ACE as MINIMS
b) BEAD as CROTCHETS
c) EDGE as SEMIQUAVERS
d) CABBAGE as QUAVERS
e) FADED as SEMibreves
ANSWERS

'D' IS HIGHER IN PITCH THAN 'C'.

1.

2.

3.

THERE ARE 16 BEATS ALTOGETHER

ADDING 'E'

1.

2.

3.

4.

ADDING 'F'

1.

2.

3.

GOING SOLO WITH 'G'

1. a) 

b) 

2.

3.

4.
UNIT ONE - PITCH ONE

ANSWERS

5.

ADDING 'A' TO 'G'

1.

2.

3.

4.

ADDING 'B' TO 'A' AND 'G'

1.

2.

3.

4.

(page 17)

5.

(a)  

(b)  

(c)  

OR  

(d)  

(e)  

RHYTHM TWO

TEACHERS PAGE

TIME SIGNATURES

TIME SIGNATURES ARE THE TWO NUMBERS FOUND AT THE BEGINNING OF A PIECE OF MUSIC OR ABOVE A PIECE OF BRAILLE MUSIC - WHEN WRITING A TIME SIGNATURE IN BRAILLE MUSIC IT IS CENTERED ON A FREE LINE ABOVE THE LINE OF MUSIC.

THERE ARE THREE BASIC TIME SIGNATURES: \( \frac{2}{4}, \frac{3}{4}, \frac{4}{4} \). \( \frac{4}{4} \) IS ALSO CALLED "COMMON TIME" AND IS REPRESENTED BY THE CAPITAL "C" INSTEAD OF THE \( \frac{4}{4} \). TIME SIGNATURES ARE WRITTEN AS FRACTIONS IN BOTH CODES EXCEPT THERE IS NO LINE DRAWN THROUGH THE PRINT NOTATION FORM.

E.G. \( \frac{2}{4} = \begin{array}{c} \cdot \cdot \cdot \end{array} \) \( \frac{3}{4} = \begin{array}{c} \cdot \cdot \cdot \cdot \end{array} \) \( \frac{4}{4} = \begin{array}{c} \cdot \cdot \cdot \cdot \cdot \end{array} \) OR \( C = \begin{array}{c} \cdot \cdot \cdot \end{array} \) (\text{"Italic C"})

THE TOP NUMBER OF A TIME SIGNATURE TELLS US THE NUMBER OF BEATS IN EACH BAR.

THE BOTTOM NUMBER TELLS US THE KIND OF BEAT. IN THIS UNIT OF WORK THE ONLY NUMBER THAT IS DEALT WITH IS '4'. THIS NUMBER REPRESENTS THE CROTCHET BEAT. (REMEMBER THE CROTCHET IS ALSO KNOWN AS THE QUARTER NOTE.....REFER TO RHYTHM ONE). E.G. \( \frac{2}{4} \) MEANS THERE ARE TWO CROTCHETS IN EACH BAR, A RHYTHM IN \( \frac{2}{4} \) WILL LOOK LIKE THIS.

PRINT NOTATION

\[ \begin{array}{c}
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
TEACHERS PAGE

THE BARLINE IN PRINT NOTATION IS A LINE DRAWN TO DIVIDE THE BEATS, IN BRAILLE MUSIC NOTATION IT IS A SPACE, LIKE THE SPACE BETWEEN TWO WORDS.

NUMBER ONE \( \frac{2}{4} \)

LISTEN TO THE PIECE OF MUSIC ON THE TAPE, IT IS IN \( \frac{2}{4} \) TIME, SEE IF YOU CAN FEEL THE FIRST BEAT OF EACH BAR AS IT IS PLAYED.

PIECE "Toreadors March" FROM THE OPERA "Carmen" BY BIZET.

CAN YOU THINK OF A WORD TO DESCRIBE THE

A) TEMPO       B) PITCH

HOW DOES THE COMPOSER INCREASE THE EXCITEMENT OF THE PIECE?

REWITE THE FOLLOWING EXERCISES BY ADDING BARLINES TO GIVE THE CORRECT NUMBER OF BEATS IN EACH BAR ACCORDING TO THE TIME SIGNATURE.

1. \( \frac{2}{4} \)----

2. \( \frac{2}{4} \)----

3. \( \frac{2}{4} \)----

4. \( \frac{2}{4} \)----

THE FIRST ONE IS DONE FOR YOU. *BRAILLE ALL THE EXERCISES WITH EVEN NUMBERS.*

RHYTHM DICTATION

THE NEXT THREE RHYTHMS ON THE TAPE ARE IN \( \frac{2}{4} \) TIME, THEY WILL BE PLAYED SIX TIMES EACH - THE FIRST ONE USES THE NOTE 'E', THE SECOND ONE USES THE NOTE 'D', THE THIRD ONE USES THE NOTE 'C'.

PITCH DICTATION

* Continue this throughout this unit.
PITCH DICTATION - USING THE NOTES 'C', 'D' AND 'E'. (BEGIN @ END ON 'C')
TWO MELODIES WILL BE PLAYED, BOTH IN 2/4 TIME, THE RHYTHMS ARE GIVEN
(WITHOUT BARLINES). WORK OUT THE PITCH NOTES AND THEN WRITE THE
CORRECT MELODY IN PITCH AND RHYTHM WITH BARLINES.

1. 2/4 d d | d d | d d | d d | d |
2. 2/4 d d | d d | d d | d d | d d |

NUMBER TWO 3/4 = .....
LISTEN TO THE PIECE OF MUSIC ON THE TAPE, IT IS IN 3/4 TIME, THIS RHYTHM
SOUNDS LIKE A WALTZ OR DANCE. IF YOU CLAP THE FIRST BEAT OF THE BAR,
THEN TAP YOUR CHEST FOR THE SECOND AND THIRD BEATS YOU WILL FEEL THE
RHYTHM MORE EASILY.

