Episode 1
The Woodwind Family

Instrument pitch and performance

OVERVIEW

Instruments are grouped into families depending on how they are made and played. The instruments of the woodwind family were originally made of wood with the sound produced with air or wind, thus resulting in the clever name, woodwind. In observance of National “Take-a-Woodwind-to-Work” Week, Quaver welcomes a woodwind quintet to the shop. Featuring the primary woodwind instruments, he explores their unique characteristics including range, timbre, pitch, and technique.

LESSON OBJECTIVES

Students will learn:
- The characteristics of the five primary woodwind instruments: piccolo, flute, oboe, clarinet, and bassoon.
- The different ranges, timbres, and sounds of each instrument.
- The three techniques used to play woodwind instruments.
- The unique and blended timbre, range, and sound of a woodwind quintet.

Vocabulary
- Range
- Timbre
- Single reed
- Double reed
- Technique*

* concepts included in the Teacher Guide, but not in the DVD
Unit 2 Instruments & Ensembles

1 Noting the ranges of woodwind instruments using the Range-O-Meter 3000

Bassoon, piccolo, oboe, flute, and clarinet are introduced and their ranges demonstrated.

2 Three ways to play woodwind instruments

The three primary techniques of sound production are presented: blowing across a hole, through a single reed, and through a double reed.

3 Weatherman Dusty Storm forecasts the playing of a clarinet

Air travels through a woodwind instrument producing vibrations. Pitch variations are created when holes are covered and uncovered.

4 Distinguishing features of the piccolo, flute, oboe, clarinet, and bassoon

Although they are classified as woodwinds, each instrument produces a unique spectrum of sound.

5 Music: Bach's Ario, followed by The Woodwind Jam

The woodwind family makes music together by utilizing its different ranges and timbres to complement each other.

Materials Needed
- Blades of grass
- Disinfectant wipes
- Straws
- Scissors

Complete details at QuaverMusic.com

Key Scenes

1 Noting the ranges of woodwind instruments using the Range-O-Meter 3000

Bassoon, piccolo, oboe, flute, and clarinet are introduced and their ranges demonstrated.

2 Three ways to play woodwind instruments

The three primary techniques of sound production are presented: blowing across a hole, through a single reed, and through a double reed.

3 Weatherman Dusty Storm forecasts the playing of a clarinet

Air travels through a woodwind instrument producing vibrations. Pitch variations are created when holes are covered and uncovered.

4 Distinguishing features of the piccolo, flute, oboe, clarinet, and bassoon

Although they are classified as woodwinds, each instrument produces a unique spectrum of sound.

5 Music: Bach's Ario, followed by The Woodwind Jam

The woodwind family makes music together by utilizing its different ranges and timbres to complement each other.

Music Standards in Lesson

2: Playing instruments*
3: Improvising melodies
6: Listening to, analyzing, and describing music
8: Understanding the relationship between music and the other arts
9: Understanding music in relation to history, style, and culture

Lessons Intro

Introducing the episode

Bring in blades of long grass for all your students. Demonstrate how to create a sound by placing the blades tightly between your thumbs and blowing. Let students experiment; see if they produce different pitches.

Next, have them try to produce sounds with straws. Show them how to cut “V” shapes into one end as shown here. Demonstrate production of sound by pursing your lips and blowing. Have students experiment to see what different sounds they can make. (Instruct them to save their straws for a later activity.)

Announce that they have created their own woodwind instruments! Forcing air through pipes is the fundamental technique of playing woodwind instruments. This episode introduces them to more highly developed cousins in the woodwind family.
Discussion Points

- What is the highest pitched instrument in the woodwind family?
  - *piccolo*
- What is the lowest pitched instrument in the woodwind family?
  - *bassoon*
- Which woodwind instrument has the greatest range (from low to high)?
  - *clarinet*
- What are the three ways to play a woodwind instrument?
  - *blowing across a hole, blowing through a double reed, and blowing through a single reed* 

Woodwind Orders

Purpose: Recognizing woodwind instruments

Cut out the flashcards of the *piccolo*, flute, oboe, clarinet, and bassoon and place them at different points in the room. Play each track and ask students to move to the flashcard representing the instrument they think they have heard. Invite them to describe the sound made by that instrument. Repeat the game until they can recognize the instruments immediately.

- **Track 1 Piccolo Flourish** - *piccolo*
- **Track 2 Bassooner the Better** - *bassoon*
- **Track 3 Clarilong** - *clarinet*
- **Track 4 Fluturama** - *flute*
- **Track 5 The Lonely Oboe** - *oboe*

Woodwind Mix-Up

Purpose: Recognizing woodwind instruments through listening

Place your instrument flashcards at the front of the class. Play **Triple Fun (Track 6)**, which features the flute, followed by the bassoon, and finally the clarinet. Have a volunteer place the flashcards in order to correspond with the music. Listen again to the track to check the volunteer’s answer.

