

# Virtual Field Trip



Weathering,  
Erosion,  
and Deposition

# Unit Question

Does the shape of the land on Earth change?

**YES**  
THE SHAPE OF  
THE LAND CHANGES  
BECAUSE OF.....



# WEATHERING

# EROSION



# DEPOSITION

Lets take a look at this video to get us ready to learn more about how weathering and erosion can change the shape of our land.

[HTTP://STUDYJAMS.SCHOLASTIC.COM/STUDYJAMS/JAMS/SCIENCE/ROCKS-MINERALS-LANDFORMS/WEATHERING-AND-EROSION.HTM](http://studyjams.scholastic.com/studyjams/jams/science/rocks-minerals-landforms/weathering-and-erosion.htm)



# WEATHERING

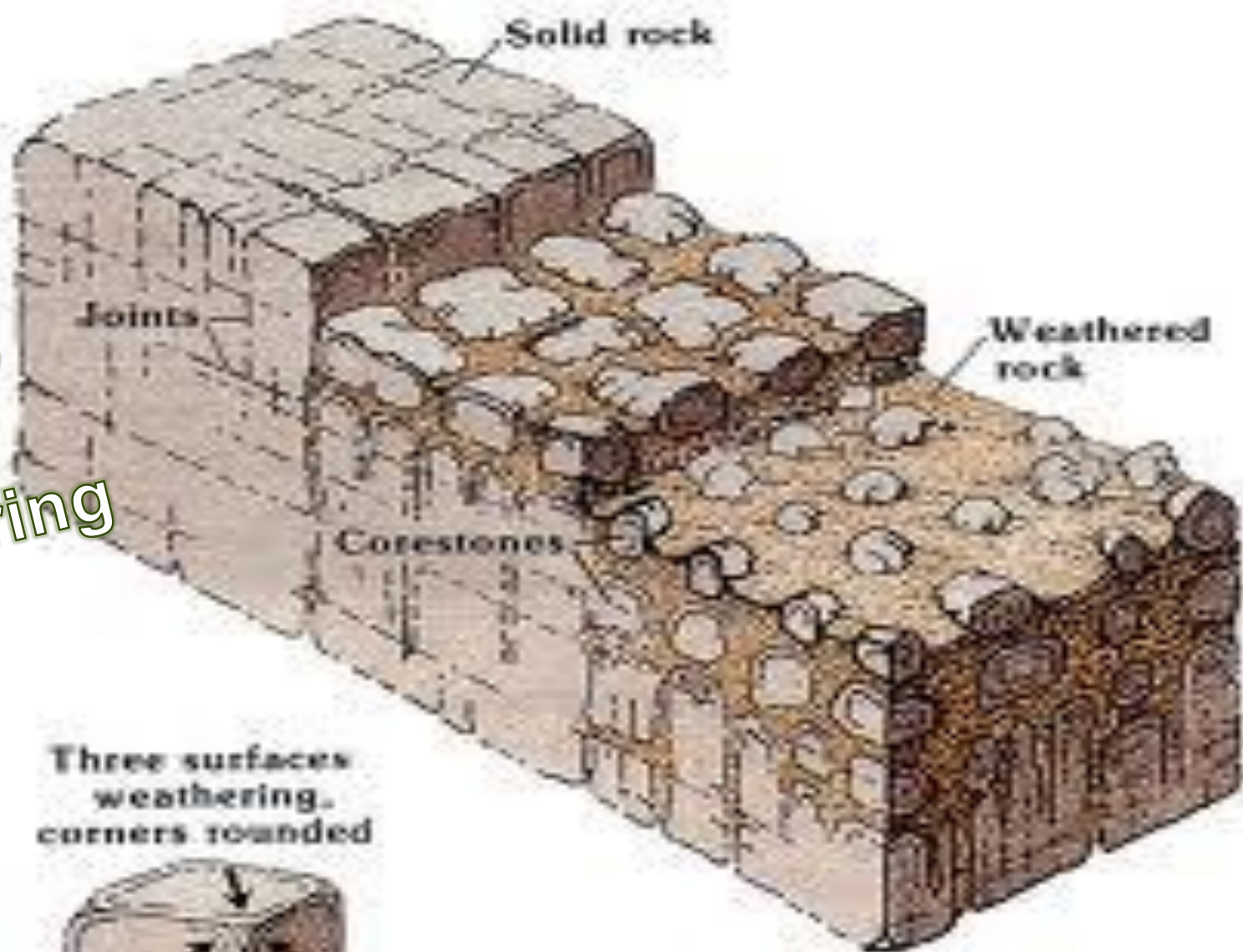
THE BREAK DOWN OF ROCKS  
INTO SMALLER ROCKS  
BECAUSE OF THE WEATHER



Breaker



# Effects Of Weathering



Three surfaces weathering,  
corners rounded

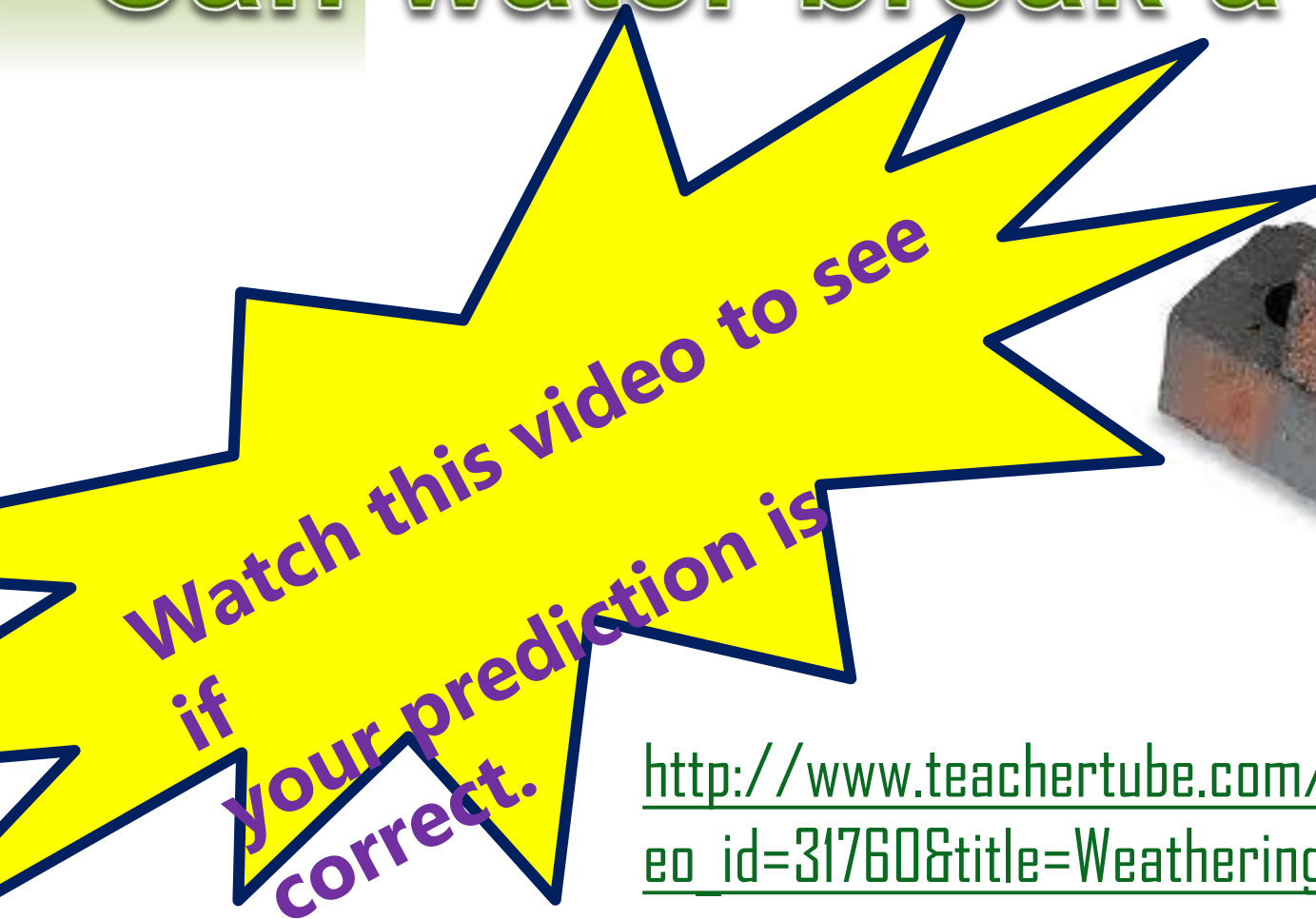


Two surfaces weathering,  
edges rounded

One surface weathering

# Weathering Prediction

Can water break a brick?