PIECE: "THE ELEPHANT" FROM "THE CARNIVAL OF THE ANIMALS" BY SAINT SAENS.
NAME THE INSTRUMENTS THAT PLAY THIS PIECE OF MUSIC.

REWRITE THE FOLLOWING EXERCISES BY ADDING BARLINES TO GIVE THEM THEIR
CORRECT NUMBER OF BEATS IN EACH BAR. THEY ARE ALL IN 3/4 TIME AND THE
FIRST ONE IS DONE FOR YOU.

1. 3/4 d d d d d d d d = 3/4 d d d d d d d d
2. 3/4 d d d d d d d d d d
3. 3/4 d d d d d d d d d d
4. 3/4 d d d d d d d d d d

RHYTHM DICTATION

THE NEXT THREE RHYTHMS ON THE TAPE ARE IN 3/4 TIME, THEY WILL BE PLAYED
SIX TIMES EACH - THE FIRST ONE USES THE NOTE 'F', THE SECOND ONE
USES THE NOTE 'A' AND THE THIRD ONE USES THE NOTE 'G'.

TEACHERS PAGE
TEACHERS PAGE

PITCH DICTATION - USING THE NOTES 'F', 'G' @ 'A'. BEGIN @ END ON 'F'.
TWO MELODIES WILL BE PLAYED IN $\frac{3}{4}$ TIME, THE RHYTHMS ARE GIVEN
BELOW WITHOUT BARLINES. WORK OUT THE PITCH FIRST, THEN WRITE THE
CORRECT MELODY IN RHYTHM AND PITCH.

1. $\frac{3}{4}$ \[ \boxed{\text{music notation}} \]
2. $\frac{3}{4}$ \[ \boxed{\text{music notation}} \]

NUMBER THREE $\frac{4}{4}$ OR 'COMMON' TIME (C) \[ \boxed{\text{music notation}} \]
LISTEN TO THE PIECE OF MUSIC ON THE TAPE, IT IS IN $\frac{4}{4}$ TIME, THIS
SOUNDS LIKE A MARCH AND CAN BE EASILY MIXED UP WITH $\frac{2}{4}$ TIME. IN $\frac{4}{4}$
TIME THERE IS A STRONG ACCENT ON THE FIRST BEAT OF EACH BAR AND A
LIGHTER ONE ON THE THIRD BEAT OF THE BAR.
PIECE: "LA BAMBA" TRADITIONAL ARRANGED BY RITCHIE VALENS
WHICH INSTRUMENT KEEPS THE $\frac{4}{4}$ BEAT GOING AND KEEPS ALL THE OTHER
INSTRUMENT IN TIME? LISTEN TO THE PIECE AGAIN AND CONCENTRATE ON
THE DRUM BEAT - IT WILL HELP YOU TO HEAR $\frac{4}{4}$ TIME.

REWRITE THE FOLLOWING EXERCISES BY ADDING BARLINES TO GIVE THEM
THEIR CORRECT NUMBER OF BEATS IN EACH BAR. THE FIRST ONE IS DONE FOR
YOU.

1. $\frac{4}{4}$ \[ \boxed{\text{music notation}} \] $\Rightarrow$ $\frac{4}{4}$ \[ \boxed{\text{music notation}} \]
2. $\frac{4}{4}$ \[ \boxed{\text{music notation}} \]
3. $\frac{4}{4}$ \[ \boxed{\text{music notation}} \]
RHYTHM TWO - PAGE FIVE

TEACHERS PAGE

4. \( \frac{4}{4} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \)

5. \( \frac{4}{4} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \)

RHYTHM DICTATION

THE NEXT THREE RHYTHMS ON THE TAPE ARE IN \( \frac{4}{4} \) TIME, THEY WILL BE PLAYED SIX TIMES EACH - THE FIRST ONE USES THE NOTE 'B', THE SECOND ONE USES THE NOTE 'A', THE THIRD ONE USES THE NOTE 'G'.

PITCH DICTATION

TWO MELODIES WILL BE PLAYED USING THE NOTES 'G', 'A' AND 'B'. THE RHYTHMS ARE GIVEN BELOW WITHOUT BARLINES. WORK OUT THE PITCH FIRST AND THEN WRITE THE MELODIES OUT CORRECTLY. BEGIN AND END ON THE NOTE 'G'.

1. \( \frac{4}{4} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \) 2. \( \frac{4}{4} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \) \( \frac{\cdots}{\cdots} \)

JUST FOR FUN

THREE PIECES OF MUSIC WILL BE PLAYED ON THE TAPE, SEE IF YOU CAN GUESS THEIR TIME SIGNATURES.

REVISION

THE FOLLOWING RHYTHMS HAVE NO TIME SIGNATURE - REWRITE THEM WITH THE CORRECT TIME SIGNATURE. WRITE A RHYTHM IN EACH OF THE TIME SIGNATURES YOU HAVE DONE IN THIS UNIT OF WORK. YOU MAY EVEN LIKE TO WRITE A MELODY.
1. 

2. 

3. 

4. 

5. 

6. 
RHYTHM TWO

STUDENTS PAGE.

TIME SIGNATURES.

TIME SIGNATURES ARE THE TWO NUMBERS FOUND AT THE BEGINNING OF A PIECE OF MUSIC - WHEN WRITING A TIME SIGNATURE IN BRAILLE NOTATION IT IS CENTRED ON A FREE LINE ABOVE THE LINE OF MUSIC.

THERE ARE THREE BASIC TIME SIGNATURES, $\frac{2}{4}$, $\frac{3}{4}$, @ $\frac{4}{4}$. THEY LOOK LIKE FRACTIONS BUT ARE CALLED: TWO/FOUR, THREE/FOUR OR FOUR/FOUR. FOUR/FOUR TIME IS ALSO CALLED COMMON TIME AND IS REPRESENTED ALSO BY AN ITALIC 'C'.

