



FEATURE

GOOD VIBRATIONS: A LOOK INSIDE THE PIANO

Meets National Core Arts Anchor Standards 5, 7, 9 and 10

OBJECTIVES

- Develop and refine artistic work for presentation (*Pr5*)
- Perceive and analyze artistic work (*Re7*)
- Apply criteria to evaluate artistic work (*Re9*)
- Synthesize and relate knowledge and personal experiences to make art (*Co10*)

MATERIALS

- *Music Alive!* magazines (Vol.39 No.6)
- Good Vibrations Packet
(available for download at musicalive.com)
- Computer or mobile device with Internet access

START

Ask your students to read “Good Vibrations: A Look Inside the Piano” on pages 10-13 before reviewing the words below. [This reinforces comprehension and vocabulary.]

DISTINCTIVE—characteristic of one thing

COMPLEXITY—a factor involved in a complicated process

MECHANICS—the machinery or working parts of something

DERIVE—base a concept on a logical extension or modification of

MONOCHORD—an instrument with a single string

RESONATE—be filled with a deep, full sound

ROBUST—strong and sturdy

ANATOMY—the bodily structure of an organism

ENHARMONIC—relating to notes that are the same in pitch though bearing different names (e.g. F sharp and G flat or B and C flat)

HOUSING—a rigid case that encloses a piece of moving or delicate equipment

SUSTAIN—cause to continue

SUSPEND—hang from somewhere

DAMPER—a pad that silences a piano string except when removed by a means of a pedal or by the note being struck

REGULATE—control or maintain the rate of a machine so that it operates properly

VARYING—differing in size, amount, degree or nature

DYNAMICS—the varying levels of volume of sound

PROJECT—cause a sound to be heard at a distance

DEVELOP

Ask students the following questions:

What type of instrument is a piano?

What other instruments are cousins of the piano?

Who invented the first instrument that qualified as a “piano?”

What was the first piano called?

How many different types of pianos are there and what are they called?

How many black keys are there on a standard grand piano?

White keys?

What are enharmonics and which keys represent them on a keyboard?

How many pedals are there on a standard piano?

Which pedal is used most frequently and what is its function?

What is the function of the holes in the back of a cast iron plate in a grand piano?

How are the lowest strings on a piano crafted differently from the higher ones?

What happens when you strike a key on a piano keyboard?

2. For further clarification, have students watch the two-part video series: “How Does a Grand Piano Work?” available at musicalive.com/learn-more. These videos provide a visual explanation of how a piano works, in even greater detail. Students will need this visual reference in order to complete the Good Vibrations Packet.

CLOSE

Have students complete the Good Vibrations Packet.

Activities include labelling the parts of a piano and answering a brief essay question. Collect packets for assessment.

ASSESS

Did the students read the article?

Did they answer the review questions?

Review answers of the Good Vibrations Packet. Did they answer each question fully and correctly?