

# ONLINE LESSONS

USING

# ZOOM

KATHLEEN'S PIANO STUDIO WILL BE USING THE ZOOM PLATFORM FOR ONLINE LESSONS. ZOOM IS EASY, SECURE, AND A RELIABLE PLATFORM TO USE FOR VIDEO CONFERENCING. AND ZOOM DOES NOT REQUIRE YOU TO SETUP AN ACCOUNT TO USE IT.

ALTHOUGH THIS IS A DETAILED WALK-THROUGH TO SHOW YOU HOW TO SET IT UP, USE IT, AND TROUBLESHOOT IT, THERE ARE REALLY JUST A FEW SIMPLE STEPS TO USING ZOOM.

1. AT YOUR LESSON TIME, RECEIVE AN EMAIL FROM KATHLEEN'S PIANO STUDIO.
2. CLICK THE LINK IN THE EMAIL TO OPEN THE LAUNCHER *(THE VERY FIRST TIME YOU USE ZOOM ON A DEVICE YOU WILL NEED TO DOWNLOAD THE LAUNCHER, BUT IT WILL AUTOMATICALLY OPEN FOR YOU EVERY TIME AFTER THAT.)*
3. ENJOY YOUR LESSON.

ZOOM IS MULTI-PLATFORM VIDEO-CONFERENCING SOFTWARE, AND CAN BE USED ON PC, LAPTOP, TABLET, OR PHONE. BUT THE RELIABILITY OF CONNECTION WILL VERY MUCH DEPEND ON WHAT YOU HAVE AVAILABLE FOR HARDWARE OR CHOOSE TO USE. ALTHOUGH KATHLEEN HAS INVESTED IN ENTERPRISE GRADE HARDWARE ON HER END, THE VIDEO AND AUDIO YOU EXPERIENCE AT YOUR END WILL BE LIMITED BY THE QUALITY OF HARDWARE AND CONNECTION YOU HAVE AVAILABLE.

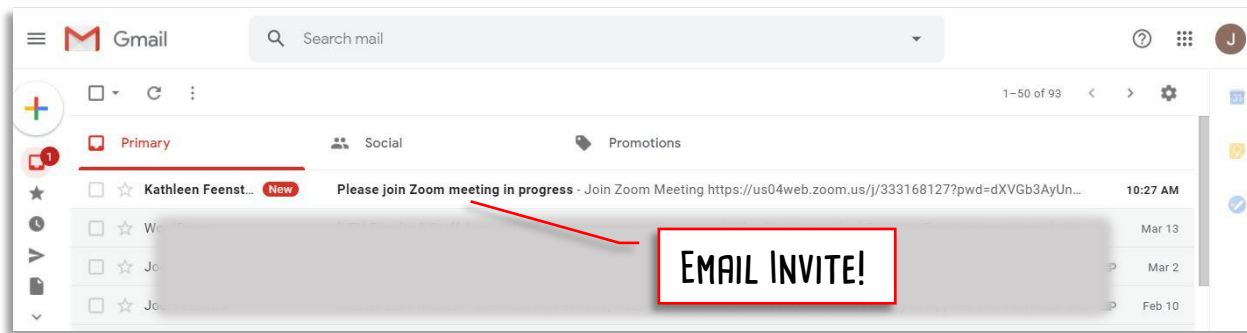
- BEST QUALITY - PC OR LAPTOP WITH HARDWIRED HIGH-SPEED INTERNET CONNECTION, AND DEDICATED WEB CAMERA, MICROPHONE, AND HEADPHONES
- MEDIOCRE QUALITY - LAPTOP OR TABLET WITH WEB CAMERA ON WI-FI WITH HEADPHONES.
- LOWEST QUALITY - PHONE ON WI-FI

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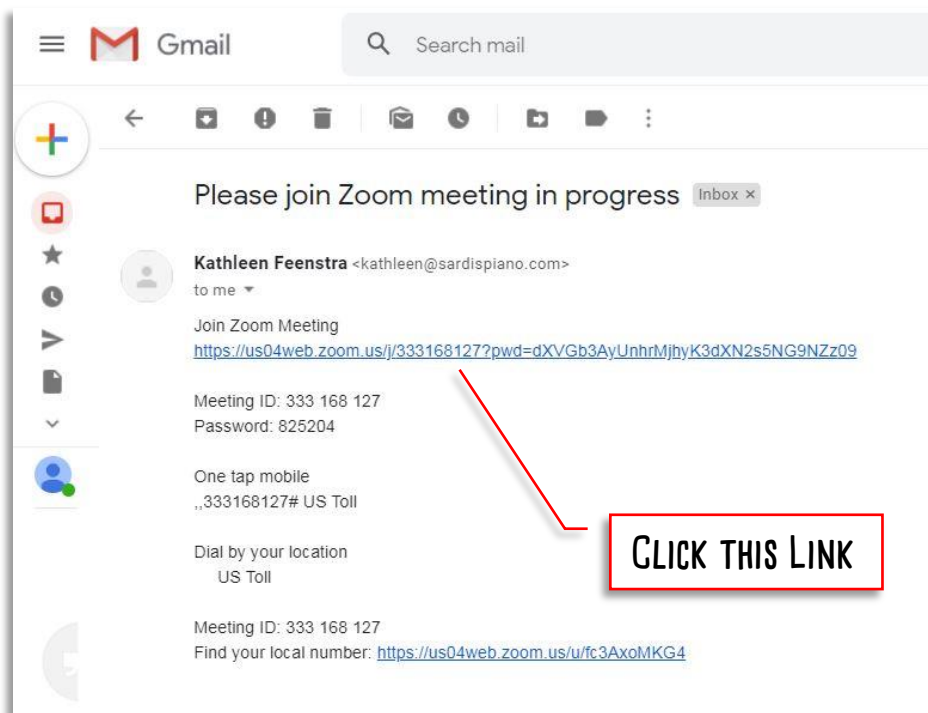
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# SECTION 1 - SETTING UP AND USING ZOOM FOR THE FIRST TIME (ON A WINDOWS PC OR LAPTOP)

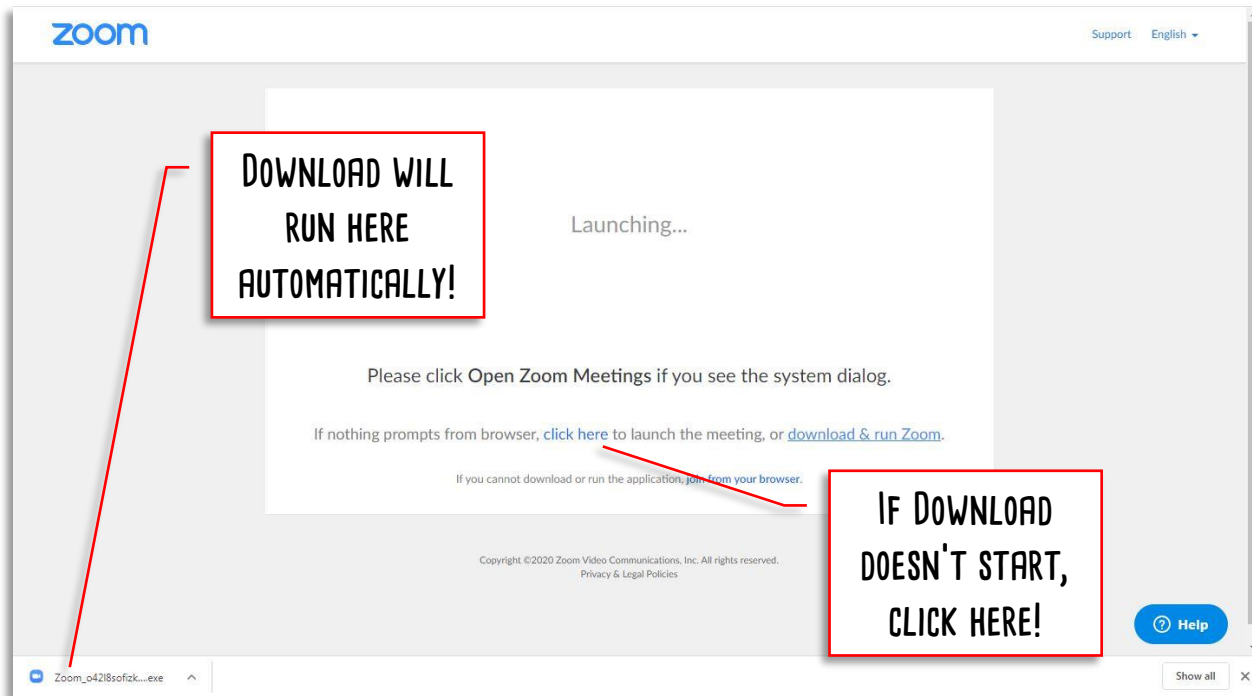
AT YOUR LESSON TIME, RIGHT AFTER KATHLEEN FINISHES LESSONS WITH THE PREVIOUS STUDENT, YOU WILL RECEIVE AN EMAIL.