THE TOP NUMBER OF A TIME SIGNATURE TELLS US THE NUMBER OF BEATS IN EACH BAR.

THE BOTTOM NUMBER OF A TIME SIGNATURE TELLS US THE TYPE OF BEAT.

IN THIS UNIT OF WORK THE ONLY NUMBER YOU WILL FIND AT THE BOTTOM WILL BE THE '4'. THIS NUMBER REPRESENTS THE CROTCHET BEAT. (REMEMBER THE CROTCHET IS ALSO CALLED THE QUARTER NOTE, FROM YOUR FIRST UNIT OF WORK). E.G. $\frac{2}{4}$ MEANS THERE ARE TWO CROTCHET BEATS IN EACH BAR,

A RHYTHM IN $\frac{2}{4}$ WILL LOOK LIKE THIS.

THE DOUBLE BARLINE AT THE END OF A PIECE OF MUSIC IS LIKE A FULLSTOP AND INDICATES THE END OF A PIECE OF MUSIC OR THE END OF A SECTION. IN BRAILLE MUSIC NOTATION IT IS REPRESENTED BY 'GH'K.
THE BARLINES IN BRAILLE MUSIC NOTATION ARE REPRESENTED BY A SPACE, LIKE THE SPACE BETWEEN WORDS.

NUMBER ONE  \( \frac{2}{4} \)

LISTEN TO THE PIECE OF MUSIC ON THE TAPE, IT IS IN \( \frac{2}{4} \) TIME, SEE IF YOU CAN FEEL THE FIRST BEAT OF EACH BAR.


CAN YOU THINK OF A WORD TO DESCRIBE THE

A) TEMPO

B) PITCH

HOW DOES THE COMPOSER INCREASE THE EXCITEMENT OF THE PIECE AS IT PROGRESSES?

REWRITE THESE EXERCISES BY ADDING BARLINES TO GIVE THEM THEIR CORRECT NUMBER OF BEATS IN EACH BAR. THE FIRST ONE IS DONE FOR YOU.

RHYTHM DICTATION

THE NEXT THREE RHYTHMS ON THE TAPE ARE IN \( \frac{2}{4} \) TIME, THEY WILL BE PLAYED SIX TIMES - THE FIRST ONE USES THE NOTE 'E', THE SECOND ONE USES THE NOTE 'D', THE THIRD ONE USES THE NOTE 'C'.

PITCH DICTATION - USING THE NOTES 'C', 'D', @ 'E'. (BEGIN AND END ON 'C'). TWO MELODIES WILL BE PLAYED, BOTH IN \( \frac{2}{4} \) TIME, THE RHYTHMS ARE GIVEN (WITHOUT BARLINES). WORK OUT THE PITCH NOTES AND THEN WRITE THE CORRECT MELODY IN PITCH AND RHYTHM.

1. \( \frac{2}{4} \) \( \begin{array}{c|c|c|c} \hline & & & \\
\cdot & \cdot & \cdot \cdot \cdot & \hline
\end{array} \) \( \begin{array}{c|c|c|c} \hline & & & \\
\cdot & \cdot & \cdot \cdot \cdot & \hline
\end{array} \) \\
2. \( \frac{2}{4} \) \( \begin{array}{c|c|c|c} \hline & & & \\
\cdot & \cdot & \cdot \cdot \cdot & \hline
\end{array} \) \( \begin{array}{c|c|c|c} \hline & & & \\
\cdot & \cdot & \cdot \cdot \cdot & \hline
\end{array} \)
STUDENTS PAGE

NUMBER TWO \( \frac{3}{4} \)

LISTEN TO THE PIECE OF MUSIC ON THE TAPE, IT IS IN \( \frac{3}{4} \) TIME, THIS RHYTHM SOUNDS LIKE A WALTZ OR A DANCE. IF YOU CLAP THE FIRST BEAT OF THE BAR, THEN TAP YOUR CHEST FOR THE SECOND AND THIRD BEATS, YOU WILL FEEL THE RHYTHM OF \( \frac{3}{4} \) MORE EASILY.

THIS PIECE OF MUSIC IS FROM THE "CARNIVAL OF THE ANIMALS" BY SAINT SAENS, ANOTHER FRENCH COMPOSER. IT REPRESENTS THE ELEPHANTS WALTZ. CAN YOU IMAGINE ELEPHANTS DANCING TO THIS? LISTEN CAREFULLY AND SEE IF YOU CAN NAME THE TWO INSTRUMENTS THAT PLAY THIS PIECE.

REWRITE THE FOLLOWING EXERCISES BY ADDING BARLINES TO GIVE THEM THEIR CORRECT NUMBER OF BEATS IN EACH BAR. THEY ARE ALL IN \( \frac{3}{4} \) TIME AND THE FIRST ONE IS DONE FOR YOU.

1. \( \frac{3}{4} = \frac{3}{4} \)

2. \( \frac{3}{4} \)
   EXAMPLES AS PER TEACHERS PAGE

3. \( \frac{3}{4} \)

4. \( \frac{3}{4} \)

RHYTHM DICTATION

THE NEXT THREE RHYTHMS ON THE TAPE ARE IN \( \frac{3}{4} \) TIME, THEY WILL BE PLAYED SIX TIMES EACH - THE FIRST ONE USES THE NOTE 'F', THE SECOND ONE USES THE NOTE 'A', THE THIRD ONE USES THE NOTE 'G'.
PITCH DICTATION - USING THE NOTES 'F', 'G', @ 'A', BEGINS AND ENDS ON F.
TWO MELODIES WILL BE PLAYED IN \( \frac{3}{4} \) TIME, THE RHYTHMS ARE GIVEN
WITHOUT BARLINES. WORK OUT THE PITCH NOTES FIRST, THEN WRITE THE
CORRECT MELODY IN RHYTHM AND PITCH.

1. \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) 

2. \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \) \( \frac{3}{4} \)

NUMBER THREE \( \frac{4}{4} \) OR 'COMMON' TIME.

