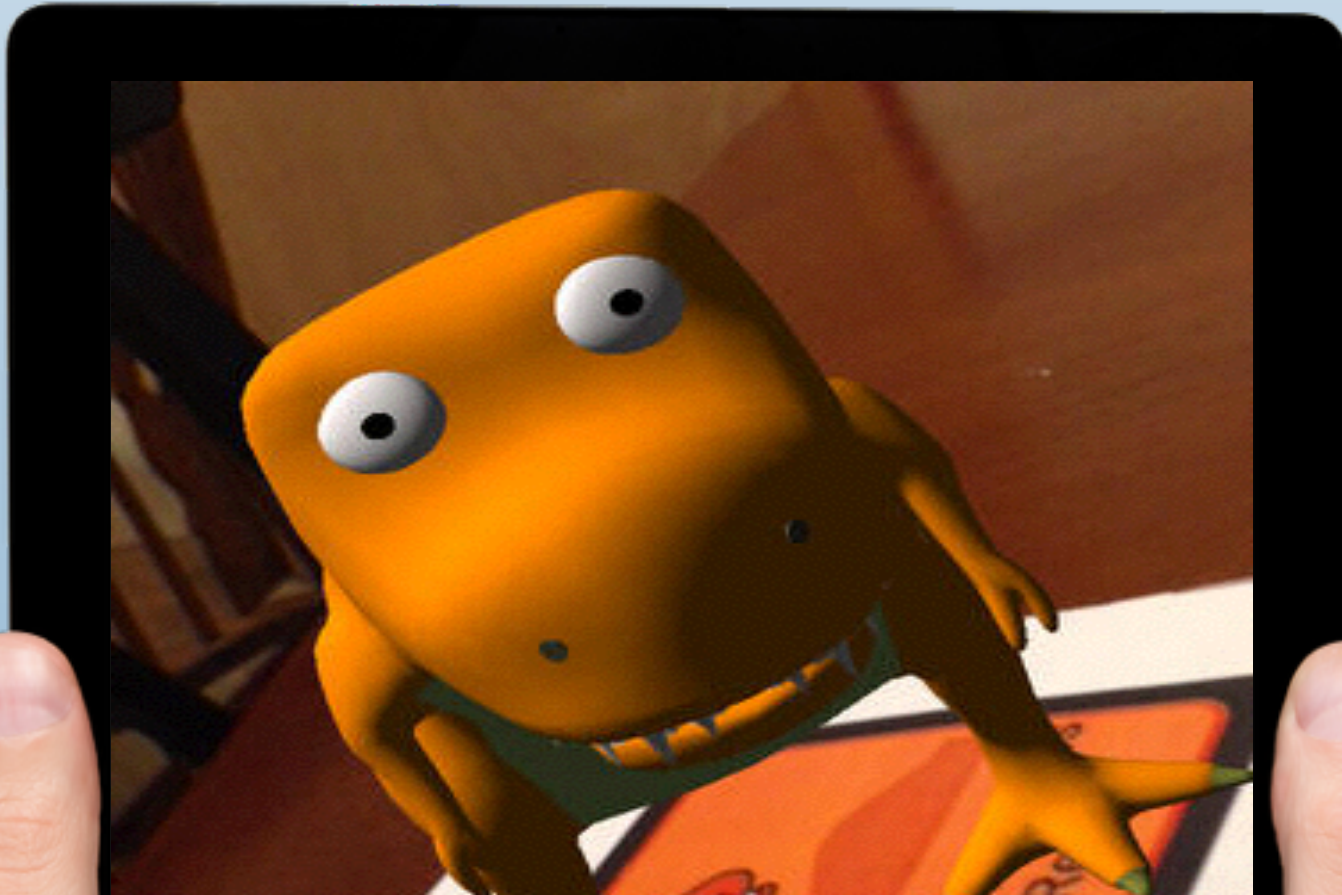


Augmented Reality: Making YOUR CLASSROOM come ALIVE!

<http://karenogen.weebly.com/my-presentations.html>



karen ogen
@karenogen
JULY 2015

What is Augmented Reality?

QR CODE

- A code is scanned by a smart device.
- The code can link the user to various web sites or multimedia.