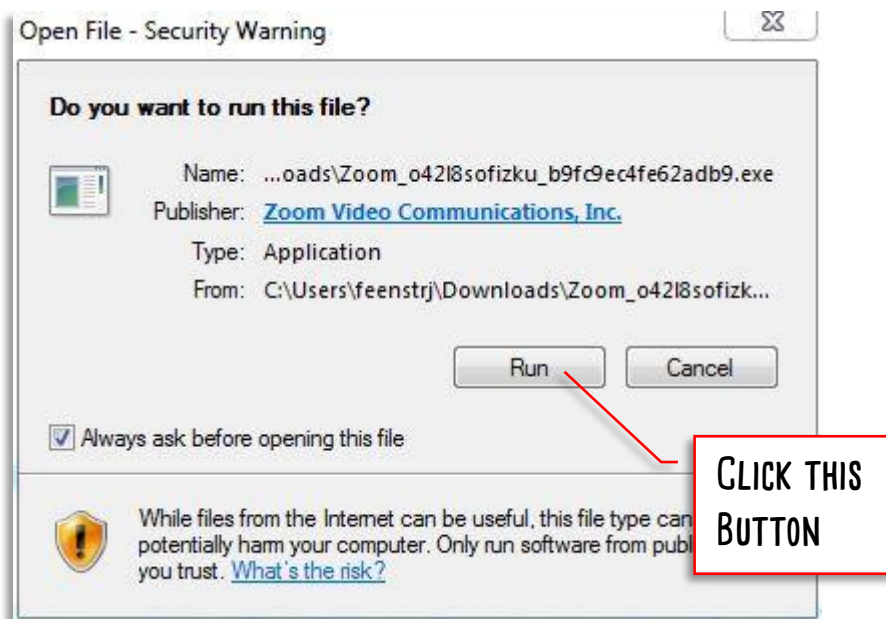
OPEN THE EMAIL AND CLICK ON THE LINK EMBEDDED IN IT.



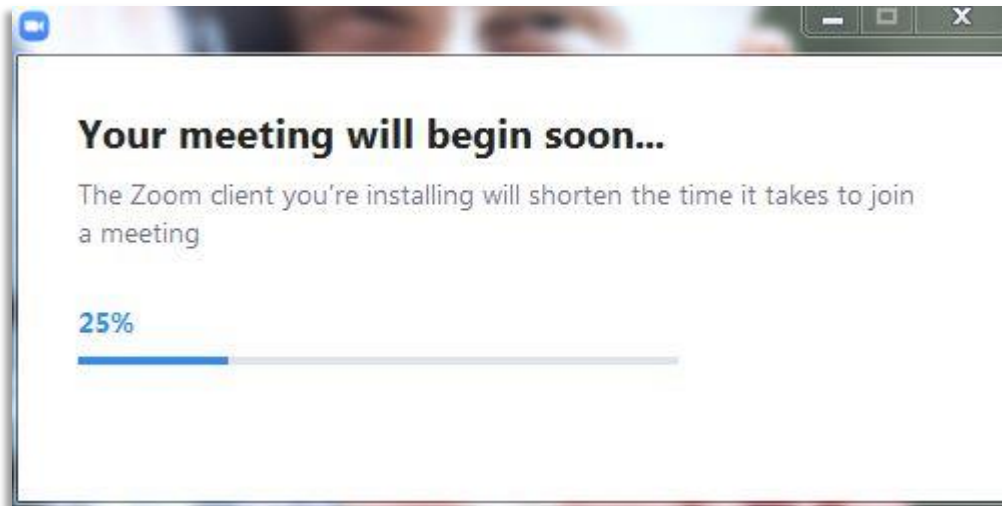
THE ZOOM LAUNCHER WINDOW WILL OPEN AND BEGIN TO DOWNLOAD.



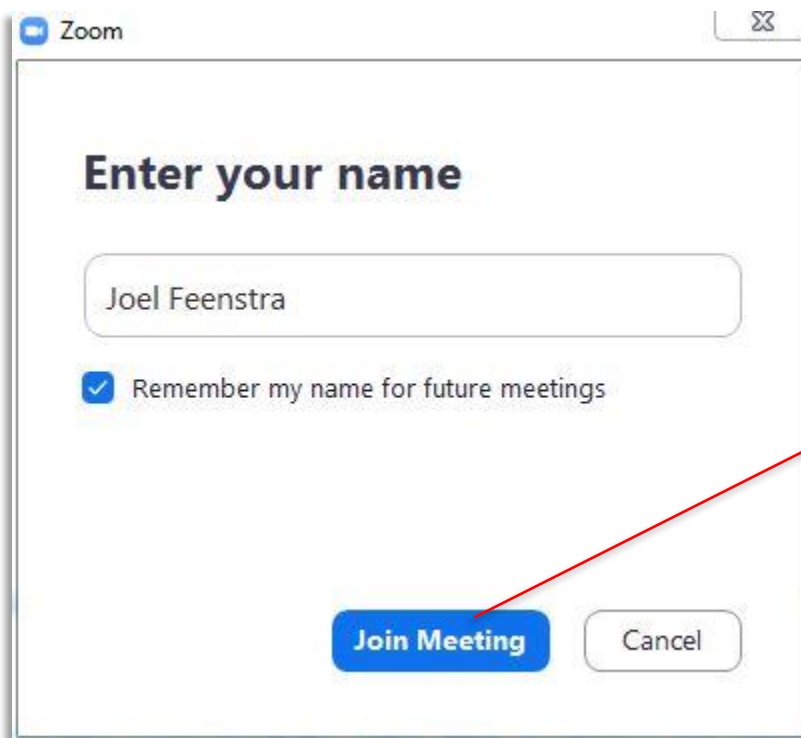
ONCE THE FILE HAS DOWNLOADED, DOUBLE-CLICK ON IT AND OPEN IT. A WINDOW WILL POPUP ASKING YOU IF YOU WANT TO RUN THE FILE. CLICK ON RUN.



AN INSTALL WINDOW WILL APPEAR, AND FINISH THE INSTALL. THIS TAKES ABOUT A MINUTE.