LISTEN TO THE PIECE OF MUSIC ON THE TAPE, IT IS IN \( \frac{4}{4} \) TIME, THIS
SOUNDS LIKE A MARCH AND CAN EASILY BE MIXED UP WITH \( \frac{2}{4} \) TIME. IN
\( \frac{4}{4} \) TIME THERE IS A STRONG BEAT ON THE FIRST BEAT OF THE BAR AND
ANOTHER LIGHTER ACCENT ON THE THIRD BEAT OF THE BAR.
"LA BAMBA" IS A TRADITIONAL FOLK SONG FROM SOUTH AMERICA THAT WAS
ARRANGED AND SUNG BY RITCHIE VALENS, DID YOU KNOW IT IS A SONG ABOUT
A GOAT? WHICH INSTRUMENT KEEPS THE \( \frac{4}{4} \) BEAT GOING AND KEEPS ALL
THE OTHER INSTRUMENTS IN TIME? LISTEN TO THIS PIECE AGAIN AND
CONCENTRATE ON THE DRUM BEAT - IT WILL HELP YOU TO HEAR \( \frac{4}{4} \) TIME.

REWRITE THESE EXERCISES BY ADDING BARLINES TO GIVE THEM THEIR CORRECT
NUMBER OF BEATS IN EACH BAR. THE FIRST ONE IS DONE FOR YOU.

1. \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) 

2. \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) 

3. \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \) \( \frac{4}{4} \)
RHYTHM TWO - PAGE FIVE

STUDENTS PAGE

4. 4

EXERCISES AS PER TEACHERS' PAGE

5. 4

RHYTHM DICTATION

THE NEXT THREE RHYTHMS ON THE TAPE ARE IN $\frac{4}{4}$ TIME, THEY WILL BE PLAYED SIX TIMES EACH - THE FIRST ONE USES THE NOTE 'B', THE SECOND ONE USES THE NOTE 'A' AND THE THIRD ONE USES THE NOTE 'G'.

PITCH DICTATION

TWO MELODIES WILL BE PLAYED USING THE NOTES 'G', 'A' @ 'B'. THE RHYTHMS ARE GIVEN BELOW WITHOUT BARLINES. WORK OUT THE PITCH FIRST AND THEN WRITE THE MELODIES OUT CORRECTLY. BEGIN AND END ON THE NOTE 'G'.

1. $\frac{4}{4} \quad \overline{\text{d} \text{ d} \text{ d} \text{ d} \text{ d} \text{ d} \text{ d} \text{ d} \text{ d}}$ 2. $\frac{4}{4} \quad \overline{\text{d} \text{ d} \text{ d} \text{ d} \text{ d} \text{ d} \text{ d} \text{ d}}$

JUST FOR FUN

THREE PIECES OF MUSIC WILL BE PLAYED ON THE TAPE, SEE IF YOU CAN GUESS THEIR TIME SIGNATURE.

REVISION

THE FOLLOWING RHYTHMS HAVE NO TIME SIGNATURE - REWRITE THEM WITH THE CORRECT TIME SIGNATURE. WRITE A RHYTHM IN EACH OF THE TIME SIGNATURES YOU HAVE DONE IN THIS UNIT OF WORK.
STUDENTS PAGE

EXERCISES AS PER TEACHERS' PAGE

1.

2.

3.

4.

5.
ANSWERS

NUMBER ONE 2\(\frac{2}{4}\)

A) THE TEMPO IS FAST
B) THE PITCH IS HIGH
C) THE COMPOSER ADDS MORE INSTRUMENTS TO THE PIECE AS IT PROGRESSES, HE ALSO INCREASES THE VOLUME AND THE PITCH GETS HIGHER.

EXERCISES

2. \(\frac{2}{4}\) \[\text{Music notation}\]
3. \(\frac{2}{4}\) \[\text{Music notation}\]
4. \(\frac{2}{4}\) \[\text{Music notation}\]

RHYTHM DICTATION

1. \(\frac{2}{4}\) \[\text{Music notation}\]
2. \(\frac{2}{4}\) \[\text{Music notation}\]
3. \(\frac{2}{4}\) \[\text{Music notation}\]

PITCH DICTATION

1. \(\frac{2}{4}\) \[\text{Music notation}\]
2. \[\text{Music notation}\]
ANSWERS - PAGE TWO

NUMBER TWO \( \frac{3}{4} \)

A) THE INSTRUMENTS ARE THE DOUBLE BASS AND PIANO.

EXERCISES

2. \( \frac{3}{4} \)

3. \( \frac{3}{4} \)

4. \( \frac{3}{4} \)

RHYTHM DICTATION

1. \( \frac{3}{4} \)

2. \( \frac{3}{4} \)

3. \( \frac{3}{4} \)

PITCH DICTATION

1. \( \frac{3}{4} \)

2.
NUMBER THREE 4

A) THE DRUM OR DRUM KIT

EXERCISES

2. 4

3. C

4. 4

5. C

RHYTHM DICTATION

1. 4

2. 4

x2. 4

x3. 4

PITCH DICTATION

1. 4

2. 4

JUST FOR FUN

1. 3 4

2. 2 4

3. 4 4
REVISON

1. 2
   4

2. C

3. 3
   4

4. 4
   4

5. 2
   4

6. 3
   4
TEACHERS PAGE

Listen to the song on the tape. This is from the Rock Opera "Jesus Christ Superstar" by Tim Rice and Andrew Lloyd Webber.

Follow the words as you listen to the tape.

