

# Bring Your STEM to Life with Augmented Reality

Download the Following Apps for Today's Session

Aurasma



Skin & Bones



Animal 4D+



# Bring Your STEM to Life with Augmented Reality

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# Question for You

## My knowledge of Augmented Reality is...

Respond at [PollEv.com/lisabaylor245](https://www.polleverywhere.com/polls/229502) Text a **KEYWORD** to **37607**

Answers to this poll are anonymous

Limited. **229502**

I have heard of it and understand the technology. **229511**

I have used this technology in my planning but looking for new ideas. **229512**

I understand AR completely, use it to enhance my lessons, and am only attending this session with friends. **229529**



# What is Augmented Reality (AR)?

- Overlay of computer-generated images or videos on real-world scenes
- An “information layer” activated by real-life “targets” or “triggers”
  - location, picture, pattern



*Where have you seen AR?*

# Not Just in the Movies Anymore...

Iron Man



Avatar



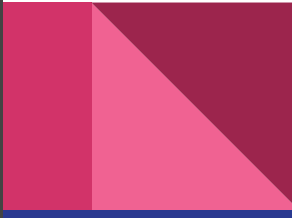
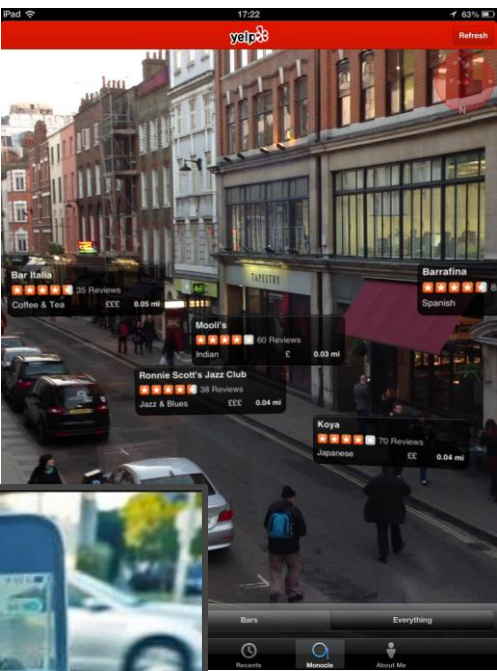