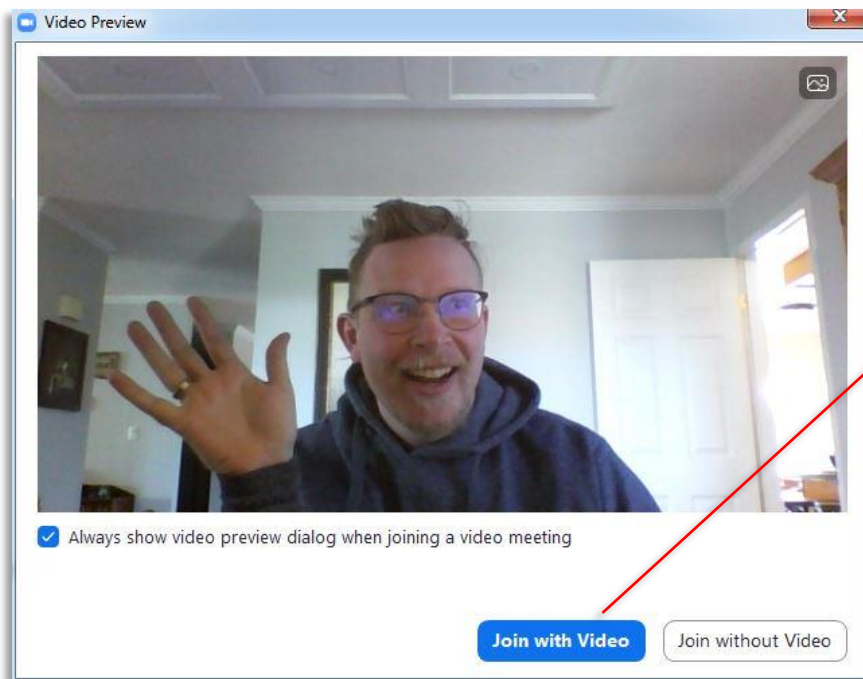


ONCE IT FINISHES THE INSTALL, IT WILL ASK YOU TO ENTER THE NAME THAT KATHLEEN WILL SEE ON HER COMPUTER. IF YOU SHARE LESSONS WITH A SIBLING, PUT IN BOTH YOUR NAMES! THEN CLICK JOIN MEETING.



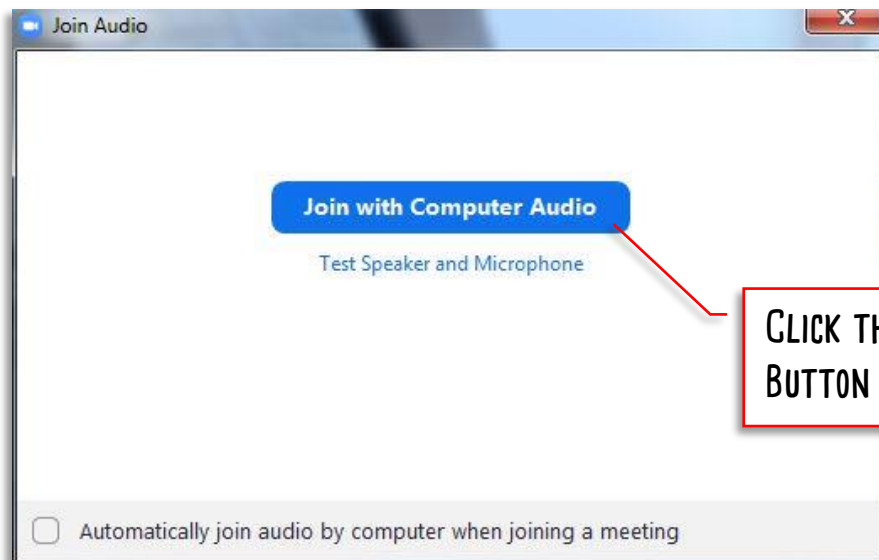
FILL OUT YOUR NAME AND THEN CLICK THIS BUTTON

A VIDEO PREVIEW WINDOW WILL THEN POPUP SHOWING YOU WHAT YOUR COMPUTER CAMERA IS SEEING. CLICK JOIN WITH VIDEO. THAT ALLOWS KATHLEEN TO SEE THE VIDEO FEED OF YOU AND YOUR PIANO.



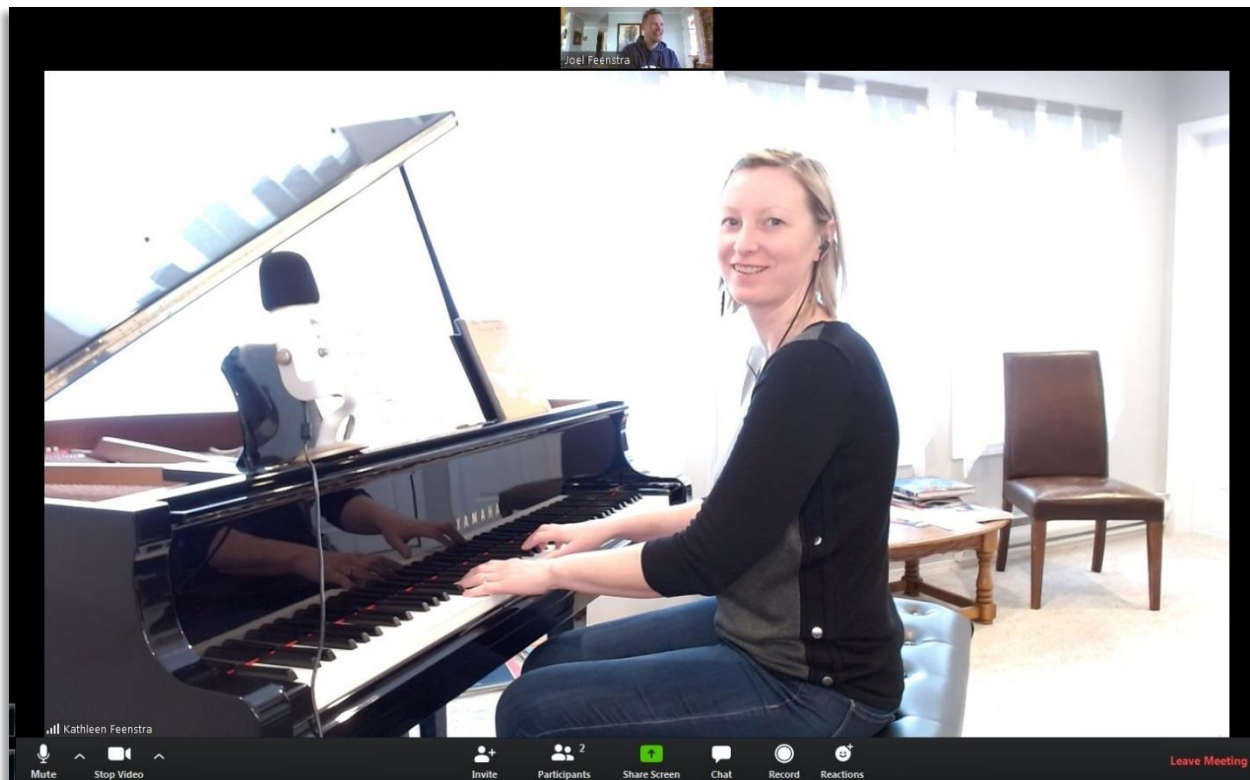
CLICK THIS  
BUTTON

NEXT A JOIN AUDIO WINDOW WILL THEN POPUP ASKING YOU TO JOIN WITH AUDIO. CLICK JOIN WITH COMPUTER AUDIO. THAT ALLOWS KATHLEEN TO HEAR THE AUDIO FEED OF YOU AND YOUR PIANO.



