Author: Sonia Forrer

Lesson plan Title: **Pitch of Sound: High and Low**

School	**X Primary**	o Middle		o High	
Year / Class	o 1	o 2	o 3	**X** 4	o 5
Subject : Music		Topic: pitch of sound ('high' and 'low') as one of the quality of sound perception and its correlation to properties of sounding objects			
CLIL language	English				

	Teacher's role:	**X Main Teacher** o Co-teacher o Other: _____	Subject taught: **Music CLIL**
Teacher / Teaching team profile	Teacher's role:	o Main Teacher o Co-teacher o Other: _____	Subject taught: _____

	CEFR Level:	**X A1**	o A2	o C1
		o B1	o B2	o C2
Student group profile (general)	**X Experiences of CLIL**: 13 learners, 2nd music CLIL year o Migrant background o English mother tongue o Other mother tongue **X Special educational needs 1** **X Other: 1 ADHD**			

		Previous lessons: Loudness of Sound – Loud and Soft
Timetable fit	**X Module**[1] o Lesson	
		Future lessons: Timbre of Sound – Introduction to Musical Instruments

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[1] It is a music CLIL unit (a series of lessons) with cross-curricular links to science; this module/unit about the pitch of the sound has to be considered as part of the multi-year music module about the qualities of sound: (besides pitch) distance, direction, duration, loudness and timbre.

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Resources & tools	Multi-media: IWB, web resources (YouTube videos, interactive e-tools) audio-files[2], word/picture[3]-flashcards, word labels; Worksheets (types: text jigsaw, gap-fill text, completing sentences, multiple choice, visual organizers – high/low diagram, Carrol diagram, lateral key, mind map); Realia: everyday-objects suitable for producing sound (cardboard boxes, rubber bands with different thicknesses and lengths, glasses with different sizes, bottles, wood sticks)

	Subject	Language
Students' prior knowledge, skills, competencies	Learners **know**… • that sound[4] can be long or short, loud or soft • that sounds and noises can be produced by various natural or artificial sources Learners **are able to**... • listen actively, alternating silence – listen to – speech according to the classroom rules and routines • recognize sound qualities (distance, direction, duration, loudness) about sounds and noises of various sources	• General **vocabulary** about animals, objects, music instruments, weather agents • **Structures**: *What is this sound?* *Guess!* *It is a lion/bell/ thunder/ guitar/…* *How is this sound/noise?* *It is* + adjective • **Communicative functions**: '*what*' and '*how*' questions and answers (**cognition**: recalling, identifying and describing)

Learning Outcomes expected for this lesson	**CONTENT** **To know…** • that sounds vary in pitch: it can be 'high' or 'low' • that pitch (high/low) and loudness (loud/soft) define two distinct qualities of the sound • that in sounding objects there is a correlation between pitch and specific properties of the objects[5] • how the pitch of a musical instrument can be altered **To be able…** • to identify the pitch of a sound (high/low)

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2 All the audio files are downloaded from Freesound.org

3 Dowloaded from Google as free to non-commercial use share or modify (as specified in the 'Usage rights')

4 The term 'sound' is used in the music classroom, at this stage, without considering the specific difference between the concepts of 'sound' and 'noise' as they are scientifically defined in the music specific vocabulary. The learners know both terms as they are meant in general English.

5 Without involving abstract concepts like vibration and frequency (Physics of sound): learners are enabled to deduct concrete correlations between pitch and properties of sounding objects (like rubber bands or glasses) through observation, manipulation and active listening.

- to compare sounds according to their pitch
- to rank sounds according to their pitch
- to sort/classify[6] sounds according to their pitch and loudness, distinguishing and applying the two sets of opposite criteria

To be aware…
- that comparison between sounds is often necessary to define their pitch (pitch as a relative quality of sound perception)
- that musical instruments are designed to produce different sound's pitches
- that everyday-objects can produce sounds of different pitches, relating to specific properties of them.