CROWD
HOSANNA HEYSANNA SANNA SANNA HO
SANNA HEY SANNA HO SANNA
HEY JC, JC WON'T YOU SMILE AT ME?
SANNA HO SANNA HEY SANNA SUPERSTAR

CAIAPHAS
TELL THE RABBLE TO BE QUIET WE ANTICIPATE A RIOT
THIS COMMON CROWD IS MUCH TOO LOUD
TELL THE MOB WHO SING YOUR SONG THAT THEY ARE
FOOLS AND THEY ARE WRONG
THEY ARE A CURSE, THEY SHOULD DISPERSE

CROWD
HOSANNA HEYSANNA SANNA SANNA HO
SANNA HEY SANNA HO SANNA
HEY JC, JC YOU'RE ALRIGHT BY ME
SANNA HO SANNA HEY SUPERSTAR

JESUS
WHY WASTE YOUR BREATHE MOANING AT THE CROWD?
NOTHING CAN BE DONE TO STOP THE SHOUTING
IF EVERY TONGUE WAS STILL THE NOISE WOULD STILL CONTINUE
THE STICKS AND STONES THEMSELVES WOULD START TO SING:

CROWD
HOSANNA HEYSANNA SANNA SANNA HO
SANNA HEY SANNA HO SANNA
HEY JC, JC WON'T YOU FIGHT FOR ME?
SANNA HO SANNA HEY SUPERSTAR.

Can you describe the difference between the voice of the person singing the part of Caiaphas, the High Priest and the voice of the person singing the part of Jesus.

Caiaphas has a low male voice, this is called a Bass.

Jesus has a high male voice, this is called a Tenor.
UNIT TWO – PITCH TWO

STUDENTS PAGE

The chorus or the large group of singers is made up of high and low male and female voices.

Listen to the song again and see if you can hear the different voices in the chorus.

The highest female voice is called the Soprano.

The lowest female voice is called the Contralto, often called the Alto.

To write music for high and low and medium voices and instruments we need to be able to write in different octaves or at different pitches. So far we have only used the fourth or middle octave which is indicated by DOT 5. and extends from Middle 'C' to the 'B' above it.

There are 7 different octaves – each of them begin at 'C' and end at the 'B' above it.

N.B. An octave is a distance of eight notes, from one note to the next note of the same name. e.g. 'A' to 'A' is an octave.
UNIT TWO - PITCH TWO

TEACHERS PAGE

The seven octave signs in Braille Notation are:

1ST OCTAVE = DOT 4
2ND OCTAVE = DOTS 4 & 5
3RD OCTAVE = DOTS 4, 5 & 6
4TH OCTAVE = DOT 5
5TH OCTAVE = DOTS 4 & 6
6TH OCTAVE = DOTS 5 & 6
7TH OCTAVE = DOT 6

NO.1 IST OCTAVE - BRAILLE MUSIC NOTATION - DOT '4'.

PRINT

\[\begin{array}{ccccccc}
C & D & E & F & G & A & B \\
\hline
\end{array}\]

The lines drawn below or above the stave are called leger lines and are necessary to provide the stave with the full range of notes. Using so many makes it hard to read so an 8va sign is used. The first octave can be written alternatively as:

\[\begin{array}{ccccccc}
\hline \\
\end{array}\]

8va ................................

The 8va sign written above the stave means that the notes are to be played an octave higher.
UNIT TWO — PITCH TWO

TEACHERS PAGE

Follow the notes on the tape as this octave is played. You can hear how low it is. Let's compare this octave with the fourth octave (the one you already know).

PRINT

1ST OCTAVE

\[ \text{\textit{C D E F G A B}} \]

4TH OCTAVE

\[ \text{\textit{C D E F G A B}} \]

RHYTHM DICTATION

Each rhythm will be played six times... write the rhythm first, then follow the instructions to complete the melody correctly.

TEACHERS - WRITE FIRST IN PRINT, THEN TRANSCRIBE INTO BRAILLE.

1. 4

\[ \text{two bars in 4 time — 1st bar on the note C} \]
\[ \text{2nd bar on the note D} \]

2. 3

\[ \text{four bars in 3 time — 1st bar on the note G} \]
\[ \text{2nd bar on the note A} \]
\[ \text{3rd bar on the note B} \]
\[ \text{4th bar on the note G} \]
UNIT TWO - PITCH TWO

TEACHERS PAGE

PITCH DICTATION

The rhythm is given below. The notes used are G, A & B...the melody begins and ends on 'G'.

1. \( \frac{3}{4} J J J | J J J J J | J J J J J | J J \) ||

2ND OCTAVE - BRAILLE DOTS 4 & 5

PRINT

BRAILLE

\[ \begin{array}{c}
\text{c d e f g a b} \\
\text{c d e f g a b}
\end{array} \]

Follow the notes as this octave is played on the tape.

Listen as the first octave is played.....then the second octave follows on.

Follow the line of music as it ascends or goes up the 2 octaves.

PRINT

BRAILLE

\[ \begin{array}{c}
\text{c d e f g a b} \\
\text{c d e f g a b}
\end{array} \]

N.B. PRINT: This looks the same but the 8va sign lowers the first group of notes by an octave.

BRAILLE: The use of the octave sign is incorrect in this example — it is being used to show the division between the two octaves as you listen to them. Rules for the use of the octave sign will be given later in this unit.
UNIT TWO - PITCH TWO

TEACHERS PAGE

RHYTHM DICTATION
This will be played six times...write the rhythm first, then follow the instructions to complete the rhythm with the correct pitch notes. Don't forget the second octave sign at the beginning of the exercise.

1. 2
   | 4

Four bars in 2 time – 1st bar on the note E
   | 4
   2nd bar on the note G
   | 4
   3rd bar on the note F
   | 4
   4th bar on the note E

PITCH DICTATION
These two dictations will be played 6 times each. The rhythms are given below.

1. \[
   \begin{array}{cccc}
   \text{C} & \text{D} & \text{E} & \text{F} \\
   \text{G} & \text{A} & \text{B} \\
   \end{array}
\]
   \[
   \begin{array}{cccc}
   \text{4} & \text{4} & \text{4} & \text{4} \\
   \end{array}
\]

Begins and ends on the note C.