AR

- A special AR marker, everyday item, or image can be used as a trigger.
- It superimposes 3-D or multimedia content into the real world.



VIRTUAL REALITY

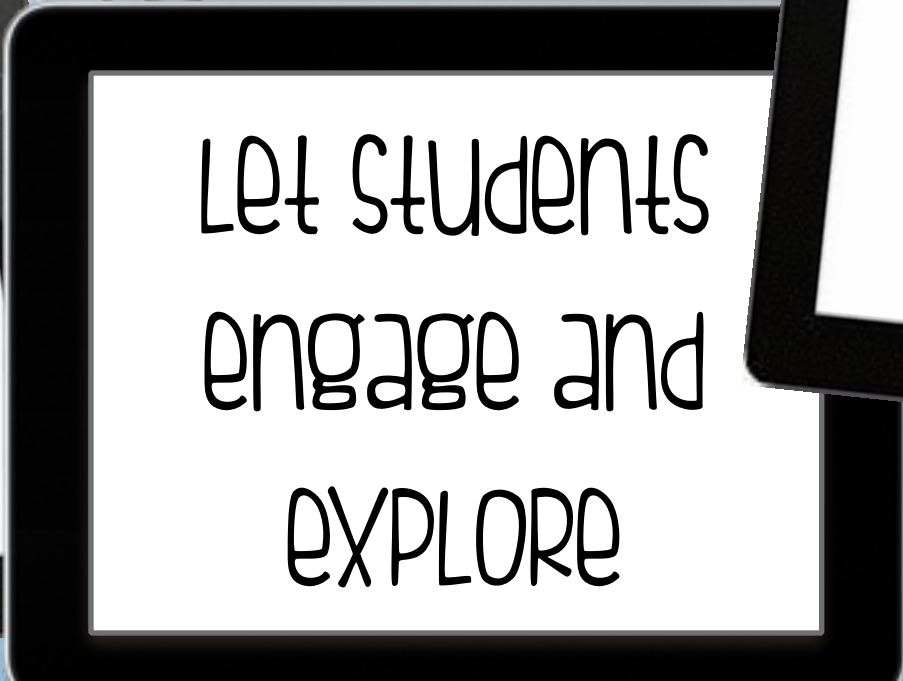
- User is totally immersed in the virtual environment.
- Some senses may be under control of the virtual system.




fun, YES! engaging, YES!
CLASSROOM, YES!
BUT...