COGNITION and LANGUAGE (COMMUNICATIVE FUNCTIONS and STRUCTURES)

To be able…
- to recognize and name sound sources (by listening to their sounds) recalling prior vocabulary and structures (*This sound/It is a …*) − CTS[7] 1
- to identify and name sound sources using and memorizing new vocabulary
- to relate sounds to their sources using a new structure (passive: *This sound is produced by …*) – CTS 1
- to define sounds according to their pitch (*This sound is high/low*) – CTS 2
- to associate high/low sounds respectively with high/low body gestures and postures – CTS 2
- to give examples of sounds, according to the description of their qualities ('such as': *A high/low sound, such as …*) CTS 2
- to compare sounds according to their pitch (comparative: *This sound is higher/lower*) – CTS 3
- to sort/classify sounds according to two distinct sets of opposite criteria – pitch and loudness – (*This sound is soft and high; This sound is low and loud; …*) – CTS 4
- to rank sounds according to their pitch (superlative: *from lowest to highest* and vice-versa) – CTS 4
- to infer (from observation, effective listening, manipulation) how the pitch of a musical instrument can be altered, expressing condition-result correlations ('if' clause 1st type present-present: *If the string gets shorter, the sound gets higher; If the string gets longer, the sound gets lower*) – CTS 4
- to predict how the pitch sound of an instrument will be altered, applying prior concepts to a new situation ('will' prediction: ...

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[6] I prefer to use 'sort' instead of 'classify' because pitch of sound is a relative quality, depending on the subjective perception of it: I think it is more appropriate infact to describe sounds as 'higher' or 'lower' in a context of comparison between sounds, instead of defining sounds as 'high' or 'low' in absolute terms.

[7] Critical Thinking Skill

will produce a higher sound; *... will produce a lower sound*) –
CTS 5

CULTURE

To be aware...
- that in different cultural areas there are different musical instruments
- that the idea of 'musical instrument' is relative to a cultural context: everyday-objects used creatively can become unconventional musical instruments

LEARNING SKILLS

To be able...
- to get useful information about a topic from videos, multimedia, interactive e-tools
- to infer concepts and correlations from observing, using senses and manipulating
- to carry out simple experiments with everyday objects
- to cooperate with others in group and pair to share ideas

Methodology	**INTEGRATE CONTENT AND LANGUAGE LEARNING BY:**
	
	➢ identifying and selecting carefully the language demanded by the subject topic (vocabulary, structures, functions)
	➢ building new subject content and language on what learners already know, by ACTIVATING and revisiting PRIOR KNOWLEDGE in both content and language (ALLOWING also USE OF L1 to express previous content knowledge)
	➢ providing and HIGHLIGHTING SUBJECT VOCABULARY required by the topic
	➢ presenting new vocabulary GRADUALLY and ORALLY: learners have to become familiar with the pronunciation before we expose them to the written form, as well as receptive skills are usually developed before productive skills in language learning (RESPECTING THE SILENT PERIOD)
	➢ identifying, highlighting and including in a variety of different activities and tasks TOPIC KEY-WORDS responding to TOPIC KEY-CONCEPTS
	➢ designing tasks for MEANINGFUL production of SUBJECT CONTENT, motivating learners to produce SUBJECT-SPECIFIC LANGUAGE
	➢ supporting comprehension of both language and subject concepts by using MULTIMEDIA and VISUAL ORGANISERS
	➢ presenting oral or written language in association with pictures, gestures, noises
	➢ using visual organizers to foster connections between subject concepts and to support production of oral and written language
	➢ providing and developing LANGUAGE FOR THINKING: communicative functions and language structures are selected, presented and used by learners in connection of the COGNITIVE skills required and promoted by the subject learning and the designed tasks
	    e.g.
	     - recognise: *This is a ...*
	     - identify cause/source: *It is produced by ...*(passive)
	     - define: *It is high/low*
	     - compare and classify/sort: *It is higher/lower* (comparative)
	     - rank: *from highest to lowest* (superlative)

- correlate conditions-results: *If ...gets, ... gets ...* ('if' clause 1st type present-present)
- predict results: *...will produce ...* ('will' prediction)

➢ GRADING and SEQUENCING language functions and structures when possible, responding to PROGRESSIVELY CHALLENGING COGNITIVE TASKS in the subject learning
➢ revisiting language again and again in a variety of different activities and tasks
➢ summarizing at the end of a lesson content and language, making learners also AWARE of what they have learnt, promoting SELF-ASSESSMENT (use of L1 allowed)

PROMOTE COMMUNICATION AND SUPPORT LANGUAGE PRODUCTION IN L2 BY:

➢ Designing for communicating subject- specific content orally, providing a wide range of PURPOSES (COMMUNICATIVE FUNCTIONS) for speaking, e.g. partecipate in a game, answer to QUESTIONS, guess and name sound sources by recalling prior vocabulary, recite a rhyme in chorus, COOPERATE during pair/group tasks, check work with others (PEER FEEDBACK), express agreement or disagreement, compare and define sounds according to their pitch, rank sounds, recall prior knowledge about sounds qualities (BRAINSTORMING APPROACH), give examples, interact with an e-tool, describe a VISUAL ORGANISER, SHARE observations and EXPERIENCES with rubber bands and glasses, EXPLAIN the correlation between strings' length/glasses' size and sounds' pitch, express predictions about how size influences sounds' pitch, report on the experiment of blowing into bottles, …
➢ Assigning of writing tasks, e.g. GAP-FILL texts, COMPLETING sentences and VISUAL ORGANISERS, text-JIGSAW
➢ Providing SUPPORT to PRODUCE LANGUAGE in writing as well as orally through keywords, CHORAL DRILL, MODEL SENTENCES, LANGUAGE FRAMES on the board, BILINGUAL GLOSSARIES, teacher EFFECTIVE QUESTIONING (OPEN or CLOSED QUESTIONS) LANGUAGE PROMPTS
➢ Fostering COOPERATION and verbal interaction between learners with pair- and group- work and tasks: model sentences and language frames are often provided on board to support USE OF L2 during PEER-INTERACTIONS (*I think…; I agree/disagree; It's right/*wrong); CODE-SWITCHING is also allowed during peer dialogues
➢ Inviting learners to talk about what they are doing, sharing their ideas and reporting on researches and experiments (keywords, model sentences, text frames are provided on board, posters or worksheets)

STIMULATE COGNITIVE DEVELOPMENT BY:

➢ a TASK-BASED approach
➢ providing PROGRESSIVELY CHALLENGING COGNITIVE TASKS
➢ designing activities and tasks which foster HOTS (Higher Order Thinking Skills), e.g. ANALYSE experience in order to INFER CORRELATIONS, PREDICT results (also through a CROSS- CURRICULAR APPROACH: in this music module links with science have been designed to involve reasoning skills)
➢ promoting ENQUIRY SKILLS, like EXAMINING through observation, senses and manipulation to GET useful INFORMATION and understand correlations
➢ EFFECTIVE QUESTIONING to stimulate ASSOCIATIONS between concepts
➢ giving learners time to think, to process new curricular concepts (WAIT TIME) before they answer to question or they produce subject content and subject language

INVOLVE AND MOTIVATE LEARNERS BY:

- ➤ providing MOVEMENT GAMES, rhymes to recite CHORALLY
- ➤ manipulating REALIA, EXPERIMENTING using senses
- ➤ designing 'GUESS-BASED' tasks to foster their curiosity and activate prior knowledge and thinking skills, e.g. guessing sound sources, meanings of words/phrases from context
- ➤ using MULTI-MEDIA, ICT interactive-tools, WEB resources
- ➤ showing elements from OTHER CULTURES, to foster their interest and curiosity

DIFFERENTIATE BY:

- ➤ EXTRA-QUESTIONS (mainly simple closed questions) to prompt and support language production in less able learners
- ➤ OPTIONAL TASKS for more able learners (e.g. an additional experiment to carry out, recording results and reporting to the class)

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Activity	Activity aims	Activity Procedure	Language	Interaction	Materials (please cite all sources)	Timing	Assessment
1 **The "High and Low Game"**	- To introduce the concept that sound can be *high* or *low* (pitch of sound). - To give examples of high and low sounds/noises - To enable learners to discern high pitch/ low pitch sounds - To associate high/low pitch of sounds respectively with high/low body movements - To recall prior vocabulary knowledge (*sound, game, lion, bird, guitar, hands, sky*). - To introduce new vocabulary items (*high/low*). - To memorize a rhyme with key vocabulary - To prompt pupils' interest and support their comprehension by using multimedia. - To motivate learners involving them in a game which promotes both their	**I.** YouTube video with examples of high and low sounds and a learning game, the "*High and Low Game*" **II.** The pupils share what they understood about the video, activating prior vocabulary and inferring the meanings from the context (code-switching allowed) **III.** The teacher integrates learners comprehension, highlighting key words (*sound, high, low, game*), repeating, explaining and displaying them on the IWB; the pupils listen, repeat and write them down **IV.** The pupils recite in chorus the rhyme of the "*High and Low Game*", matching it with the opportune body movements (raise and lower the arms) **V.** The learners play the "*High and Low Game*"	**Vocabulary** <u>Revisited</u>: *sound, game, lion, bird, guitar, hands, sky* <u>New</u>: *high/low* **Structures** noun/pronoun *is* + adjectives: *The sound is high/low*; *This is right/wrong*; imperative of verb + direct object: *Touch the sky/your toe*; **Functions** Describing sounds Reciting a rhyme in chorus understanding its aesthetic value Matching verbal expressions with appropriate gesture Sharing ideas Evaluating peer work **Teacher** *What have you understood about the video?* *What does it mean?* *Can you explain it in Italian?*	**I-V.** Whole class **VI.** Individual work followed by peer-feedback	**I.** YouTube video for children with didactic content: "*The High and Low Game - The Children's Music Workshop*" https://m.youtube.com/watch?v=KSEojtRAoHw **VI.** Worksheet: Text Jigsaw "*The High and LowRhyme*" (ATTACHMENT 1)	**I-III.** 20 min. **IV-V.** 15 min. **VI.** 10 min. **TOT.** 45 min.	**TOOL** Text jigsaw: glue the "High and Low Rhyme" pieces in order ATTACHMENT 1 **Type**: formative-performance assessment, individual task with peer-feedback **Focus**: language and content **Assessed outcomes:** - can identify and define sounds according to their pitch - can match high/low sounds respectively with high/low body gestures and postures - can recite a rhyme in chorus understanding its aesthetic value