2. \[
   \begin{array}{cccc}
   \text{C} & \text{D} & \text{E} & \text{F} \\
   \text{G} & \text{A} & \text{B} \\
   \end{array}
\]
   \[
   \begin{array}{cccc}
   \text{4} & \text{4} & \text{4} & \text{4} \\
   \end{array}
\]

Begins and ends on the note G.

3RD OCTAVE – BRAILLE DOTS 4, 5 & 6.

PITCH

BRAILLE

Listen as the third octave is played.

Can you remember the octave signs for the first octave, the second octave and the fourth octave?
UNIT TWO - PITCH TWO

TEACHERS PAGE

RULES FOR THE USE OF OCTAVE SIGNS

1. Octave signs always directly precede the note, nothing may come between them.

2. The first note of every melody must be preceded by an octave sign to show where it is located. As the melody progresses the following notes may or may not need an octave sign, depending on the interval between the notes.

REMEMBER:

NEVER MARK A SECOND OR A THIRD
ALWAYS MARK A SIXTH OR MORE
ONLY MARK A FOURTH OR FIFTH IF IT LEAVES THE OCTAVE.

When working out intervals always count the note you begin on.

C to D is a second
C to E is a third
C to F is a fourth
C to G is a fifth
C to A is a sixth
C to B is a seventh
C to C is an eighth or an octave.

WORK OUT THE FOLLOWING INTERVALS

a) a third above F  b) a second above G
b) a second above G  c) a fifth above D
c) a fifth above D  d) a sixth above E
d) a sixth above E  e) a seventh above B
e) a seventh above B  f) a fourth above A
f) a fourth above A  g) a fourth below D
g) a fourth below D  h) a second below A
h) a second below A  i) a third below B
i) a third below B  j) a fifth below E
j) a fifth below E  k) a seventh below F
k) a seventh below F  l) a sixth below C
l) a sixth below C
UNIT TWO — PITCH TWO

TEACHERS PAGE

A. NEVER MARK A SECOND OR A THIRD

Have a look at the next two exercises. In the first one the notes in the same octave, the second one has notes in different octaves.

No. 1  No. 2
\[ \text{E} \]

B. ALWAYS MARK A 6TH OR MORE

The next two exercises are examples of this. The first one has notes in the same octave, the second one has notes in different octaves.

No. 1  No. 2
\[ \text{A} \]

C. SOMETIMES MARK A 4TH OR A 5TH

A fourth or fifth is \[ \text{not} \] marked if it is in the same octave.

\[ \text{e.g.} \]

A fourth or fifth is \[ \text{only} \] marked if it is \[ \text{not} \] in the same octave.

\[ \text{e.g.} \]
UNIT TWO — PITCH TWO

TEACHERS PAGE

4TH OCTAVE — DOT 5
This octave has already been studied in the previous unit.

5TH OCTAVE — DOTS 4 & 6

PRINT

BRAILLE

This begins where we left off in the 4th octave.
Listen to the 4th and the 5th octave as they are played.
Follow the notes of these exercises as they are played — some
notes will require an octave sign. Can you work out which ones
they are? Then rewrite the melody correctly

EXERCISE 1.

EXERCISE 2.

EXERCISE 3.
UNIT TWO - PITCH TWO

TEACHERS PAGE

6TH OCTAVE - DOTS 5 & 6

PRINT

\[ \text{BRAILLE} \]

Listen as the sixth octave is played and then listen as the 4th.
5th & 6th octaves are played - follow the notes in your book as
they gradually climb up the scale.

The following exercises need to have octave signs changed, altered
or added - listen to each exercise as it is played and see if you
can correct them.

EXERCISE 1.

EXERCISE 2

EXERCISE 3: This one is in a new time signature 6 which means
that each bar is equal to 6 quavers. Remember that a quaver is
also called an 1/8th note.
UNIT TWO - PITCH TWO

7TH OCTAVE - DOT 6

As this octave is very high it has a limited use - the Piccolo or a violin and the piano play these notes successfully.

We'll finish the octaves with a pitch dictation in the 7th octave.

The rhythm is given below - it begins and ends on the note 'C'.

\[
\begin{array}{cccccccc}
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\end{array}
\]

Can you remember the octave signs for these octaves?

2nd octave
4th octave
1st octave
5th octave
3rd octave
6th octave

Test your teacher on the octave signs and say them in order from 1st octave to 7th octave.

Remember the rules:

Never........................................
Always........................................
Sometimes.................................
UNIT TWO - PITCH TWO

STUDENTS PAGE

Listen to the song on the tape. This is from the Rock Opera "Jesus Christ Superstar" by Tim Rice and Andrew Lloyd Webber. Follow the words as you listen to the tape.

CROWD
HOSANNA HEYSANNA SANNA SANNA HO
SANNA HEY SANNA HO SANNA
HEY JC, JC WON'T YOU SMILE AT ME?
SANNA HO SANNA HEY SUPERSTAR

CAIAPHAS
TELL THE RABBLE TO BE QUIET WE ANTICIPATE A RIOT
THIS COMMON CROWD IS MUCH TOO LOUD
TELL THE MOB WHO SING YOUR SONG THAT THEY ARE
FOOLS AND THEY ARE WRONG
THEY ARE A CURSE.. THEY SHOULD DISPERSE

CROWD
HOSANNA HEYSANNA SANNA SANNA HO
SANNA HEY SANNA HO SANNA
HEY JC, JC YOU'RE ALRIGHT BY ME
SANNA HO SANNA HEY SUPERSTAR

JESUS
WHY WASTE YOUR BREATHE MOANING AT THE CROWD?
NOTHING CAN BE DONE TO STOP THE SHOUTING
IF EVERY TONGUE WAS STILL THE NOISE WOULD STILL CONTINUE
THE STICKS AND STONES THEMSELVES WOULD START TO SING:

CROWD:
HOSANNA HEYSANNA SANNA SANNA HO
SANNA HEY SANNA HO SANNA
HEY JC, JC WON'T YOU FIGHT FOR ME?
SANNA HO SANNA HEY SUPERSTAR.