connect
to
standards



Let students
engage and
EXPLORE

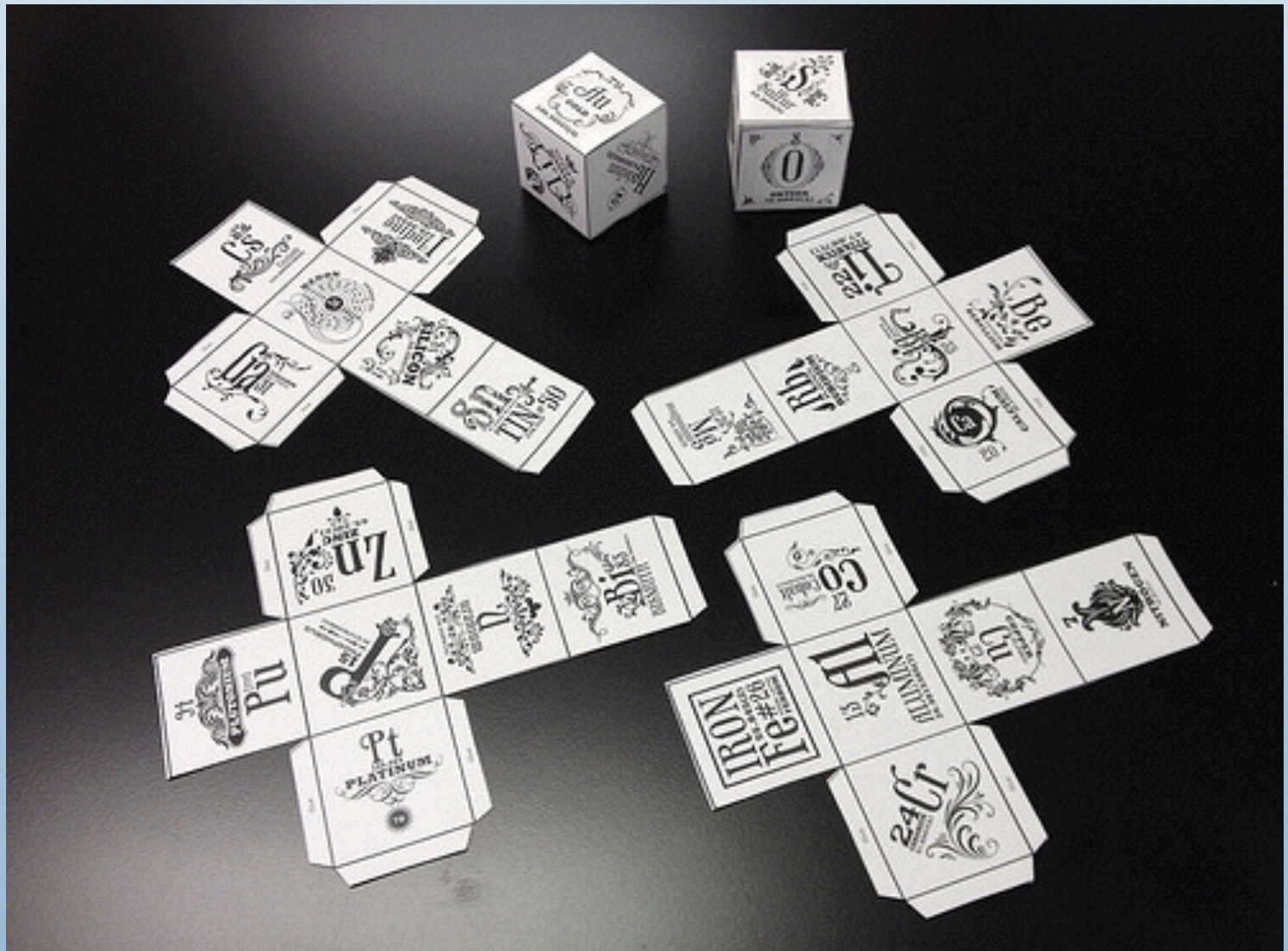


try
it
first

ELEMENTS 4D



- CHEMISTRY
- PROPERTIES
OF ELEMENTS
- COMBINING
ELEMENTS



anatomy 4D



- science/health
- body systems
- not for young students

THE HUMAN BODY

WE GOT THE BEAT

Before each beat, your heart fills with blood. The muscle then contracts to squirt the blood along. An adult heart beats **60-80 times per minute**.

60 - 80

BEATS PER MINUTE

RIGHT VS. LEFT

Right-handed people live, on average, **nine years longer** than left-handed people do. The majority of the machines and tools we use on a daily basis are designed for those who are right handed, resulting in thousands of accidents and deaths each year.

MILES OF VESSELS

The human body has **60,000 miles of blood vessels**. The distance around the earth is about 25,000 miles, making the distance your blood vessels could travel if laid end to end more than **2x** around the earth.



WET FEET

Feet have **500,000 sweat glands** and can produce more than a pint of sweat a day.



BRAIN POWER

The brain operates on the same amount of power as a **10-watt light bulb**, and generates as much energy as a small light bulb even when you're sleeping.



10w

BREATHE IN

The surface area of a human lung is equal to a **tennis court**.



The large amount of surface area makes it easier for the exchange of oxygen and carbon dioxide to take place, and makes sure you stay properly oxygenated at all times.

"SMALL" INTESTINE

The largest internal organ is the small intestine. In fact, it's so long that it is actually **four times as long as the average adult is tall**.



ANATOMY 4D | DAQRI

THE HEART

ELECTRICALLY CHARGED

Because the heart has its own electrical impulses, it can continue to beat even when separated from the body as long as it has an adequate supply of oxygen.



HOSE VS. HAIR

The aorta, the largest artery in the body, is almost the diameter of a garden hose. Capillaries, on the other hand, are so small that it takes ten of them to equal the thickness of a human hair.



PASS THE TISSUE

Blood is actually a **thrust**.

HEART POWER

The volume of blood pumped by the heart can vary over a wide range, from 5 to 30 liters per minute.