CLICK THIS  
BUTTON

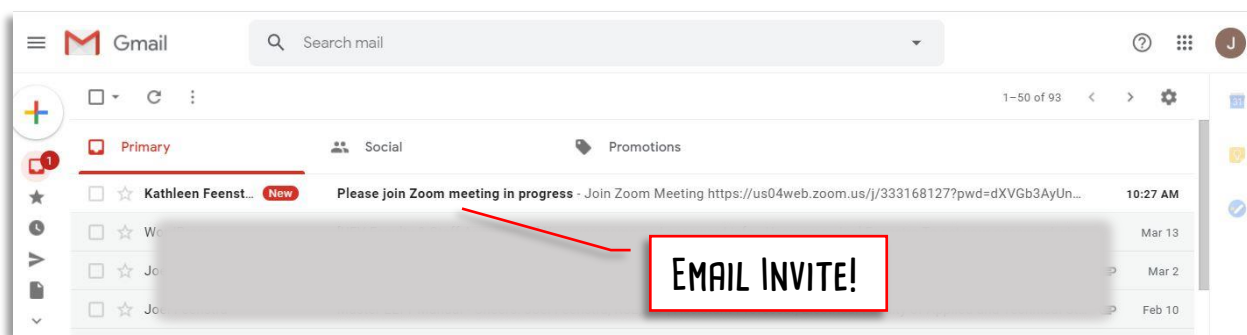
NOW YOU ARE IN AND READY TO GO! YOU SHOULD SEE KATHLEEN AT HER PIANO, AND RIGHT ABOVE THE SCREEN A MINI-SCREEN SHOWING WHAT SHE SEES OF YOU!



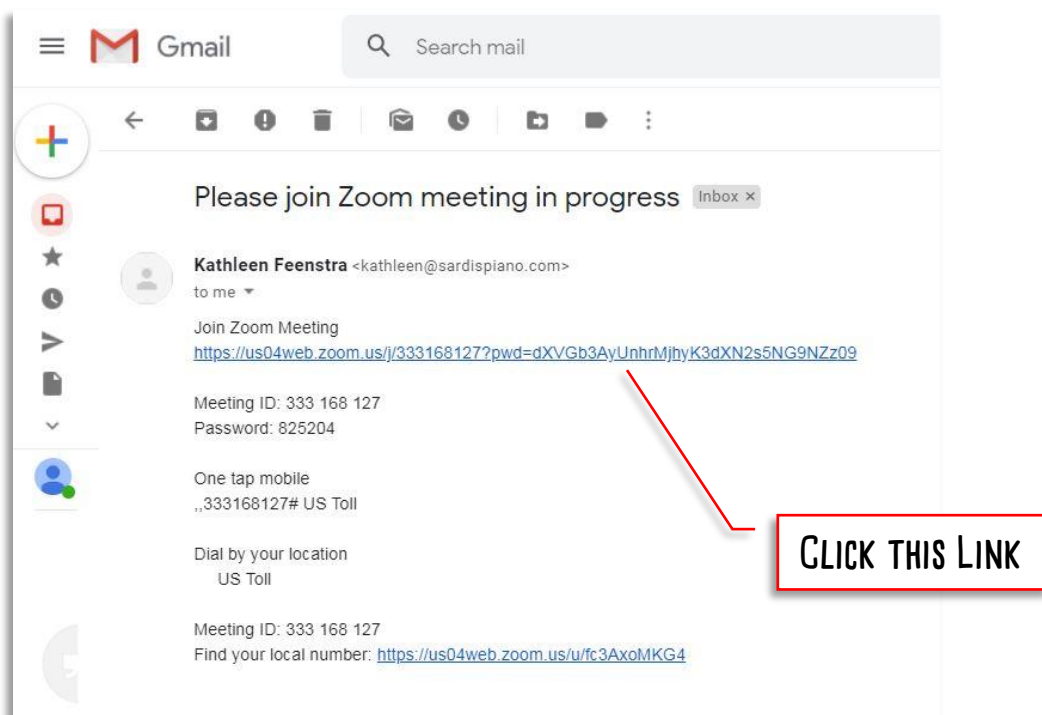
THERE ARE OTHER OPTIONS ALONG THE BOTTOM OF THE SCREEN, LIKE "INVITE", "PARTICIPANTS", "SHARE SCREEN", "CHAT", "RECORD", OR "REACTIONS". MOST OF THESE WILL NEVER BE NEEDED IN LESSONS, ALTHOUGH KATHLEEN MIGHT SOMETIMES USE THE "CHAT" FUNCTION TO WRITE OUT INSTRUCTIONS, SONG NAMES, OR OTHER INFORMATION THAT YOU NEED TO RECORD INTO YOUR LESSON BOOK.

## SECTION 2 - USING ZOOM TO JOIN A LESSON IF YOU HAVE ALREADY SET IT UP. (ON A WINDOWS PC OR LAPTOP)

AT YOUR LESSON TIME, RIGHT AFTER KATHLEEN FINISHES LESSONS WITH THE PREVIOUS STUDENT, YOU WILL RECEIVE AN EMAIL.

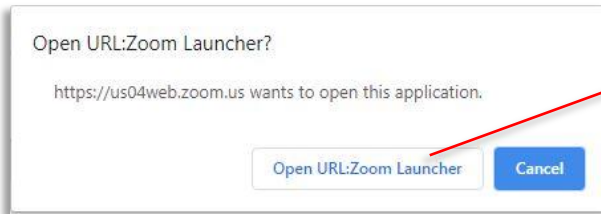


OPEN THE EMAIL AND CLICK ON THE LINK EMBEDDED IN IT.



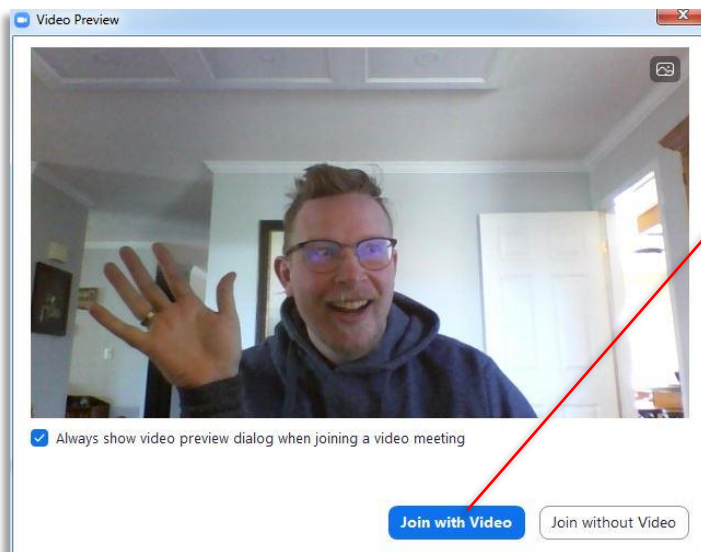


BECAUSE YOU HAVE ALREADY SET ZOOM UP IN A PREVIOUS LESSON, AN OPEN URL WINDOW WILL OPEN AND ASK TO PROCEED. CLICK THE "OPEN URL:ZOOM LAUNCHER" BUTTON. (IF YOU HAVE NEVER USED ZOOM BEFORE, THIS WOULD BE DIFFERENT AND YOU NEED TO FOLLOW THE INSTRUCTIONS IN SECTION 1 OF THIS GUIDE)



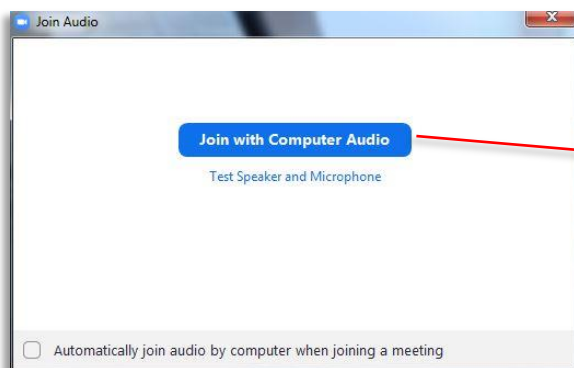
CLICK THIS  
BUTTON

A VIDEO PREVIEW WINDOW WILL THEN POPUP SHOWING YOU WHAT YOUR COMPUTER CAMERA IS SEEING. CLICK JOIN WITH VIDEO. THAT ALLOWS KATHLEEN TO SEE THE VIDEO FEED OF YOU AND YOUR PIANO.