		understanding of music concepts and their use of language for meaningful purposes. - To promote cooperation skills (whole class/pair work)	(reciting the rhyme and doing the related body movements) with the examples of the video (low sounds: *lion roar, contrabass*; high sounds: *birds twitter, high played guitar*) **VI.** Task (text jigsaw): pupils glue the "*High and Low Rhyme*" pieces in order, then compare the work with a partner (ATTACHMENT 1)	*How is this sound? Is it high or low?*				
2 **'Higher' and 'Lower': comparing sounds**		- To stimulate active and effective listening by identifying distinct sound sources - To recall prior vocabulary knowledge (e.g. *handbell, ship, triangle, roar, ...*) - To introduce new vocabulary items (e.g. *alarm clock, siren, twitter, contrabass, thunder, piccolo,...*). - To promote cooperation skills (whole class/group/pair work) - To enable learners to compare and	**I.** The learners listen to sounds of different sources and in groups try to identify them with the help of picture-flash cards (task: put the cards in the order you hear the sounds played) ATTACHMENT 2 **II.** The learners listen again to the sounds, played in the same order, and they are encouraged, one at a time, to tell the sentence "*This sound is produced by ...*" (sentence frame provided on the IWB); each group checks its work and match word	**Vocabulary** <u>Revisited</u>: *handbell, ship, triangle, roar, ...* <u>New</u>: *pitch* (altezza del suono), *alarm clock, siren, contrabass, thunder, piccolo, didgeridoo, samba whistle* ('*apito*') **Structures** *This is* + comparative adjectives: *This sound is higher/low*er; passive form: ...*is produced by*... **Functions** Comparing and sorting sounds according to their pitch. Identifying and telling sound sources	**I.** Group work **II.** Whole class **III.** Whole class **IV.** Pair work **V.** Whole class **VI.** Individual work and whole class	**I-III.** Audio-files (downloaded from Freesound.org) Picture-flash cards and word labels ATTACHMENT 2 **IV.** Worksheet: visual organizer higher/lower (the teacher prepares worksheet with the pictures used for the flashcards, on one side, and two organizers to sort them into "higher" and "lower") **V.** YouTube video showing an Aborigine artist playing a didgeridoo: "Rika Alis Plays Aboriginal Eucalyptus Didgeridoo" https://youtu.be/JEgXAu30yuY **VI.** Gap-fill text worksheet ATTACHMENT 4	**I.** 10 min. **II.** 10 min. **III.** 5 min. **IV.** 15 min. **V.** 5 min. **VI.** 15 min. **TOT.** 60 min.	**TOOL 1** Observing, questioning and recording learners during the activity **Type**: formative, performance assessment **Focus**: content and language **Assessed outcomes:** - can identify sounds sources and tell them using a passive form - can compare and sort sounds in higher and lower according to their pitch

| | contrast sounds, sorting them in higher and lower
 - To involve the learners and help their content and language comprehension by playing a game
 - To introduce a new language structure
 - To present two music instruments of other cultures (the Aboriginal *didgeridoo* and the Brazilian *apito de samba (samba whistle)* | labels with the picture-flash cards (ATTACHMENT 2)
 III. Play the "*High and low game*" with the previous sounds
 IV. In pairs: for each couple of sounds, listen to, compare and sort them into higher and lower and glue the responding picture-flash cards in the right space of the diagram (LOWER/ HIGHER); then check with the whole class: the pupils, one at a time, on the IWB, drag-and-drop the pictures in the right space and are invited to tell *This sound is lower/higher* or to answer to closed questions like *Which is the lower/higher sound?* (PICTURE B[8])
 V. YouTube video: "*Rika Alis Plays Aboriginal Eucaliptus Didgeridoo*"
 VI. Gap-fill the text "*Today I have learned…*" as individual task – ATTACHMENT 4; | Matching verbal expressions with appropriate gesture. Collaborating and negotiating with a partner, sharing ideas.

