

AUGMENTED REALITY

FOR THE CLASSROOM

Karen Ogen www.karenogen.com @karenogen 2016



#### WHAT IS AUGMENTED REALITY?

#### QR Codes

A QR Code is scanned by a phone or a device with a QR reader loaded.

The code will link to multimedia such as images, video, or audio or connect users to a web resource.



#### Augmented Reality

Sometimes a special target is scanned to activate AR, other times an everyday object can be used.

AR augments or changes something in the real-world and makes it appear differently.



#### Virtual Reality

A QR Code is scanned by a phone or a device with a QR reader loaded.

The code will link to multimedia such as images, video, or audio or connect users to a web resource.



#### AUGMENTED REALITY IS FUN, BUT IN THE CLASSROOM:

Let students engage and explore with Augmented Reality.

Always connect your learning activities to your standards! Try out all apps and activities before using with your students.



### ELEMENTS 4D

- Chemistry
- FREE
- Solids, Liquids, Gases
- Combining Elements
- Exploring Elements
- Lessons Online





#### ANATOMY 4D

- Science
- Ages 12+
- Human Body **Systems**
- The Heart
- Focus on one system or multiple

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

#### THE HUMAN BODY

#### **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.

#### **BREATHE IN**

The surface area of a huma is equal to a tennis court.



surface area makes easier for the exch of oxygen and carbo dioxide to take plan and makes sure yo properly oxygenate all times.

#### "SMALL" INTESTINE

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







FLECTRICALLY CHARGED

PASS THE TISSUE

Blood is actually a

HEART POWER

The volume of blood

pumped by the heart

can vary over a wide range, from five to 30

liters per minute.

long as it has an adequate supply of oxygen

Because the heart has its own electrical impulse, it can

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

#### continue to beat even when separated from the body as ten of them to equal the thickness of a human hair.

THE HEART

#### ENTRANCE HALL & LITTLE BELLY

"Atrium" is Latin 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



#### 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

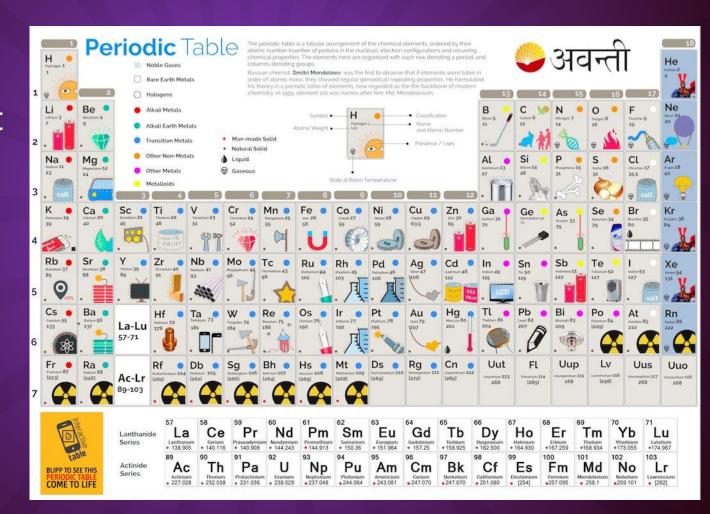
ANATOMY 4D SOLORI

ANATOMY 4D \ \ □ DΛ

THIS TARGET **WORKS!** 

#### BLIPPAR

- SCIENCE
- FREE
- Learn about each of the elements.
- Take a quiz.







### ARLOON ANATOMY

- Science
- \$2.99
- Ages 12+
- Human
   Body
   Systems,
   Functions,
   and Organs
- Use a person as a target.



LIVE AN AMAZING

EXPERIENCE!

AUGMENTED REALITY





### HEART CAM

- Science
- FREE
- Visualize a beating heart as if it is real.
- Print the target and hold it over a person's heart.