CLICK THIS  
BUTTON

NEXT A JOIN AUDIO WINDOW WILL THEN POPUP ASKING YOU TO JOIN WITH AUDIO. CLICK JOIN WITH COMPUTER AUDIO. THAT ALLOWS KATHLEEN TO HEAR THE AUDIO FEED OF YOU AND YOUR PIANO.



CLICK THIS  
BUTTON

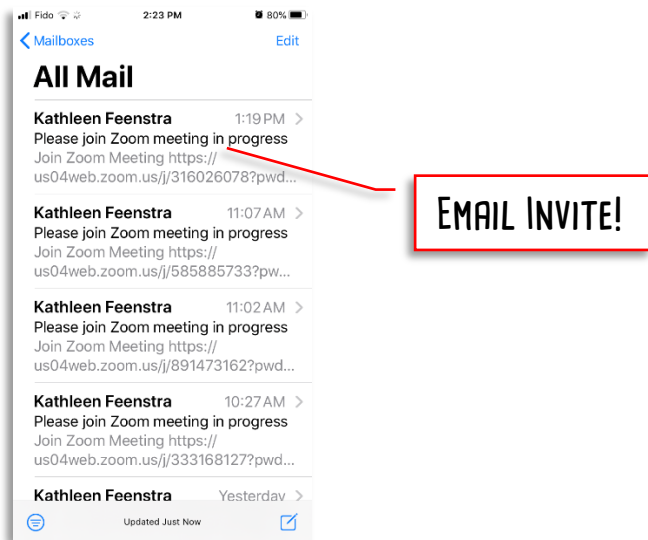
**NOW YOU ARE IN AND READY TO GO! YOU SHOULD SEE KATHLEEN AT HER PIANO, AND RIGHT ABOVE THE SCREEN A MINI-SCREEN SHOWING WHAT SHE SEES OF YOU!**



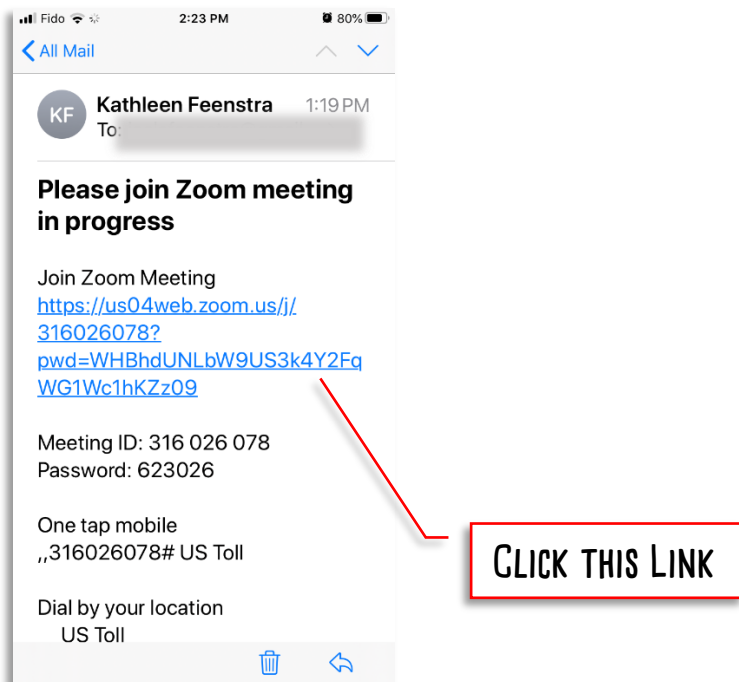
**THERE ARE OTHER OPTION ALONG THE BOTTOM OF THE SCREEN, LIKE "INVITE", "PARTICIPANTS", "SHARE SCREEN", "CHAT", "RECORD", OR "REACTIONS". MOST OF THESE WILL NEVER BE NEEDED IN LESSONS, ALTHOUGH KATHLEEN MIGHT SOMETIMES USE THE "CHAT" FUNCTION TO WRITE OUT INSTRUCTIONS, SONG NAMES, OR OTHER INFORMATION THAT YOU NEED TO RECORD INTO YOUR LESSON BOOK.**

# SECTION 3 - SETTING UP AND USING ZOOM FOR THE FIRST TIME (ON AN IPHONE OR IPAD)

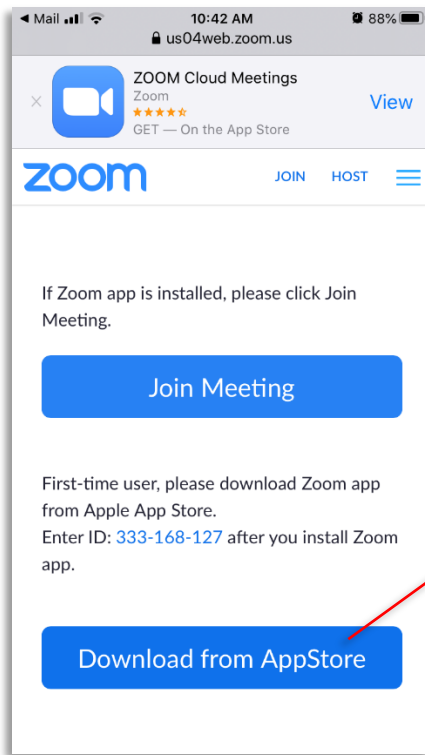
AT YOUR LESSON TIME, RIGHT AFTER KATHLEEN FINISHES LESSONS WITH THE PREVIOUS STUDENT, YOU WILL RECEIVE AN EMAIL LESSON INVITE TO YOUR DEVICE.



OPEN THE EMAIL AND CLICK ON THE LINK EMBEDDED IN IT.

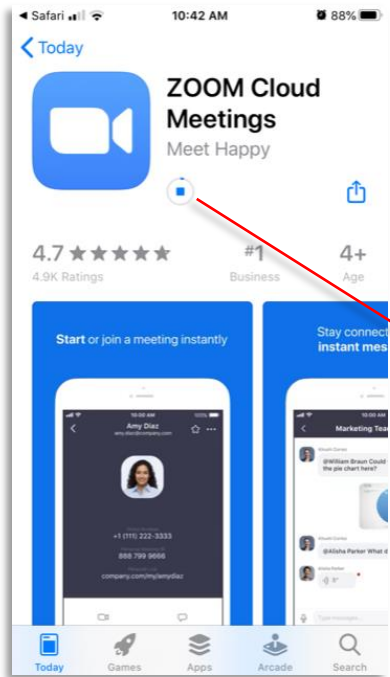


IF THIS IS YOUR FIRST TIME USING ZOOM ON THIS APPLE DEVICE, ZOOM WILL OPEN THIS WINDOW. CLICK ON THE DOWNLOAD FROM APPSTORE LINK.



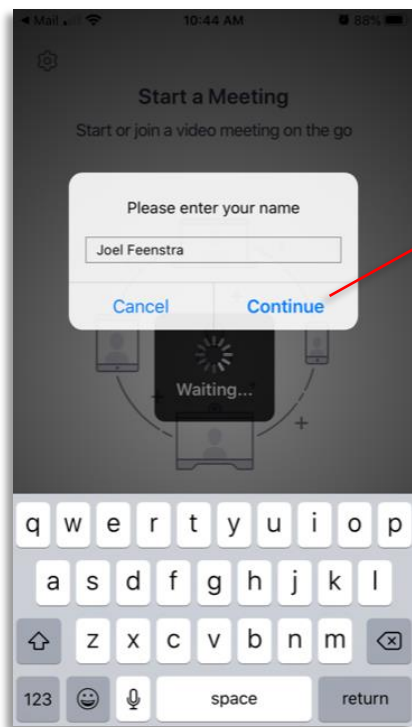
CLICK THIS LINK

THE LINK WILL BRING YOU TO THE APPSTORE. ONCE THERE DOWNLOAD AND INSTALL THE APP. IT IS FREE.