 Teacher talking
 Listen to the sounds and identify their sources.
 What is this sound? By what is it produced? Guess!
 Put the flash cards in order.
 Match the word labels with the picture-flash cards.
 Listen and compare this two sounds: which is higher/lower?
 Sort the sounds into higher and lower | | | | - can cooperate and share ideas, using key words in the target language

 TOOL 2
 Gap-fill text (ATTACHMENT 4)
 Type: formative
 Focus: language and content
 Assessed outcomes:
 - can use the key content vocabulary appropriately in a written text, demonstrating the comprehention of topic concepts
 - can use the comparatives *higher* and *lower* to contrast sounds in a written text |

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8 See all the pictures in the Presentation, PDF n. 4, "Language for Thinking"

		final plenary follows to check the task together, revising content and language learnt in this lesson stage					
3 **Pitch vs Loudness**	- To enable learners to contrast and compare sounds according to their pitch and loudness, combining the two sets of opposite criteria - To activate and revisit prior knowledge (the loudness of sound) in a different subject context and type of task - To support the understanding of the concepts and their relationships by completing a visual organizer - To recall prior vocabulary knowledge (*soft/loud, high/low, cricket, school bell, thunder, ...*) - To introduce new vocabulary items	**I.** The learners listen to sounds of different sources and try in pairs to identify them with the help of picture-flash cards (task: put the cards in order of listening – ATTACHMENT 5 **II.** Listen again to the sounds playlist, comparing the work with others by telling one at a time which sound source has been identified ("This sound is produced by…"); then match word labels with the picture-flash cards ATTACHMENT 6 **III.** Individual task: glue the picture-flash cards of the sounds in the right cell of the diagram according to their pitch and loudness – ATTACHMENT 6 **IV.** Pupils compare with whole class how they have completed the	**Vocabulary** Revisited: *loud/soft, low/high, cricket, school bell, thunder* New: *tuba* (wind instrument) **Structures** passive form: …*is produced by…*; is + adjective: *This sound is …and ….* I + verb present tense: I *agree*/*disagree* **Functions** Identifying and telling sound sources Comparing and sorting sounds according to their pitch and loudness. Collaborating and negotiating with a partner, sharing ideas. Expressing agreement/disagreement **Teacher talking** *Listen to the sounds and identify their sources.*	**I.** Pair work **II.** Whole class **III.** Individual work **IV.** Whole class	**I-II.** Audio-files (downloaded from Freesound.org) Picture-flash cards and word labels ATTACHMENT 5 **III.** Worksheet: Carrol diagram – ATTACHMENT 6 **IV.** IWB to display model sentences and language frames	**I.** 5 min. **II.** 10 min. **III.** 5 min. **IV.** 10 min. **TOT.** 30 min.	**TOOL 1** Observing, questioning and recording learners during the activity **Type**: Formative, performance assessment **Focus**: content and language **Assessed outcomes:** - can tell sound sources using a passive sentence - can cooperate, share ideas and expressing agreement/disagree-ment using key words and model sentences in the target language **TOOL 2** Task: Carrol diagram to fill out ATTACHMENT 6