Can you describe the difference between the voice of the person singing the part of Caiaphas, the High Priest and the voice of the person singing the part of Jesus.

Caiaphas has a low male voice, this is called a Bass. Jesus has a high male voice, this is called a Tenor.
UNIT TWO  -  PITCH TWO

TEACHERS PAGE

The chorus or the large group of singers is made up of high and low male and female voices.

Listen to the song again and see if you can hear the different voices in the chorus.

The highest female voice is called the Soprano.

The lowest female voice is called the Contralto, often called the Alto.

To write music for high and low and medium voices and instruments we need to be able to write in different octaves. So far we have only used the fourth or middle octave which is indicated by DOT 5, and extends from Middle 'C' to the 'B' above it.

There are 7 different octaves – each of them begin at 'C' and end at the 'B' above.

N.B. An octave is a distance of eight notes from one note to the next of the same name. e.g. 'A' to 'A' is an octave.

In Print Notation the BASS Clef is used for the low notes (below middle 'C') and the TREBLE Clef is used for high notes. You should be able to draw the TREBLE Clef so practise drawing the BASS Clef.

Another name for the BASS Clef is the 'F' clef.

In Braille notation the octave signs replace the Clefs.
UNIT TWO — PITCH TWO

STUDENTS PAGE

The seven octave signs in Braille notation are:

1ST OCTAVE = DOT 4
2ND OCTAVE = DOTS 4 & 5
3RD OCTAVE = DOTS 4, 5 & 6
4TH OCTAVE = DOT 5
5TH OCTAVE = DOTS 4 & 6
6TH OCTAVE = DOTS 5 & 6
7TH OCTAVE = DOT 6

NO. 1 1ST OCTAVE — DOT 4

C D E F G A B
UNIT TWO – PITCH TWO

STUDENTS PAGE

Follow the notes on the tape as this octave is played. You can hear how low it is. Let's compare this octave with the fourth octave (the one you already know).

1ST OCTAVE

4TH OCTAVE

RHYTHM DICTATION

Each rhythm will be played six times.....write the rhythm first, then follow the instructions to complete the melody correctly.

1.

Two bars of 4 time – 1st bar on the note C
4
2nd bar on the note D

2.

Four bars in 3 time – 1st bar on the note G
4
2nd bar on the note A
3rd bar on the note B
4th bar on the note G
UNIT TWO — PITCH TWO

STUDENTS PAGE

The rhythm is given below. The notes used are G, A and B...the melody begins and ends on 'G'.

1.

2ND OCTAVE — DOTS 4 & 5

C D E F G A B

Follow the notes as this octave is played on the tape. Listen as the first octave is played......then[the second octave copy] follows on.

Follow the line of music as it ascends or goes up the 2 octaves.

octave signs

N.B. The use of the octave sign is incorrect in this example — it is being used to show the division between the two octaves as you listen to them. Rules for the use of the octave signs will be given later in this unit.
UNIT TWO - PITCH TWO

STUDENTS PAGE

Listen as the first three octaves are played and follow the notes as they ascend the scale. There are no octave signs indicating the change of octave because 'B' to 'C' is an interval of a second or a step and octave signs are not used between this interval.

RHYTHM DICTATION

The following rhythms will be played six times. Don't forget the octave sign for the third octave at the beginning of each rhythm.

1.

Two bars of 4 time - the 1st bar on the note D

\[ \begin{array}{c}
\text{4} \\
\text{D}
\end{array} \]

the 2nd bar on the note C

\[ \begin{array}{c}
\text{4} \\
\text{C}
\end{array} \]

2.

Four bars of 3 time - the 1st bar on F

\[ \begin{array}{c}
\text{4} \\
\text{F}
\end{array} \]

the 2nd bar on A

\[ \begin{array}{c}
\text{4} \\
\text{A}
\end{array} \]

the 3rd bar on G

\[ \begin{array}{c}
\text{4} \\
\text{G}
\end{array} \]

the 4th bar on F

\[ \begin{array}{c}
\text{4} \\
\text{F}
\end{array} \]

PITCH DICTATION

This will be played six times... it begins and ends on the note C.

The rhythm is given below.

\[ \begin{array}{c}
\text{.} \\
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\text{.} \\
\text{.} \\
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\end{array} \]
UNIT TWO — PITCH TWO

STUDENTS PAGE

RULES FOR THE USE OF OCTAVE SIGNS

1. Octave signs always directly precede the note; nothing may come between them.

2. The first note of every melody must be preceded by an octave sign to show where it is located. As the melody progresses the following notes may or may not need an octave sign, depending on the interval between the notes.

REMEMBER:
NEVER MARK A SECOND OR A THIRD
ALWAYS MARK A SIXTH OR MORE
ONLY MARK A FOURTH OR FIFTH IF IT LEAVES THE OCTAVE

When working out intervals always count the note you begin on.

C to D is a second
C to E is a third
C to F is a fourth
C to G is a fifth
C to A is a sixth
C to B is a seventh
C to C is an octave

WORK OUT THE FOLLOWING INTERVALS

a) a third above F  b) a second above G
c) a fifth above D  d) a sixth above E
e) a seventh above B f) a fourth above A
g) a fourth below D h) a second below A
i) a third below B  j) a fifth below E
k) a seventh below F l) a sixth below C
UNIT TWO — PITCH TWO

STUDENTS PAGE

A. NEVER MARK A SECOND OR A THIRD

Have a look at the next two exercises. In the first one the notes are in the same octave, the second one has notes in different octaves.

NO. 1

NO. 2

B. ALWAYS MARK A 6TH OR MORE

The next two exercises are examples of this. The first one has notes in the same octave, the second one has notes in different octaves.