# AR in the Real World

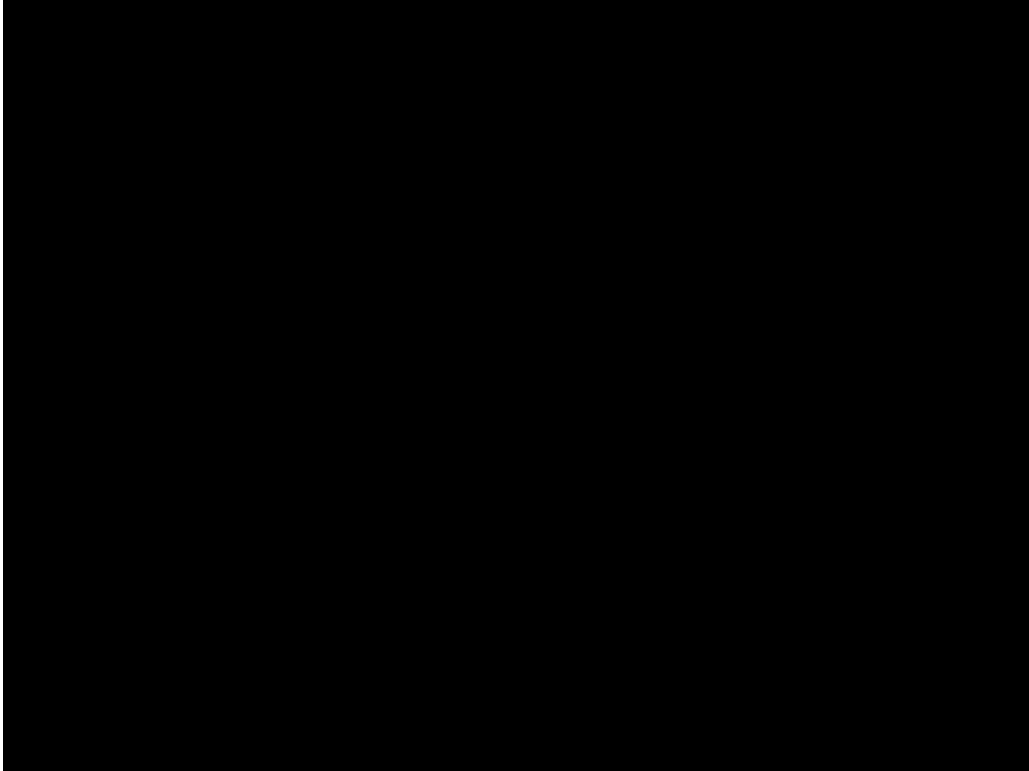


Lines on the Football Field

Pokemon GO Characters



# An Example of AR in the Math Classroom



Watch as 5th grade students use AR to create peer mini-lessons on how to solve math problems



# Classroom Applications

- **Homework Mini-Lessons:** When students scan a page of their homework, the page reveals a video of their teacher helping them solve a problem.
- **Staff Photo Wall:** Set up a display of teacher photos near the school entrance. Visitors can scan the image of any teacher and see that figure come to life, telling more about him- or herself.
- **Book Reviews:** Students record themselves giving a brief review of a novel that they just finished, and then attach that "aura" (assigned digital information) to a book. Afterward, anyone can scan the cover of the book and instantly access the review.





# Classroom Applications Continued...

- **Yearbooks:** From tributes to video profiles, from sports highlights to skits and concert footage, the ways that AR can enhance a school yearbook are limitless.
- **Word Walls:** Students can record themselves providing the definitions to different vocabulary words on a word wall. Afterward, anyone can use the Aurasma app to make a peer pop up on screen, telling them the definition and using the word in a sentence.
- **Lab Safety:** Put triggers (images that activate media when scanned by an AR-enabled device) all around a science lab so that when students scan them, they can quickly learn the different safety procedures and protocols for the equipment.
- **Foreign Language or ASL Flashcards:** With AR, flashcards of vocabulary words can contain a video overlay that shows the translation or how to sign a word.



# Live Examples

- Numberlys (Imagnotron app)
- iDinosaurAR
- Skin & Bones (Smithsonian)
- 4D Elements
- Animal 4D+
- Create Your Own with Aurasma



# Using Aurasma in the Classroom



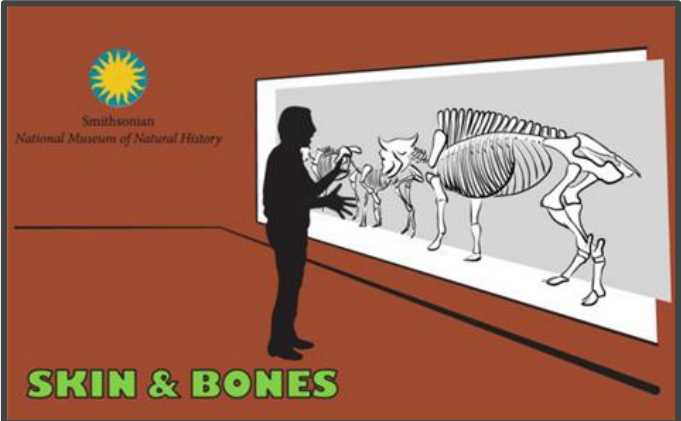
For more help,  
subscribe on YouTube  
to: PowerPoint Spice

# Now It's Your Turn!

Create Your Own



Or PLAY with Skin & Bones or Animals 4D



# Share Out

Now that you have learned about AR, can you think of a classroom project you can enhance by using this technology?



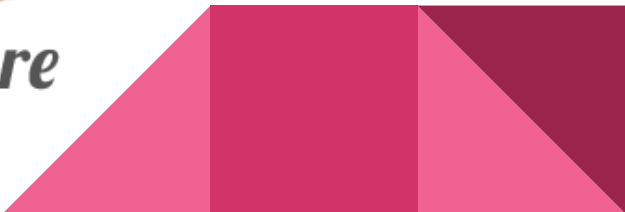
*Discover*



*Learn*



*Share*



# AR Resources Shared in Session

## Demonstrated in the Session

- Elements 4D (Daqri)
- Skin & Bones (Smithsonian Museum)
- iDinosaurAR (iExplore)
- The Numberlys (Imagnotron)
- Aurasma

## Tried On Your Own

- Animal 4D+ (Octagon Studio)