	(*tuba* – wind instrument –) - To reuse prior sentence structures - To introduce a new sentence structure to express agreement or disagreement	diagram: they tell sentences to describe the sounds according to their pitch and loudness with a simple structure like "Thunder is a low and loud sound". Learners are also supported with model sentences to express their agreement or disagreement with others ("I agree/ disagree") about the sound sorting.	*What is this sound? By what is it produced? Guess!* *Put the flash cards in order.* *Match the word labels with the picture-flash cards.* *Listen and sort the sounds into the diagram.* *Is this sound high and loud? Or high and soft? Low and loud? Or low and soft?*				**Type:** formative, performance assessment, individual task followed by peer-feedback **Focus:** content and language **Assessed outcomes:** - can contrast and sort sounds according to their pitch and loudness, applying two sets of opposite criteria
4 **Pitch and Strings: experimen-ting correlations (with cross-curricular links to science)**	- To give examples about how the pitch of a musical instrument can be altered - To introduce a new concept (correlation between strings lenght and pitch) through observation and manipulation of real objects - To involve learners in experimental activities, stimulating and developing HOTS (e.g. analyzing and inferring correlations)	**I.** Learners experiment in groups: following the teacher example and instructions, they arrange rubber bands on cardboard boxes and they pluck them like guitar strings, paying attention to the sound pitches produced by them; placing a ruler across the box to form a bridge, rubber bands become shorter and the pitch of their sounds gets higher - PICTURE C **II.** Learners share their ideas about what they have experimented with	**Vocabulary** Revisited: *guitar, box, long/short, high /low, pitch, sound* New: *string, pluck, rubber band, get* (diventare) **Structures** *is* + comparative adj.: e.g. *The rubber band is shorter/longer; The sound is higher/lower* '*If*' clause (1st type present-present) *If the string gets shorter, the sound gets higher/ If the string gets longer, the sound gets lower*	**I.** Group work **II.** Whole class **III.** Whole class **IV.** Individual work	**I.** Cardboard boxes, rubber bands, rulers **II.** Key words and sentence frames on the IWB **III.** Web interactive tool, BBC Schools, "Changing Sounds" http://www.bbc.co.uk/schools/scienceclips/ages/5_6/sound_hearing.shtml **IV.** Worksheet: completing sentences task ATTACHMENT 7	**I.** 15 min. **II.** 10 min. **III.** 15 min. **IV.** 10 min. **TOT.** 50 min.	**TOOL 1** Observing, questioning and recording learners during the activity **Type:** formative **Focus**: content and language **Assessed outcomes:** - can manipulate auditory material to understand how the pitch can be altered - can explain orally the correlation between string length and pitch

- To enhance comprehension of subject content by means of an interactive e-learning tool - To recall prior vocabulary knowledge - To introduce new vocabulary items - To introduce a new language structure to express conditions	the rubber bands, guided by teacher questions, in order to focus on the correlation between rubber bands length and sound's pitch; key words are displayed in the IWB to support learners' production in the target language (e.g. *rubber band, long/short, longer/shorter, sound, higher/lower*); code-switching is also allowed **III.** The teacher shows on the IWB a web interactive e-tool which allows to experiment virtually how in a string instrument the pitch of the sound can be altered by changes in string length; learners, one at a time, try and use the e-tool on the IWB; a language structure is introduced to express correlations between changes in string length and sound's pitch (*If the string gets shorter, the sound gets higher/ If the string gets longer, the sound gets lower*). Learners are invited to follow the provided model sentence to tell	**Functions** Describing and comparing things according to given criteria Expressing changes and correlations **Teacher talking** *Put the rubber bands on the cardboard boxes. Pluck them like guitar strings. Pay attention to the pitch of the sounds. Put the ruler on the box like a bridge. Shorten the rubber bands with the ruler. How is the pitch now? Higher? Lower? What is the correlation between shorter/longer strings and pitch of the sound?*				**TOOL 2** Completing sentences task **Type**: formative, performance assessment **Focus**: language and content **Assessed outcomes:** - can use correctly topic key words in written form - can understand and explain the correlation between the pitch of sound and the string length in a string instrument

		the correlations between pitch and string length experimented with the e-tool **IV.** Task: learners complete sentences in written form about what they have learned ATTACHMENT 7					
5 **Pitch of Sound and Glass Percussion (with cross-curricular links to science)**	- To involve learners in handling realia and experimenting - To stimulate HOTS (applying prior concepts and correlations to make predictions) - To promote inferences from observation and manipulation - To promote the skill of ranking sounds according to their pitch (from lowest to highest and vice-versa) - To activate prior knowledge in vocabulary and subject concepts - To introduce a new language form: superlative adjectives (*highest/lowest*) - To show how everyday-objects,	**I.** The learners are invited to observe two drinking glasses with same shape and different size. Without touching or hitting them, but thinking about the previous experiences with rubber bands and strings, pupils are encouraged to make predictions about which one of the glasses will produce the higher- and which one the lower- pitched sound; key words and sentence frames are provided on the IWB to enable pupils to express their predictions (*Glass A/B ....will produce ...; glass, smaller/larger, higher/lower sound*). Each pupil is encouraged to express his own prediction; the	**Vocabulary** Revisited: *high/low, sound, wood stick, produce, water* New: *glass, small/large, hit, bottle, blow, fill, empty/full* **Structures** 'Will' prediction sentence: *The smaller/larger glass will produce the higher/lower sound* Comparative adjectives Superlative adjectives: *smallest/largest; from lowest to highest* **Functions** Predicting outcomes Correlating changes of size to variations of sound's pitch Reporting experiment outcomes	**I.** Whole class **II.** Whole class **III.** Group work **IV.** Group work **V.** Individual work **VI.** Whole class **VII.** Individual homework and report to the whole class	**I.** Two drinking glasses with similar shape and different size **II.** Idem plus a wood stick **III.** A4 sheets with sentence phrases **IV.** Drinking glasses with different sizes and shapes **V.** Worksheet (rank ordering and completing) ATTACHMENT 8 YouTube video: "*Glass Percussion Project excerpt*" https://m.youtube.com/watch?v=zYrKyvQyVkM **VI. VII-VIII.** Worksheet (Experiment "*Blowing into bottles*", instructions and form to fill out) ATTACHMENT 9	**I.** 10 min. **II.** 15 min. **III.** 10 min. **IV.** 10 min. **V.** 5 min. **VI.** 5 min. (**VII.** HOMEWORK 20 min.) **TOT.** 55 min.	**TOOL 1** Observing, questioning and recording learners during the activity **Type:** formative **Focus**: content and language **Assessed outcomes:** - can make accurate predictions about sound's pitch based on the size of the glasses - can express a 'will' prediction supported by a language frame - can use experience to get useful information - can infer conclusions from observation