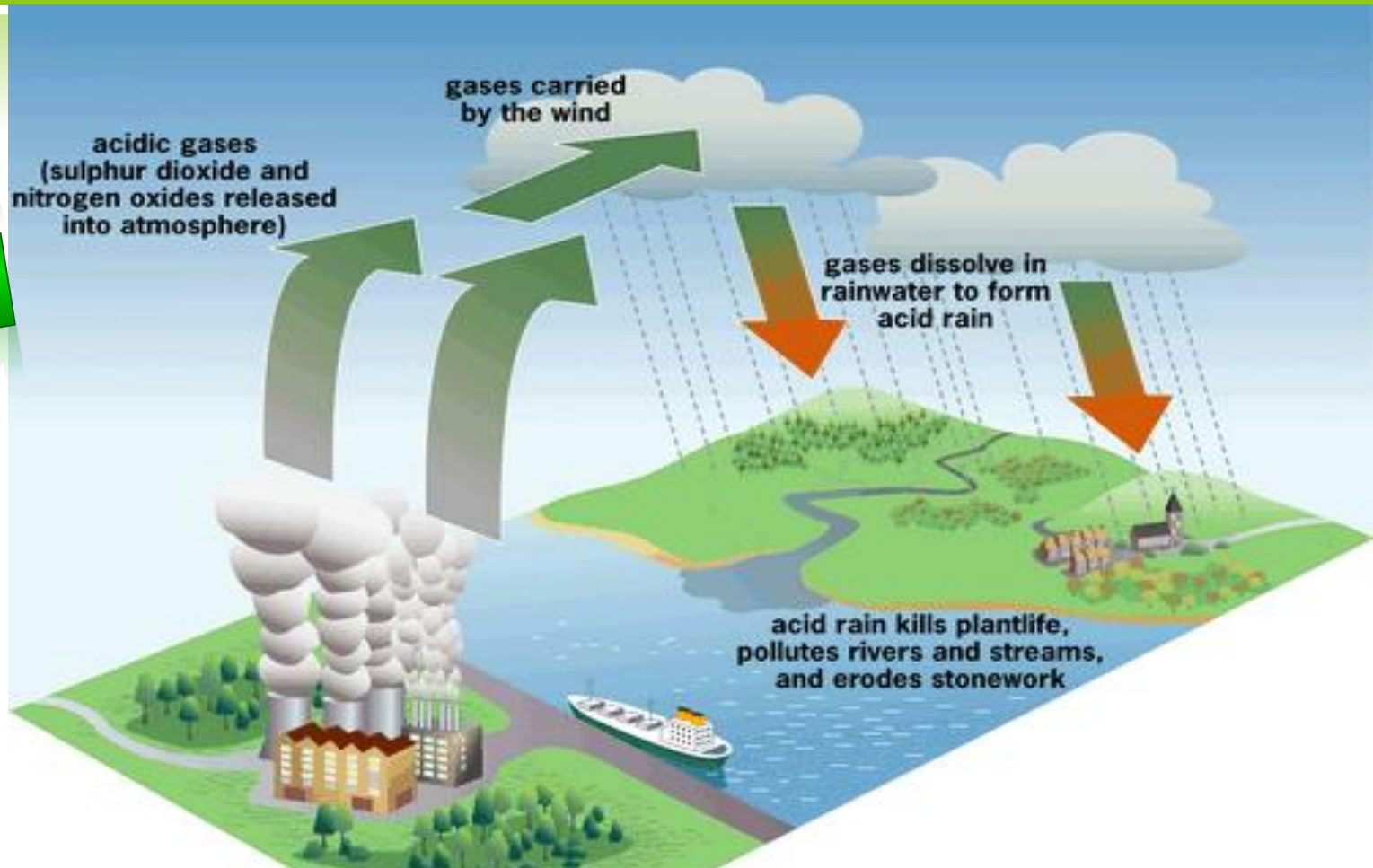


[http://www.teachertube.com/viewVideo.php?video\\_id=31760&title=Weathering\\_Ice\\_Wedging](http://www.teachertube.com/viewVideo.php?video_id=31760&title=Weathering_Ice_Wedging)