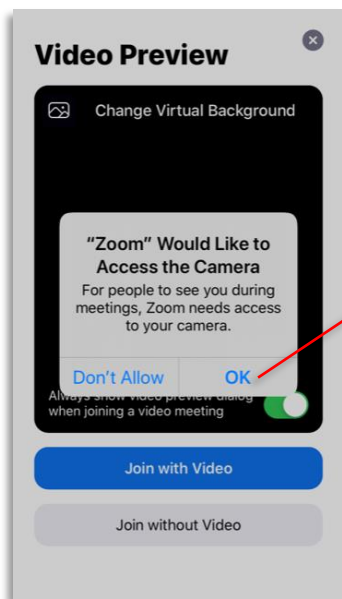
CLICK THE DOWNLOAD BUTTON AND WAIT FOR THE APP TO DOWNLOAD AND INSTALL

ONCE THE ZOOM APP HAS DOWNLOADED, IT WILL CONTINUE THE PROCESS OF JOINING THE MEETING. THE FIRST THING IT WILL PROMPT YOU FOR IS YOUR NAME. IF YOU ARE SHARING THIS WITH A SIBLING, PLEASE USE BOTH NAMES! ENTER THAT AND THEN CLICK CONTINUE.



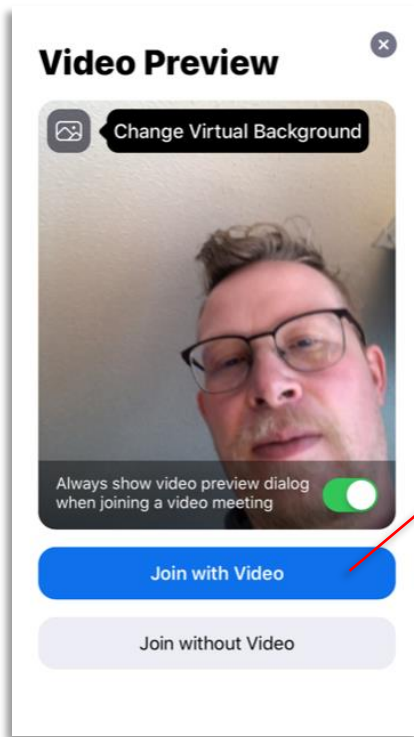
FILL OUT YOUR NAME AND THEN CLICK THIS CONTINUE

THE APP WILL THEN REQUEST ACCESS TO YOUR CAMERA. CLICK OK. IF ZOOM CANNOT ACCESS THE CAMERA, KATHLEEN WILL NOT BE ABLE TO SEE YOU AND YOUR PIANO THROUGH THE APP.



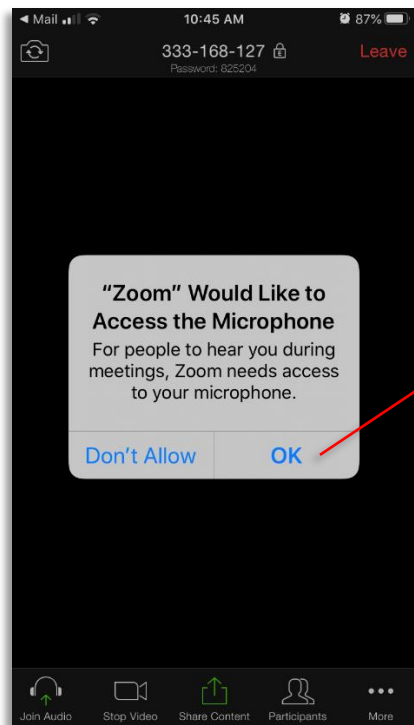
CLICK OK

NOW YOUR CAMERA IS SETUP. CLICK JOIN WITH VIDEO TO ALLOW KATHLEEN TO SEE YOU AND YOUR PIANO.



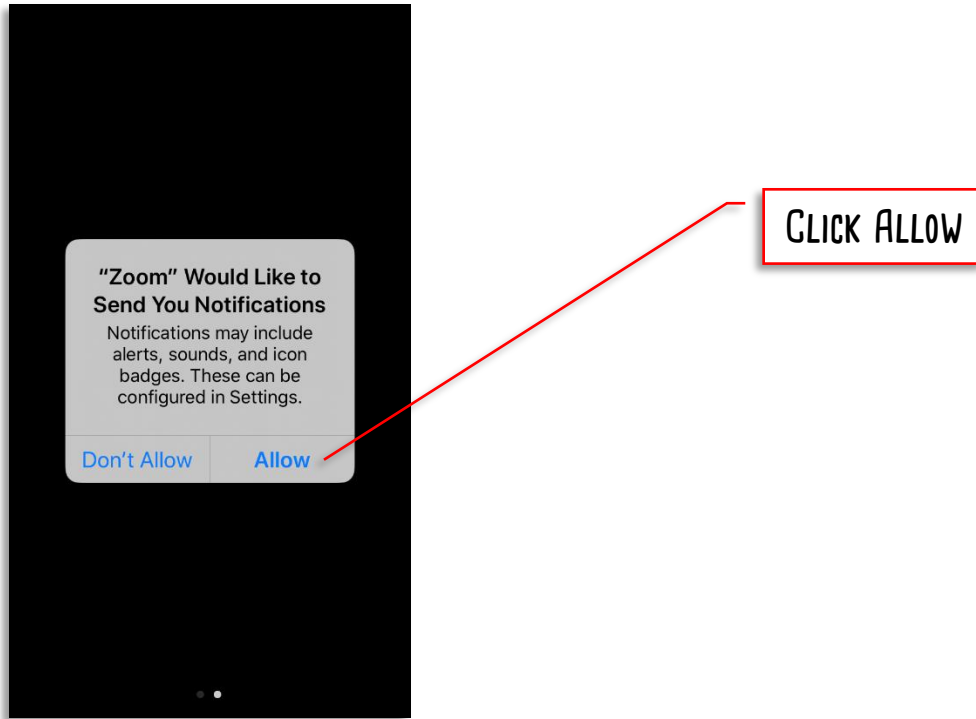
CLICK THIS BUTTON

THE APP WILL THEN REQUEST ACCESS TO YOUR MICROPHONE. CLICK OK. THAT WAY YOUR AUDIO FEED WILL BE ABLE TO BE SHARED THROUGH THE APP SO KATHLEEN CAN HEAR YOU AND YOUR PIANO.