used in an appropriate and creative way, can become musical instruments - To show an example of the musical art of glass percussion with a video	support of teacher with effective questioning could be needed to prompt learners' speaking in the target language and reasoning. **II.** The pupils are encouraged to hit the glasses with a wood stick to verify which one of them produces the higher/lower-pitched sound. After the test, learners are invited to confirm, or to revise, their predictions. (*Do you think your prediction was true or false?*) ***III.*** Group task: sentence jigsaw to summarize the conclusions of the previous activity about the correlation between glasses size and sound pitch (sentences to assemble: *The smaller glass produces the higher sound; The larger glass produces the lower sound)* **IV.** In groups, learners hit glasses with different sizes and shapes in order to rank them according to their pitch, some group from lowest to highest pitch,	**Teacher talking** *Which glass will produce the higher/lower sound? Think about the rubber bands. What do you predict? Was your prediction right/wrong? What is the correlation between size and pitch? Order the glasses from the lowest to the highest sound's pitch they produce.*				- can rank sounds according to their pitch **TOOL 2** Task: rank ordering and completing: **Type:** formative, peer assessment **Focus**: language and content **Assessed outcomes:** - can rank the glasses according to their pitch (size) applying previous concepts - can use correctly in written form the superlative adjectives **TOOL 3** Homework: experiment (blowing into bottles) and oral report about the outcomes **Type:** formative **Focus:** content and language **Assessed outcomes:** - can follow given instructions to carry out a simple

		some other from highest to lowest. Then each group execute the 'scale' created. PICTURE F **V.** Individual task: number pictures of glasses with different sizes, ordering them in rank according to the sound's pitch they are supposed to produce (from lowest to highest), based on their Size. ATTACHMENT 8 **VI.** YouTube video: *"Glass Percussion Project excerpt"* **VII.** Optional homework: Blowing into Bottles Experiment. ATTACHMENT 9 **VIII.** Optional, for more capable learners: report orally on the outcomes of the experiment carried out at home, supported by the filled out form (which provides drawings, key-words, model sentences and language frames). ATTACHMENT 9				experiment with everyday-objects - can get and record information (in a given form) trough observation and manipulation - can report on the outcomes of the experiment using key-words and sentence-frames

