

Build Your Instrument

Then 4 don't show up below

Why: Building your own instrument will combine what you have learned about the four Properties of sound (Pitch, Intensity, Timbre, and Duration) and apply it to the making of an instrument. Other areas this activity will help you in your future musical career are: Instrument building and design, Instrument repair, composing (knowing the range and characteristics of the instruments you write for), and acoustics.

Design:

1. You can use any materials to build your instrument.
2. Your instrument can be but not limited to the three main types:
 - A. Wind Instrument (vibration is caused by a column of air)
 - B. Stringed Instrument (vibration is caused by the movement of a string)
 - C. Pitched Percussion (vibration is caused by striking the vibrating body)
3. You will need to use the three qualities of instrument production:
 - A. A vibrating body
 - B. A resonating body
 - C. A method to control the pitch
4. Your instrument needs to be able to play at least one octave, divided into increments of your choice.

Rubric Points:

1. You will be able to identify and discuss the vibrating body used to produce the sound on your instrument.
2. You will be able to identify and discuss the resonating body used to amplify the sound on your instrument.
3. You will be able to produce a sound on your instrument and demonstrate the octave range and increments you chose to use for your instrument.

Timeline:

1. April 11, 12, 13. Design your instrument. Make drawing and list of materials needed.
2. April 14, 15. Materials available for use in class. Initial assembly begins.
3. April 18, 19, 20. Continue assembly, refinements, changes in design.
4. April 21. Presentation of instruments in class.
5. May 10. Instruments will be on display at the Spring Band/Choir Concert.

Market your instrument. Who would want it? When would it be used? How much would it cost?

These two don't match. In them up.

provide some examples to help spark design ideas

Write about it provide

a script for the display

Play it at the concert

RubiStar Rubric Made Using:
RubiStar (<http://rubistar.4teachers.org>)

Designing and Making An Instrument : Music Theory I

Teacher Name: **Jim Edgeton**

Student Name: _____

CATEGORY	4 - Above Standards	3 - Meets Standards	2 - Approaches Standard	1- Below Standard
Drawing	Provided an accurate, easy-to-read drawing with labels that included the main parts of the instrument. The drawing was done prior to construction.	Provided an accurate drawing with labels that included the main parts of the instrument. The drawing was done prior to construction.	Provided an accurate, easy-to-read drawing with labels that included the main parts of the instrument. The drawing was done during the construction process.	No drawing was provided or it was seriously incomplete.
Construction Materials	Appropriate materials were selected and creatively modified in ways that made them even better for the purpose.	Appropriate materials were selected.	Most of the construction materials were appropriate, but 1-2 were not.	Construction materials were not appropriate for the purpose.
Quality of Sound	Instrument offers a wide dynamic and/or tonal contrast.	Instrument offers some dynamic and/or tonal contrast.	Instrument offers little variety in sound.	Instrument offers no variety in sound.
Critical Attributes	Student can accurately state whether this is a Wind, stringed, or pitched percussion instrument and point out several features that make it fit in that family.	Student can accurately state whether this is a Wind, stringed, or pitched percussion instrument and point out a few features that make it fit in that family.	Student can accurately state whether this is a Wind, stringed, or pitched percussion instrument.	Student cannot determine what type of instrument s/he built.
Demonstration	Presenter speaks loudly and clearly. Instrument is visible to class and its use demonstrated. The instrument is named and the process for making it is described clearly.	Instrument is shown to class and its use demonstrated. The instrument is named and the process for making it is described clearly. It was hard to hear the presenter.	Instrument is shown to class and its use demonstrated. The instrument is named and the presenter describes a few of the steps of making it.	Instrument is shown to class and is named. The student cannot describe the process used to make it OR cannot demonstrate it.

Date Created: Apr 03, 2011 07:10 pm (CDT)

Copyright © 2000-2007 Advanced Learning Technologies in Education Consortia ALTEC

To view information about the Privacy Policies and the Terms of Use, please go to the following web address:
<http://rubistar.4teachers.org/index.php?screen=TermsOfUse>