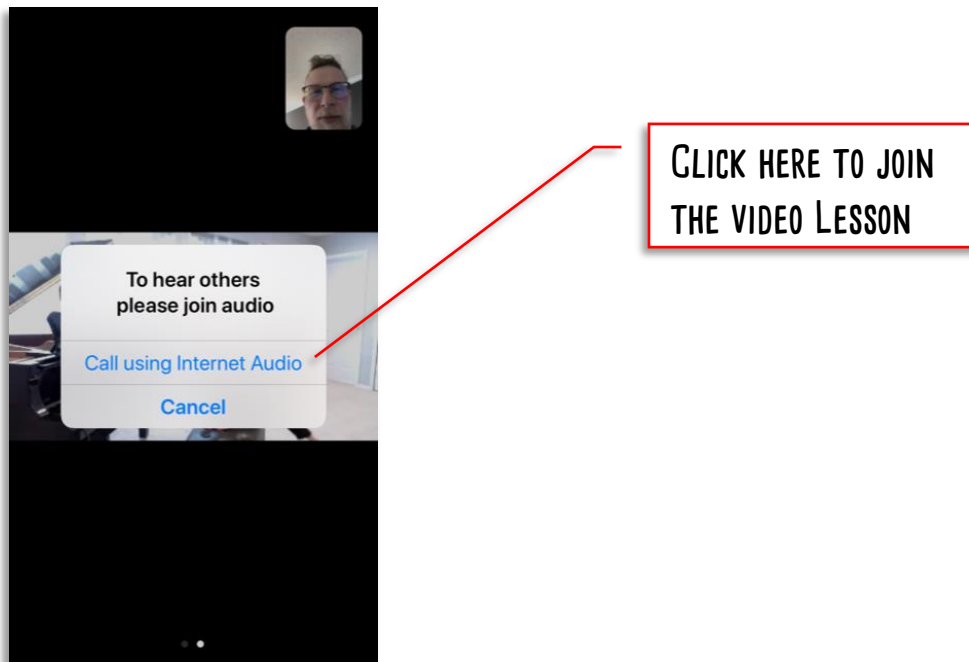


CLICK OK

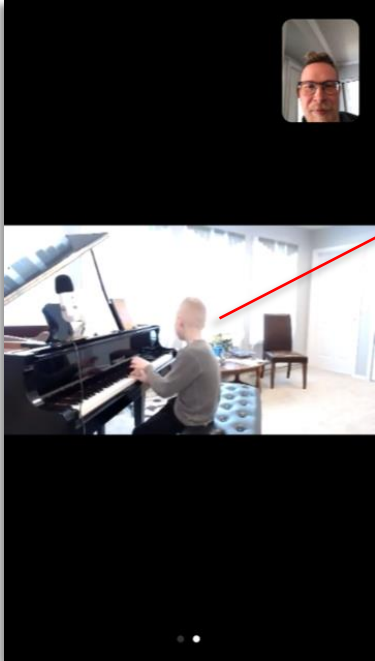
LAST OF ALL, THE APP WILL ASK TO BE ABLE TO SEND YOU NOTIFICATIONS. CLICK ALLOW, AS THEN ANY NOTIFICATIONS THAT KATHLEEN SENDS TO YOU THROUGH THE APP WILL BE DISPLAYED.



NOW YOU ARE JUST ABOUT IN. CLICK CALL USING INTERNET AUDIO TO JOIN THE LESSON. YOU SHOULD BE ABLE TO SEE AND HEAR KATHLEEN, AS WELL AS A THUMBNAIL PICTURE OF YOURSELF.



THAT'S IT. YOU ARE IN AND YOUR LESSON CAN BEGIN. AND NEXT TIME YOU TAKE A LESSON ONLINE, CLICKING ON THE EMAIL LINK WILL DIRECTLY TAKE YOU INTO THE LESSON IN THE APP.



THIS IS NOT KATHLEEN, BUT THIS IS WHERE YOU WOULD SEE HER AT HER PIANO!



# SECTION 4 - QUESTIONS AND TROUBLESHOOTING SOUND ISSUES

## WHY DON'T ALL MICROPHONES WORK FOR PIANO?

- MICROPHONES HAVE A "FREQUENCY RESPONSE", WHICH IS THE AUDIO FREQUENCIES THAT THEY PICKUP BEST. THE HUMAN VOICE CREATES FREQUENCIES BETWEEN 85 HZ TO 255 HZ. SO A MICROPHONE DESIGNED TO PICKUP HUMAN VOICE (LIKE THOSE IN WEB CAMERAS, PHONES, TABLETS ETC) WILL BE TUNED TO RESPOND BEST BETWEEN 60 TO 300 HZ IN MOST CASES. BUT PIANOS CREATE FREQUENCIES FROM 26 HZ TO 20,000 HZ. THIS IS WELL BEYOND THE UPPER AND LOWER RANGE OF MOST VOICE-GRADE MICROPHONES, WHICH MEANS THAT THE AUDIO CAN BE DISTORTED OR "CLIPPED".

## SHOULD I USE HEADPHONES OR SPEAKERS FOR MY LESSON?

- HEADPHONES WILL BE BETTER. USING HEADPHONES PREVENTS AUDIO FEEDBACK. THEY ALSO BLOCK OUT SOME OF THE SURROUNDING NOISES SO YOU CAN HEAR KATHLEEN BETTER AND FOCUS ON YOUR LESSONS.

## WHY CAN THE VIDEO/AUDIO QUALITY BE SO LOW AT TIMES?

- YOU CAN IMAGINE THE FLOW OF DATA BETWEEN YOUR PLACE AND KATHLEEN'S PIANO STUDIO LIKE A PIPE. ANYTIME THERE IS A RESTRICTION ON THE DATA FLOW (IMAGINE A SMALLER DIAMETER PIPE SECTION THERE), THE QUALITY DROPS OR IT FREEZES. WE HAVE PROVIDED THE BEST QUALITY WE CAN AT OUR END WITH A POWERFUL DEDICATED COMPUTER AND HARDWIRED, HIGH-SPEED INTERNET. BUT THERE COULD BE A RESTRICTION AT YOUR END. THE MOST COMMON REASONS FOR THIS ARE THESE:
  - USING WIFI OR CELLULAR DATA FOR YOUR INTERNET CONNECTION.
  - USING A DEVICE (COMPUTER/TABLET/PHONE) THAT HAS A LOT OF BACKGROUND APPS OR PROGRAMS RUNNING. *(CLOSE THOSE!)*
  - USING AN OLD DEVICE (COMPUTER/TABLET/LAPTOP) THAT HAS A SLOW PROCESSOR AND CANNOT RENDER THE GRAPHICS AND AUDIO QUICKLY.
  - OTHER DATA USERS AT YOU HOUSE USING YOUR ROUTER BANDWIDTH BY DOWNLOADING OR STREAMING MUSIC, VIDEO, OR GAMES.