ENTRANCE HALL & LITTLE BELLY

"Entrance" is a lot for "entrance hall" and "ventricle" is Latin for "little belly".



HEART SPRINTS

Even at rest, the muscles of the heart work hard—twice as hard as the leg muscles of a person sprinting.



TRAVEL PRO

When the body is at rest, it takes only six seconds for the blood to go from the heart to the lungs and back, only eight seconds for it to go to the brain and back, and only 16 seconds for it to reach the toes and travel all the way back to the heart.

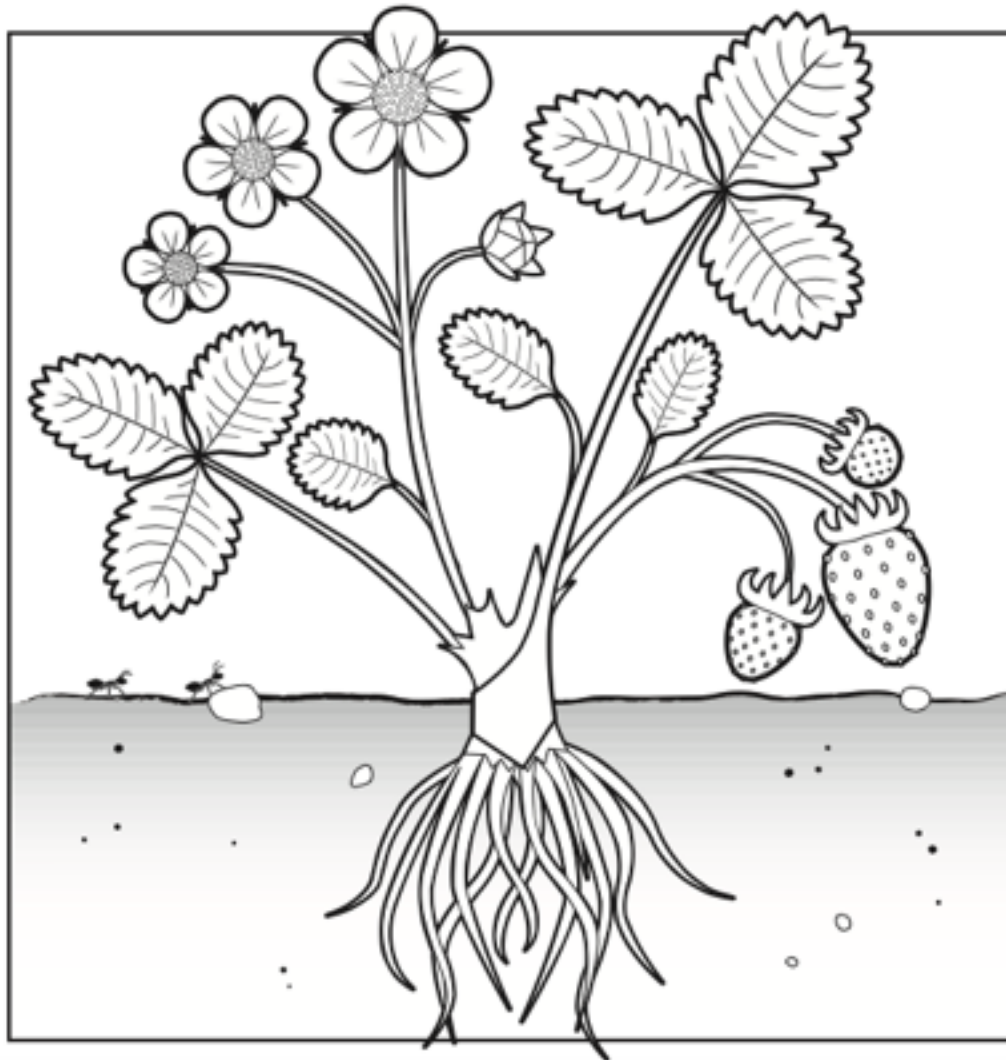


ANATOMY 4D | DAQRI

CHROMVILLE



- science
- parts of a plant
- what plants need to grow



Lesson 1 - PLANTS -

What do you need to
grow a plant?

page from:



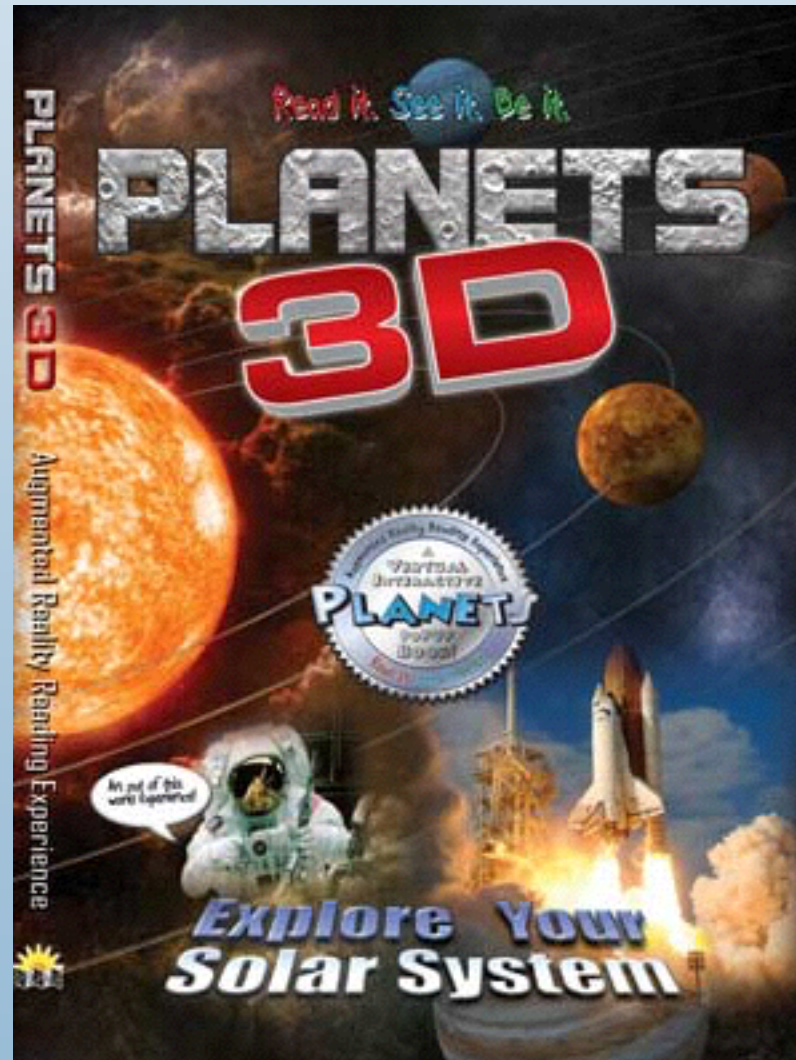
Learn & Play with
CHROMVILLE APP
www.chromville.com



POPAR PLANETS 3D



- Science
- Planet facts, and videos
- See the planets ALL AROUND YOU



BOOK MODE

VR MODE

ZOO Kazam



- science
- Realistic animal and information
- RESEARCH

QUIVER (COLAR)



Create your own flag!



QuiverVision.com

1 Print 2 Color 3 Play



- many pics to choose from (free & paid)
- science, math, art, social studies, etc.
- each has an interactive element



OWNey



- history
- tie to literacy
- first AR postal stamp

enchantium fairytale



- CRITICAL thinking
- STORYTELLING

The crowd closed to let a wizened old woman through. The leader readily defers to her judgment, yielding the center of the circle that formed around him. "It is true we could never fight the Roper directly. No man, woman or child can resist his enchantment. That is why we cannot send a man, woman or child against him."

"What then?" A desperate voice cries out. "What then?"

The woman reaches down into a pouch at her hip. "There are others who love our children as much as we. Love is our greatest wealth. The Roper could never understand that."

The woman produces a twittered and torn stuffed bear. She places it on the ground. She circles her hand above it, glowing sparkles dripping down upon the bear until light reconfigures it entirely.