## THE BRAIN

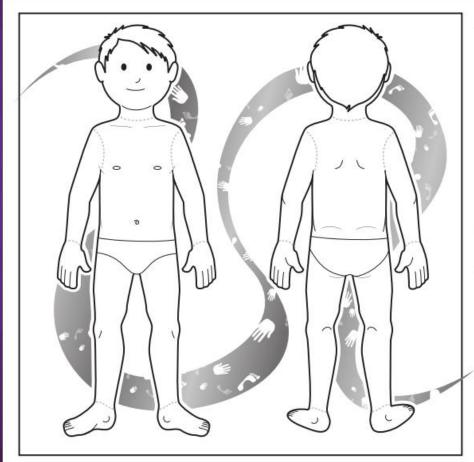
- Science
- FREE
- No target needed.
- View the body systems involved in the head and learn about parts of the brain.





### CHROMVILLE SCIENCE

- Science
- FREE
- K-2
- Parts of the body.
- Layersskin, muscles, and bones.





Walter has to treat a patient. Show him that you know the different parts of the body.













Do you know more? write them down!







Learn & Play with CHROMVILLE WORLD chromville.com/science





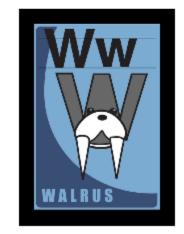


# AR FLASHCARDS

- ELA
- FREE
- Pre-K-1
- Letter recognition.
- Letter sounds.













### IMAG.N.O.TRON

- ELA
- FREE App
- Works with
  The
  Fantastic
  Flying
  Books of
  Morris
  Lessmore
- K-5







### LETTERS ALIVE

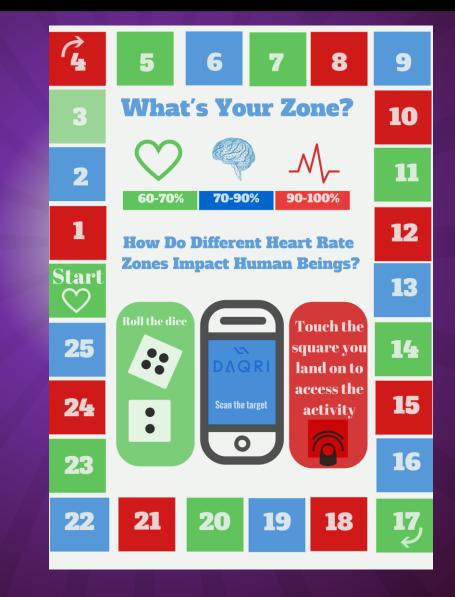
https://www.youtube.com/watch?v=El9MmstwL8o

- ELA
- The program must be purchased
- \$\$\$
- Letter recognition
- Sound recognition
- Word recognition
- Sentences
- K-2





- HEALTH/PE
- FREE
- Find targets
   online for
   your
   content.







#### BLIPPAR

- SCIENCE
- FREE
- Watch the planets around you in 360
- Planet size and information
- Find more targets online.







### SPACE JOURNEY

- SCIENCE
- FREE
- Planets
- Solar System



AMAZING



## MOONWALKING

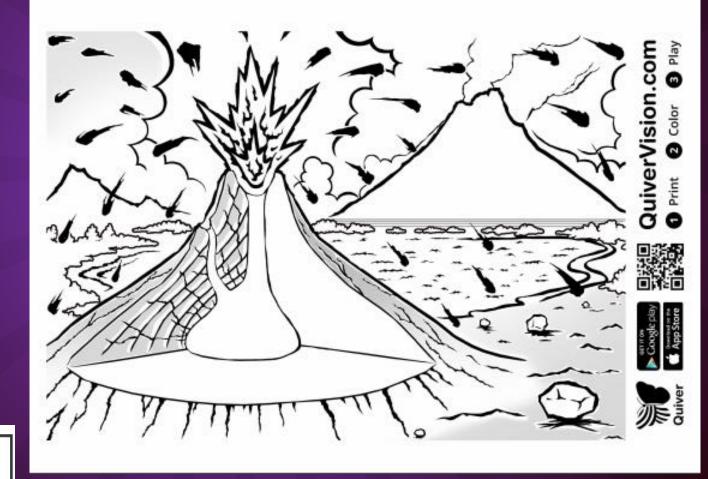
- SCIENCE
- HISTORY
- FREE
- Witness a virtual moon landing.