NO. 1

NO. 2

C. SOMETIMES MARK A 4TH OR A 5TH

A fourth or fifth is only marked if it is not in the same octave.

\[ \text{e.g.} \quad \begin{array}{c}
\text{\textcolor{red}{\footnotesize \downarrow}} \\
\text{\textcolor{blue}{\footnotesize \uparrow}}
\end{array} \]

A fourth or fifth is only marked if it is not in the same octave.

\[ \text{e.g.} \quad \begin{array}{c}
\text{\textcolor{red}{\footnotesize \downarrow}} \\
\text{\textcolor{blue}{\footnotesize \uparrow}}
\end{array} \]
UNIT TWO - PITCH TWO

STUDENTS PAGE

4TH OCTAVE - DOT 5

This octave has already been studied in the previous unit.

5TH OCTAVE - DOTS 4 & 6

This begins where we left off after the 4th octave.

Listen to the 4th and the 5th octave as they are played.

Follow the notes of these exercises as they are played - some notes will require an octave sign. Can you work out which ones they are? Then rewrite the melody correctly.

EXERCISE 1.

EXERCISE 2.

EXERCISE 3.
UNIT TWO — PITCH TWO

STUDENTS PAGE

6TH OCTAVE — DOTS 5 & 6

Listen as the sixth octave is played and then listen as the 4th.
5th & 6th octaves are played — follow the notes in your book as
they gradually climb up the scale.

The following exercises need to have octave signs changed, altered
or added — listen to each exercise as it is played and see if
you can correct them.

EXERCISE 1.

EXERCISE 2.

EXERCISE 3. This one is in a new time signature 6 which means
that each bar is equal to 6 quavers. Remember that a quaver is
also called an 1/8th note.
UNIT TWO - PITCH TWO

STUDENTS PAGE

7TH OCTAVE - DOT 6

As this octave is very high it has limited use - the Piccolo or a violin and the piano play these notes successfully.

We'll finish the octaves with a pitch dictation in the 7th octave.

The rhythm is given below - the melody begins and ends on the note 'C'.

Can you remember the octave signs for these octaves?

2nd octave
4th octave
1st octave
5th octave
3rd octave
6th octave

Test your teacher on the octave signs and say them in order from 1st octave to 7th octave.

Remember the rules:

Never
Always
Sometimes
UNIT TWO - PITCH TWO

1ST OCTAVE

RHYTHM DICTATION
1.
PITCH
PRINT

bracht

BRAILLE

2.
PITCH
PRINT

bracht

BRAILLE

PITCH DICTATION
1.
PRINT

bracht

BRAILLE
UNIT TWO - PITCH TWO

2ND OCTAVE

RHYTHM DICTATION
1.
PRINT
\[ \text{music notes} \]

BRAILLE

PITCH DICTATION
1.
PRINT
\[ \text{music notes} \]

BRAILLE

2.
PRINT
\[ \text{music notes} \]

BRAILLE
UNIT TWO – PITCH TWO

3RD OCTAVE

RHYTHM DICTATION
1. PRINT

\[ \frac{7}{4} \]

BRAILLE

2. PRINT

\[ \frac{7}{4} \]

BRAILLE

PITCH DICTATION
1. PRINT

\[ \frac{7}{4} \]

BRAILLE
# UNIT TWO - PITCH TWO

## ANSWERS

### INTERVALS

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<td>L) E</td>
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### RULES FOR THE USE OF OCTAVE SIGNS

#### 5TH OCTAVE

EXERCISE 1.

PRINT

```
\begin{music}
  3 4 5 6 7 8 9 0
\end{music}
```

BRAILLE

EXERCISE 2.

PRINT

```
\begin{music}
  C D E F G A
\end{music}
```

BRAILLE

EXERCISE 3.

PRINT

```
\begin{music}
  C D E F G A
\end{music}
```

BRAILLE
UNIT TWO - PITCH TWO

6TH OCTAVE

EXERCISE 1.
PRINT

BRAILLE

EXERCISE 2.
PRINT

BRAILLE

EXERCISE 3.
PRINT

BRAILLE
ANSWERS

UNIT TWO - PITCH TWO

7TH OCTAVE

EXERCISE

PRINT

BRAILLE

2ND OCTAVE = DOTS 4 & 5
4TH OCTAVE = DOT 5
1ST OCTAVE = DOT 4
5TH OCTAVE = DOTS 4 & 6
3RD OCTAVE = DOTS 4, 5, & 6
6TH OCTAVE = DOTS 5 & 6
PROGRAM OF INSTRUCTION IN BRAILLE MUSIC FOR TEACHERS OF VISUALLY IMPAIRED STUDENTS

A Project Presented to the Faculty of Education
The University of Western Sydney, Nepean

In Partial Fulfilment for the Degree of Master of Education

by
Margaret Ann Clark, Dip. Mus. (Ed.),
June 1992
Multimedia item accompanies print copy
SEE PRINT COPY FOR
BRAILLE
VERSION
CERTIFICATE OF ORIGINALITY

I certify that the substance of this project has not already been submitted for any degree and is not currently being submitted for any other degree.
I certify that any help received in preparing this project, and all sources used, have been acknowledged in this project.

[Signature]

W. A. Clark
ACKNOWLEDGEMENTS

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Special thanks go to Gail, Naomi and Mayeta whose patient support and enthusiasm made this project possible.
ABSTRACT: This project describes the processes and procedures used in planning and writing a braille music program specifically to assist teachers of visually impaired students instruct their students in basic braille music notation. The experiment was conducted over two terms of the school year with an Itinerant Teacher and her 9 year old braille student. The program was based on a direct instruction model, and material included a Teachers Manual a Students Manual (in print and braille), plus examples and exercises recorded on tape. The recordings emphasised and developed aural skills in pitch and rhythm, ensuring that the subject matter was learned musically. The experiment was a single-case study (A-B-A design) using pre-tests, probes and post tests. The final post test was administered six weeks after the completion of the program.
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