"Gather their toys! Gather our Enchantium!"

enchantium musical strings

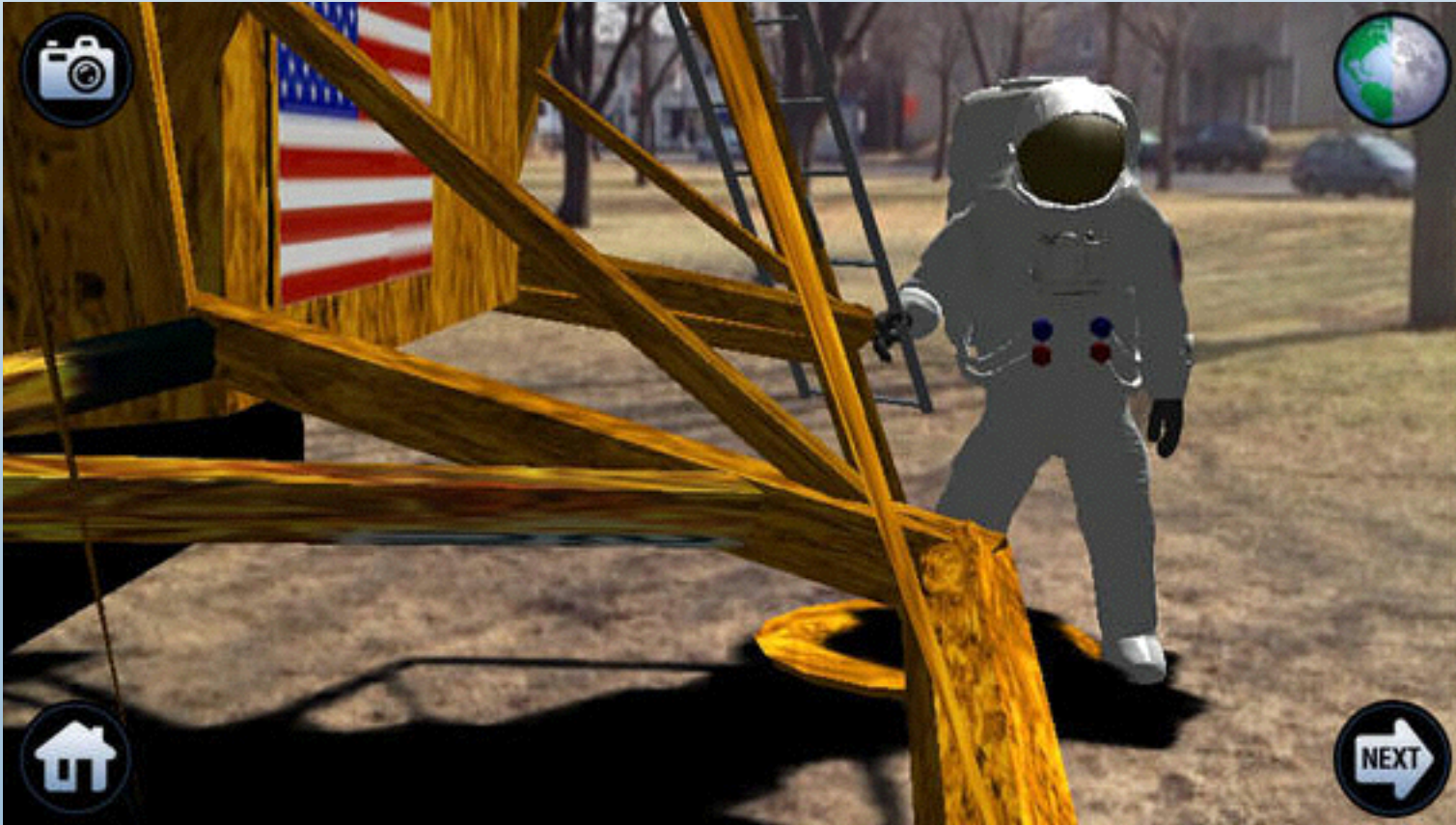


musical strings



- CRITICAL thinking
- PHYSICS
- MATH
- MUSIC

MOONWALKING



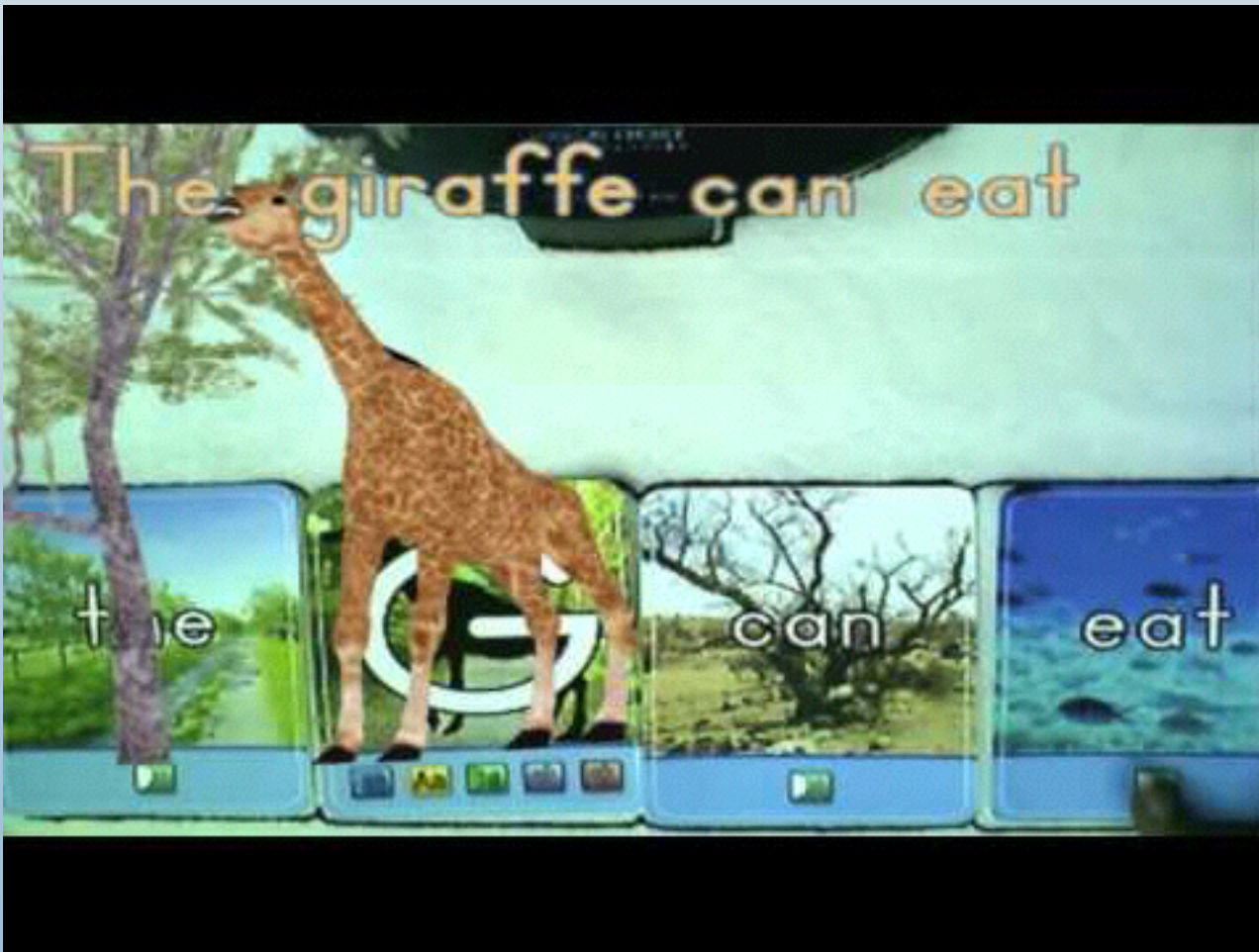
- science
- history
- first moon walk

AR FLASHCARDS



- Letters
- Letter sounds

LETTERS ALIVE



- Letters
 - Phonics
 - Sentence building
 - beginning Reading
 - Sight words
- (kit that works with computer and camera- not an app)

<https://youtu.be/SWpa9cCmYcA?t=3m33s>

Heart Cam



- Health OR science
- visualize a real heart

Augment



**KAREN'S
AM
ROUTINE**



- create YOUR OWN 3-d augmented reality experiences with 3-d drawings and targets that you create or download.

AURASma



- Create your own augmented reality experiences with images or objects as triggers. The triggers can access other images, videos, or websites when scanned.

[How to create your own auras with AURASma](#)