## QUIVER

- SCIENCE
- FREE and \$
- Find a variety of coloring pages online for your content.



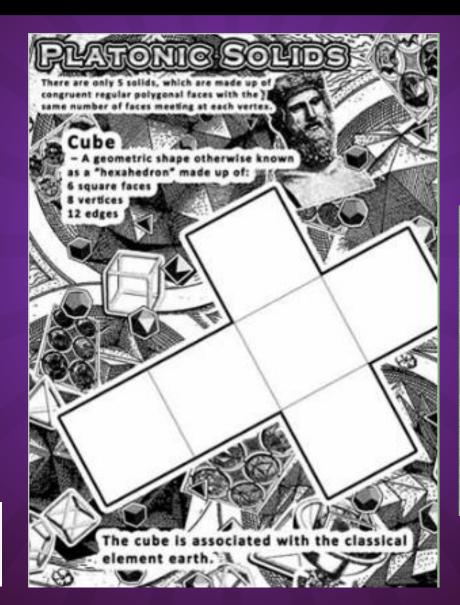




### QUIVER

- MATH
- FREE and \$
- Geometric shapes.
- Faces, vertices, and edges.
- Find a variety of coloring pages online.









## BLIPPAR

- MATH
- SCIENCE
- ART
- FREE
- Symmetry







# SHAPE QUEST

- MATH
- FREE
- Board type game
- Shape recognition
- Elementary





The contexts of this mobile game were developed under a grant from the Department of Education, However, those contexts do not reconserily represent the policy of the Department of Education, and you should not accome entiresement by the Federal Government. PM Sucret No. USSE/100005, CFDA No. 84.0966.



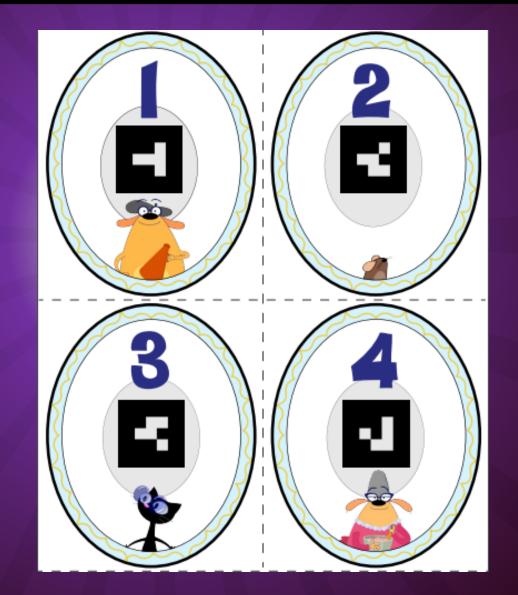






## FETCH! LUNCH RUSH

- MATH
- FREE
- Addition and subtraction problems
- Grades K-2







#### PHOTOMATH

- MATH
- FREE
- Solves or checks the answers on math problems.
- Shows step-bystep how to solve.