Then play **Mix Up (Track 7)**, which features the *piccolo*, oboe, and clarinet. Finally, play **Jam Jam (Track 8)**, presenting the bassoon, piccolo, and flute.

*Note: Each successive track featuring the three instruments becomes progressively harder. This game could be played in teams or groups with each group having a set of flashcards.*
Straw Orchestra
Purpose: How woodwind instruments produce pitch
Using the straws made earlier, identify your three best woodwind players. Shorten one of their straws to 7” by cutting off the bottom of the straw. Ask the students what happens to the pitch (it is raised). Cut another of the straws to 6” and another to 5”.

The result will be three different notes ascending in pitch. Using these three straws as a standard, split your students into 7”, 6”, and 5” groups, to create your ‘student straw orchestra’.

Peter and the Wolf
Purpose: Analyzing a famous piece that uses the woodwind family brilliantly
Serge Prokoviev, a famous Russian composer, wrote his masterpiece Peter and the Wolf in 1936. He cleverly assigned each woodwind instrument to portray a different character in the story. The duck is represented by the oboe, the bird by the flute, the cat by the clarinet, and the grandfather is played by the bassoon. Non-woodwind instruments are also used: strings portray Peter, the horns represent the wolf, the timpani denotes the hunters. Find a recording on the internet of Peter and the Wolf. Ask the students to speculate why Prokoviev chose those particular instruments for those characters.

VIDEO REPLAY
Woodwind Jam
Purpose: Seeing a woodwind quintet perform
Look again at the piece played by the woodwind quintet Woodwind Jam (Track 9). Observe how the sounds of the instruments blend together. Notice also how the musicians hold and play their instruments. This is called technique. Which one looks most difficult to play? Why?

WEB ACTIVITIES

Metro / Style Venues
Students can visit numerous music style venues including the Classical Music Hall. Observe how the orchestra sections (or instrument families) are organized so that the overall sound is perfectly mixed and balanced. Listen to the music, noticing that the orchestra is an incredibly powerful musical team.

Shop / Phone Box
Travel back in time and learn how John Philip Sousa (the March King) incorporated several kinds of woodwind instruments into his compositions. For example, in The Stars and Stripes Forever, Sousa used flutes and piccolos to highlight the off beats, creating lots movement and excitement in the piece!
Woodwind Quiz

Listen to these five tracks, and ask students to write down the name of the woodwind featured on each track.

- **Track 10** Pixie Piccolo - piccolo
- **Track 11** Grandad - bassoon
- **Track 12** The Flying Cat - clarinet
- **Track 13** Fluty - flute
- **Track 14** Double Doboe - oboe
Woodwind Zoo

Purpose: Becoming better acquainted with woodwind instruments
If your friends or colleagues have woodwind instruments, ask them to join you in hosting a “musical petting zoo.” Discuss the intricacies of the keys, levers, and pads of each instrument.

Note: These devices allow the instrument to have a greater range, and it makes it easier for the player to quickly cover the holes without moving his or her hand position.

Allow students to come up one by one and try to play them. You will need some disinfectant wipes for this task.

My Unique Woodwind

Purpose: Thinking creatively about instruments
All instruments were invented. Ask students to invent their own unique woodwind instrument. It could be a cross between two other woodwinds such as a fluboe or a bassiccolo. Or it could be something completely original. What materials would be required to make it? Judging by the shape, would its range be low or high? What technique would be used to play it? Traveling with an instrument is really important; how would it be packed? How heavy would it be? Challenge the students to think about these issues.

Language Arts

The story of Peter and the Wolf features a narrator. Find a recording of the piece with the narration and play it for students. Ask them to notice how the music enhances the story and vice versa. Using The Chase (Track 15), ask students to come up with a story that matches the music.

Art

After listening to Peter and the Wolf, challenge half of your students to draw their ideas of what the wolf, cat, bird, hunters, the grandfather, and Peter look like. Instruct the other half to copy or draw different instruments from the piece. On a large display board pin up the characters linked to their respective instruments with colorful arrows. You could make this into a great classroom display about Prokoviev’s composition.
Featured Instruments

- Piccolo
- Recorder
- Flute
- Oboe

TEACHER NOTES

The Woodwind Family
TEACHER NOTES

Featured Instruments

- Clarinet
- Bassoon
- Bagpipes