6 Summary of Sound Qualities	- to recall, revisit and summarize prior content and language about the sound qualities - to promote links between concepts and categorize them related to the topic (the qualities of the sound) building a mind map - to recall, revisit and summarize the concepts related to the topic "Sound Qualities" by comparing and describing sounds according to their different qualities (putting marks in a lateral key table) - introduce a new language form to give examples (*such as…*)	**I.** Develop together a mind map about all the sound qualities which have been learnt in the music course PICTURE G (see Presentation, Visual Organisers) **II.** Task: the learners in pairs listen to sounds and describe them following a lateral key table, according to three sets of opposite criteria: short/long/intermittent (sounds' duration), soft/loud (loudness) and low/high (pitch) ATTACHMENT 10 **III.** Game "Guess the Sound": learners, one at a time, describe sounds according to their duration, loudness and pitch, supported by the previous compiled lateral key "*A ….., ….. and … sound such as… Guess!*" The others try one at a time to guess the sound asking: *"Such as a …?" "Yes, your turn!/No, sorry"*, and so on (language frames are displayed on the IWB)	**Vocabulary** Revisited: *duration, long/short, intermittent, loudness, loud/soft, pitch, high/low, alarm clock, lion, ship siren, triangle, didgeridoo, drum, …* New: *bass drum* **Structures** *Sound can be …, or …. A …, … and … sound such as …* *(e.g. A long, soft and low sound, such us…) Guess! Such us the …?* *Yes, your turn!/ No, sorry* **Functions** Generalizing about how a sound can be. Comparing and describing sounds according to their duration, loudness and pitch. Giving examples ('such as') **Teacher talking** *How can be sound?* *'Long' or 'short' is about duration of sound.* *'Soft' or 'loud' is about loudness of sound.* *Is it high or low? Such as? Give an example of a sound such as the one described by …*	**I.** Whole class **II.** Pair work **III.** Whole class	**I.** Mind map drawn and written by learners and teacher on the IWB PICTURE G **II.** Worksheet: lateral key ATTACHMENT 10 **III.** Language frames on the IWB	**I.** 20 min. **II.** 15 min. **III.** 20 min. **TOT.** 55 min.	**TOOL 1** Observing, questioning and recording learners during the activity **Type:** formative **Focus**: content and language **Assessed outcomes:** - can recall prior subject concepts and vocabulary to describe sounds - can sort and describe sounds according to their qualities (duration, loudness and pitch) **TOOL 2** Task: mark the right sound qualities (according to (duration, loudness, pitch) in a lateral key **Type:** formative, pair task, performance assessment **Focus:** content and language **Assessed outcome:** can identify and describe qualities (duration, loudness and pitch)

7 **Final Test**		**I.** The teacher displays the test screenshot on the IWB and read its text aloud, inviting the learners to follow the teacher reading with his eyes on the board. The teacher paraphrases and explains with gestures sentences which could be difficult. Then learners are invited to ask for clarification, if needed, about the instructions and the task types of the test (not about questions content or to elicit information for the answers) **II.** The teacher hands out the test worksheets; learners are invited to read them silently and, if needed, ask for further clarification (about the task types and the related instructions) **III.** As all the learners' questions are clarified,		**I.** Whole class **II – IV.** Individual work		**I-IV.** 20 minutes	**TOOL ATTACHMENT 11** **Type:** summative **Focus:** content and language (receptive skills) **Assessed outcome:** - can identify the pitch of sounds; - can rank sounds according to their pitch; - can predict correlations between sound's pitch and properties of sounding objects (e.g. the length of metal bars in a metallophone)

		they are informed about the time available to complete the test and the test gets started. **IV.** During the test execution, learners are obviously not allowed to talk; they can though raise their hand to ask for clarification or help. Updates about the time remaining are given by the teacher toward the end of the test session; extra time, translation and prompts can be allowed for less able learners if required					

References

Audio clips: Freesound.org

"Changing Sounds"
http://www.bbc.co.uk/schools/scienceclips/ages/9_10/changing_sounds.shtml

"The High and Low Game - The Children's Music Workshop"
https://m.youtube.com/watch?v=KSEojtRAoHw

"Rika Alis Plays Aboriginal Eucalyptus Didgeridoo"
https://youtu.be/JEgXAu30yuY

"Glass Percussion Project excerpt"
https://m.youtube.com/watch?v=zYrKyvQyVkM

Pictures

Attachment 1

Touch toe https://c1.staticflickr.com/5/4051/4307527365_5153892743_b.jpg

Touch sky https://c.pxhere.com/photos/dc/55/hand_sky_clouds_blue-1019662.jpg!d

Attachment 2

Alarm clock https://cdn.pixabay.com/photo/2016/03/31/19/19/alarm-1294909_960_720.png

Piccolo https://upload.wikimedia.org/wikipedia/commons/b/b6/Piccolo.jpg

Samba whistle https://images-na.ssl-images-amazon.com/images/I/51btYsFm6UL._SY355_.jpg

Lion https://cdn.pixabay.com/photo/2016/10/12/14/59/lion-1734800_960_720.png

Contrabass https://upload.wikimedia.org/wikipedia/commons/5/53/Contrabass_%28PSF%29.png

Bell https://www.publicdomainpictures.net/pictures/190000/velka/school-12.jpg

Triangle
https://upload.wikimedia.org/wikipedia/commons/4/40/Triangle_hg.jpg

Ship siren
https://cdn.pixabay.com/photo/2016/03/31/19/33/sea-1295114_960_720.png

Thunder drawing
https://cdn.pixabay.com/photo/2013/07/12/15/23/thunderstorm-149830_960_720.png