## IF YOU CANNOT HEAR KATHLEEN:

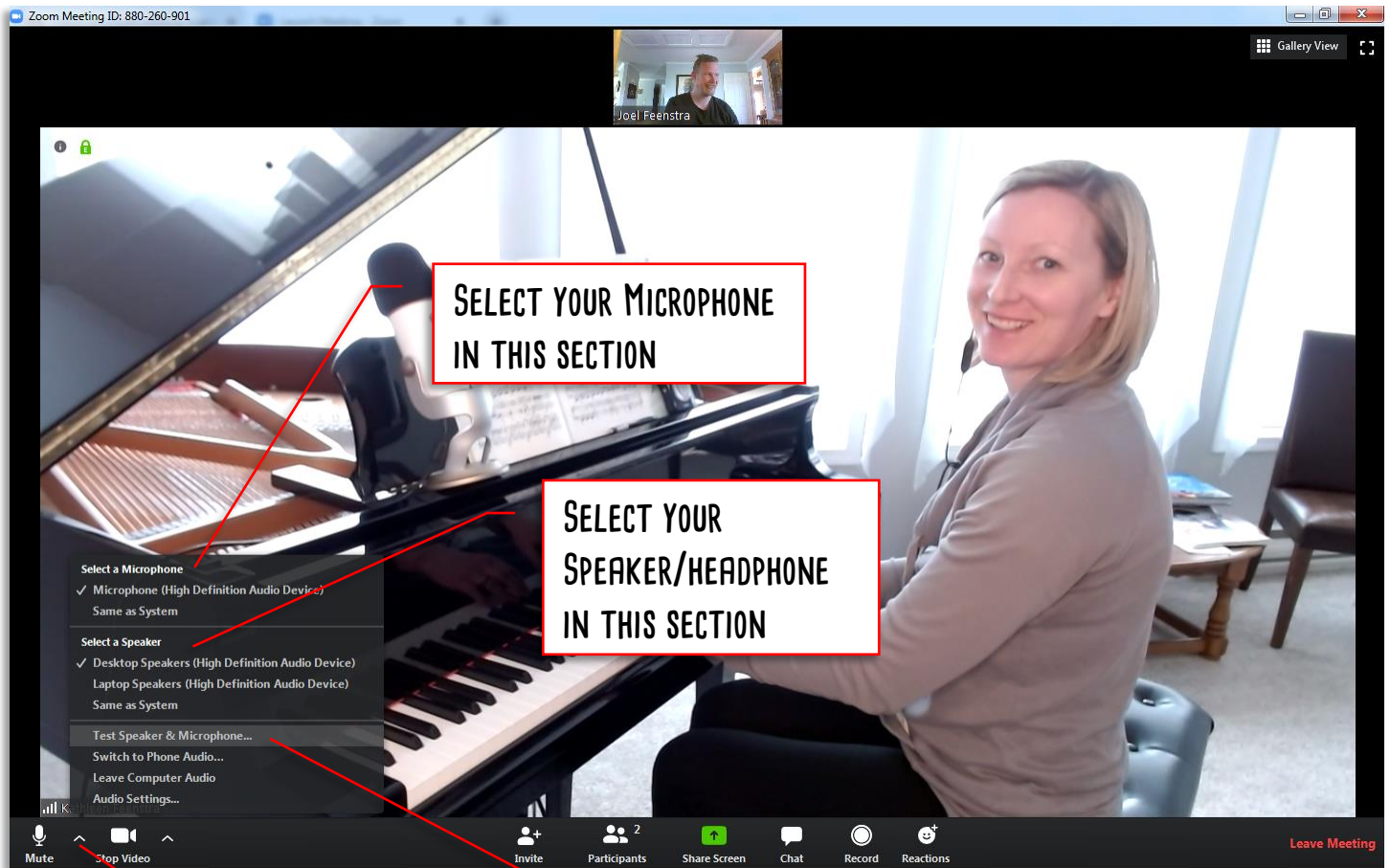
- USE THE "CHAT" FUNCTION TO SEND A TYPED MESSAGE TO LET HER KNOW THAT!
- CHECK THAT YOUR SPEAKERS ARE ON AND THE VOLUME IS HIGH ENOUGH.
- MAKE SURE YOUR SPEAKERS ON YOUR COMPUTER/TABLET/PHONE ARE NOT ON MUTE.
- IF YOU HAVE HEADPHONES PLUGGED INTO THE DEVICE, USUALLY THE AUDIO WILL BE DIVERTED THERE BY DEFAULT. USE THE HEADPHONES, OR ELSE UNPLUG THEM IF YOU ARE NOT USING THEM.
- CHECK THAT YOU HAVE THE RIGHT DEVICE SELECTED. IF YOUR COMPUTER/TABLET/PHONE HAS SEVERAL DIFFERENT AUDIO OUTPUT DEVICES (*BLUETOOTH SPEAKERS, HEADPHONES, WIRED SPEAKERS, ETC*) PAIRED TO IT, IT MIGHT BE SENDING THE AUDIO SIGNAL TO ONE OF THEM WHERE YOU CAN'T HEAR IT.
  - OPEN THE AUDIO SETTINGS IN ZOOM AND SELECT THE CORRECT SPEAKER DEVICE YOU WANT TO BE PLAYING. (*SEE THE PICTURE ON THE NEXT PAGE*)

## IF KATHLEEN CANNOT HEAR YOU:

- SHE WILL USE THE "CHAT" FUNCTION TO SEND A TYPED MESSAGE TO YOU KNOW THAT!
- MAKE SURE THAT YOU ARE FACING AND CLOSE ENOUGH TO YOUR MICROPHONE. NOT ALL MICS CAN PICKUP SOUND FROM MORE THAN A FEW FEET AWAY.
- MAKE SURE YOUR MICROPHONE SETTING ON YOUR COMPUTER/TABLET/PHONE IS NOT ON MUTE.
- CHECK THAT YOU HAVE THE RIGHT DEVICE SELECTED. IF YOUR COMPUTER/TABLET/PHONE HAS SEVERAL DIFFERENT AUDIO INPUT DEVICES (*BLUETOOTH HEADSETS, WEB CAMERA, ETC*) PAIRED TO IT, IT MIGHT BE TRYING TO TAKE THE AUDIO IN VIA ONE OF THEM THAT IS NOT ACTUALLY ACTIVE.
  - OPEN THE AUDIO SETTINGS IN ZOOM AND SELECT THE CORRECT MICROPHONE DEVICE YOU WANT TO BE PLAYING. (*SEE THE PICTURE ON THE NEXT PAGE*)

# AUDIO SETTINGS IN ZOOM

*(DESKTOP/LAPTOP/TABLET VERSION - MOBILE IS SLIGHTLY DIFFERENT)*



**YOU CAN USE THIS TOOL TO TEST YOUR SPEAKERS AND MICROPHONE**

**BRING YOUR MOUSE TO THE BOTTOM OF THE SCREEN TO BRING UP THE TOOLBAR. THEN CLICK HERE TO OPEN THE AUDIO SETTINGS**

# APPENDIX A - KATHLEEN'S VIDEO LESSON EQUIPMENT

## WEB CAMERA:

LOGITECH C920S - THIS IS A 1080P HD WEB CAMERA WITH BUILT IN MICROPHONE. THE VIDEO FEED IS REALLY GOOD, AND IS THE REASON WE HAVE SELECTED THIS ONE. BUT LIKE ALL WEB-CAMERAS, THE MICROPHONE IS TUNED FOR HUMAN VOICE RANGE, NOT THE PIANO RANGE. IT IS STILL BETTER THAN MOST BUILT-IN LAPTOP/TABLET MICS THOUGH.

<https://www.logitech.com/en-hk/product/hd-pro-webcam-c920>

## MICROPHONE:

BLUE YETI - THIS IS A PROFESSIONAL USB CONNECTED MULTI-PATTERN MICROPHONE. IT HAS A FREQUENCY RANGE (*FROM 15 Hz TO 22,000 Hz*) THAT WILL COVER THE PIANO'S COMPLETE RANGE. IT ALSO HAS SEVERAL SETTING LIKE GAIN AND PATTERN THAT CAN BE USED TO SET THE SENSITIVITY AND DIRECTIONS THAT SOUND IS PICKED UP IN, ALLOWING YOU TO FOCUS THE AUDIO WHERE YOU WANT IT.

<https://www.bluedesigns.com/products/yeti/#full-features>

## HEADPHONES:

JAYBIRD X4 - LIKE A STAGE MUSICIAN, KATHLEEN USES WIRELESS IN-EAR HEADPHONES FOR HER AUDIO. IF SHE WOULD USE REGULAR SPEAKERS, THE SOUNDS FROM THOSE SPEAKERS WOULD GET PICKED UP BY THE MICROPHONE, AMPLIFIED, FED BACK OUT OF THE SPEAKERS, PICKED UP AGAIN, AMPLIFIED, ETC IN AN ENDLESS LOOP... THIS IS CALLED "FEEDBACK", AND IS THAT SHRIEKING OR BOOMING NOISE THAT YOU SOMETIMES HEAR WHEN PEOPLE ARE USING MICROPHONES TOO CLOSE TO A SPEAKER. USING AN IN-EAR BLUETOOTH HEADPHONE PREVENTS THAT FEEDBACK FROM HAPPENING, AS THE SOUND STAYS CONTAINED.

<https://www.jaybirdsport.com/en-ca/x4.985-000808.html>

## LIGHTING:

KATHLEEN USES A 10" RINGLIGHT ON A PORTABLE STAND. THE WEB CAMERA IS MOUNTED IN THE CENTRE OF THAT SO THAT THE VIEW IS WELL LIT. SOMETIMES YOU CAN SEE THAT REFLECTION IN HER GLASSES. 😊