# Chemical Weathering

**ACID  
RAIN**



<http://www.youtube.com/watch?v=yphLO8S77MY>: acid rain

<http://www.youtube.com/watch?v=a5qRnbhtako>: chemical weathering



# EROSION



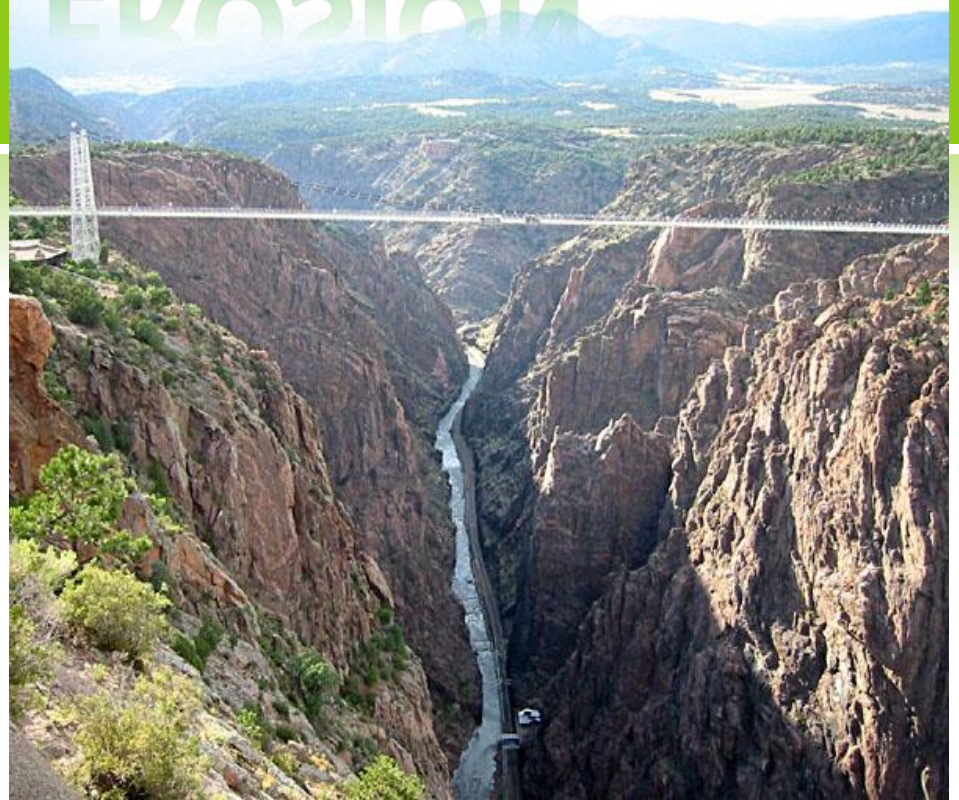
THE MOVEMENT OF ROCKS AND SAND,  
WHICH CHANGES THE SHAPE OF THE LAND

Whoosh!





# WATER EROSION



- carves canyons
- cuts valleys into the land
- smooths rocks and moves them downstream

Did you know the Grand Canyon was formed from water erosion?

**WATCH THIS SHORT  
VIDEO  
TO LEARN MORE!**



[http://www.teachersdomain.org/asset/ess05\\_vid\\_canyon/](http://www.teachersdomain.org/asset/ess05_vid_canyon/)



# WAVES EROSION



- crashes into rocks and carves arches and caves
- changes beaches
- pushes sand onto the beach and pulls sand out to the sea



# GLACIER EROSION



- flattens the land



**ACTS LIKE A  
BULLDOZER**

- carves out basins or bowls in the land

# WIND EROSION



- blows sand and smoothes rocks
- can carve arches into rock formations

# SHAPE IT UP



Now its time to identify these four types of erosion by playing the game Shape It Up, an Earth Changing Erosion Activity.

<http://www.kineticcity.com/mindgames/warper/>



# DEPOSITION

like a dump truck

## 3. DEPOSITION



The depositing or dropping off of rocks and sand in a new place

**THIS SHORT VIDEO SHOWS HOW WEATHERING, EROSION, AND DEPOSITION WORK TOGETHER**

<http://www.youtube.com/watch?v=oFnpm4SUF7I>



# ROCK AROUND THE PARK



Play this game to learn  
how landforms  
continue to change over  
time

bec  
<http://www.nps.gov/webrangers/activities/rockpark/>

eros

# Let's take a trip around the United States to see the affects of erosion across our country!



[http://www.classzone.com/books/earth\\_science/terc/content/visualizations/es1205/es1205page01.cfm](http://www.classzone.com/books/earth_science/terc/content/visualizations/es1205/es1205page01.cfm)



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The Grand Canyon: How It Formed. (2006). *Teacher's Domain*. Retrieved on October 15, 2011, from [http://www.teachersdomain.org/asset/ess05\\_vid\\_canyon/](http://www.teachersdomain.org/asset/ess05_vid_canyon/).

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Weathering, Erosion, and Deposition. *You Tube*. Retrieved on October 16, 2011, from <http://www.youtube.com/watch?v=oFnpm4SUF7I>.