$$\frac{1}{2} \div \frac{1}{4}$$

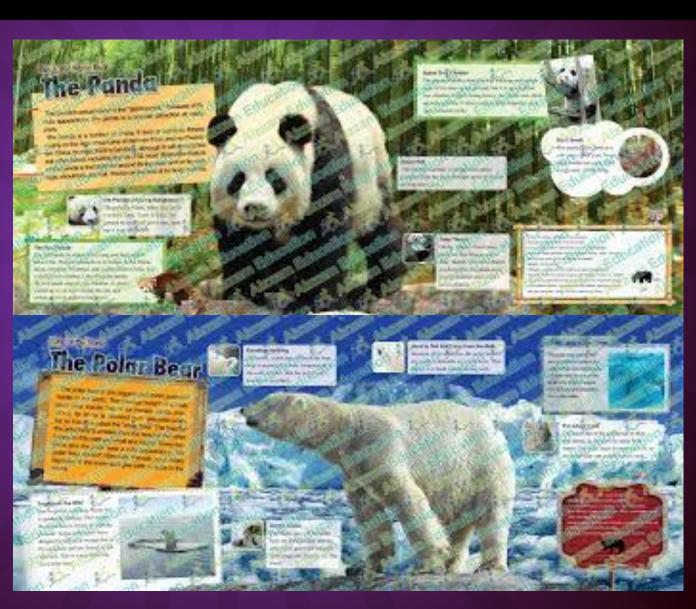
$$9 + \frac{5x}{2} = 4$$



## EVO ANIMAL

- FREE
- Animal information.
- Trial with selected images from books.
- Also: Farm,
   Ocean,
   Bird, Dino,
   Herptile.

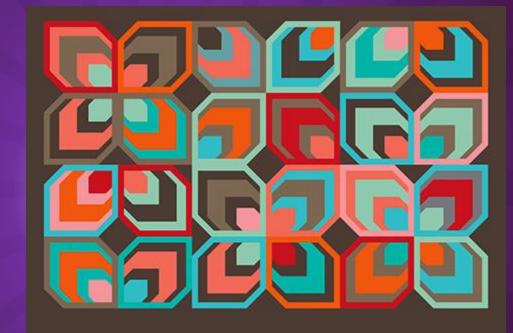






#### ZOO KAZAM

- FREE or \$
- Animal information.
- Birds, Fish,
   Mammals,
   Dinos,
   Invertebrates,
   Amphibians,
   Bugs, Reptiles,
   and Pets.



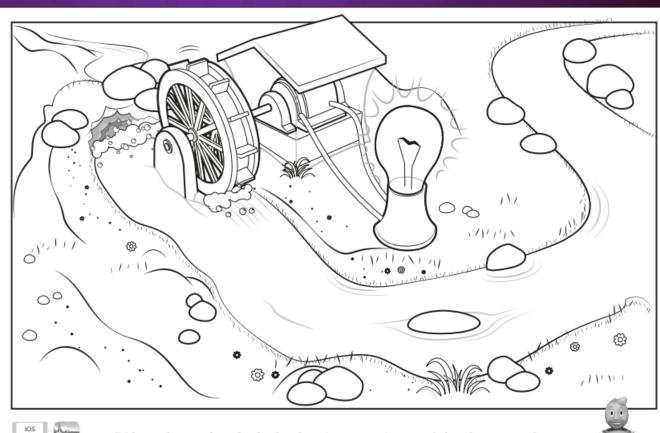






## BARCY CHROMVILLE

- FREE
- Water energy
- Water life
- Water care
- Color and it comes to life.







Learn with Barcy Powered by Chromville Did you know that the hydroelectric energy is one of the cleanest and most useful renewable energies? See how it works turning on this amazing machine!





# AUGMENT

- FREE
- A collection of AR objects.
- With and without targets.
- Create your own!





## LIFELIQE

- FREE Trial
- PAID Content
- A collection of over 1,000 AR objects.



### DIDN'T SEE WHAT YOU NEED? CREATE YOUR OWN!



- AURASMA
- studio.aurasma.com
- Create a channel to house your Auras and invite followers so they can view and use your content.



- BLIPPAR
- blippbuilder.com
- Users enter your target number in the app to use your AR marker.



- AUGMENT
- Augment.com
- Create 3-D AR with target images.