

# New Literacies for Today's Classroom

Sean Bermingham Executive Editor, NGL

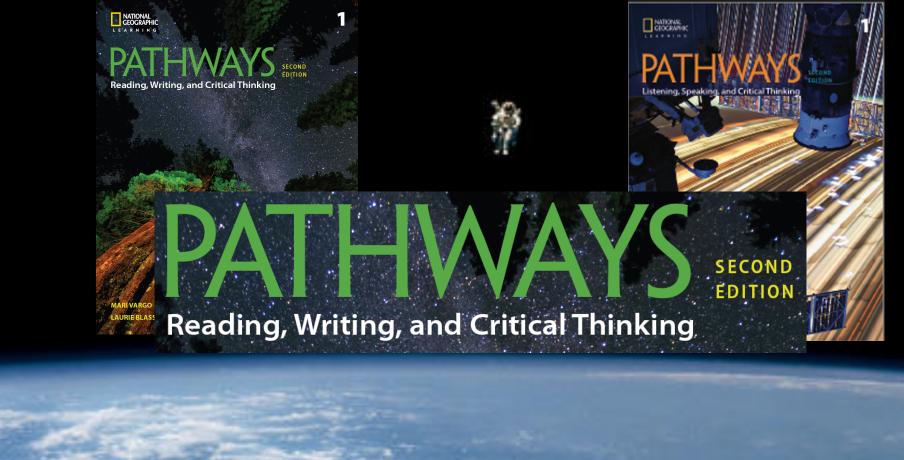
Bringing the world to the classroom and the classroom to life



Sean Bermingham is an Executive Editor for National Geographic Learning. A former English language teacher, Sean has given presentations and workshops at language teaching conferences in Asia and North America. He is currently based in Singapore, where he works on the development of new products for the global ELT market, including coursebooks, digital components, and instructor materials.

Bringing the world to the classroom and the classroom to life







- ▶ The world's population grows by about 200,000 people.
- ► More than **8,000,000** people travel by plane.
- ► About **200,000** people move into cities.
- More than 4,000,000,000 people communicate with others through their cell phones.
- Social media website Facebook connects over 1,000,000,000 people.
- ▶ People upload more than 576,000 hours of video to YouTube.

# "Now is the time that we need to rethink what we mean by the word "literacy."



#### Michael Wesch

US Professor of the Year (2008) National Geographic Emerging Explorer

# "Traditional definitions of literacy [are] insufficient if we seek to provide students with the futures they deserve."



Prof. Donald J. Leu
Director, New Literacies Research Lab
University of Connecticut

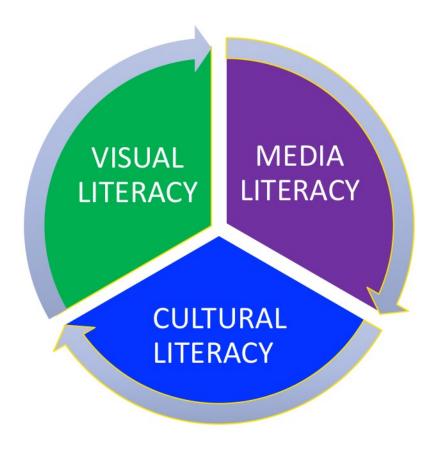
# "Traditional definitions of literacy [are] insufficient if we seek to provide students with the futures they deserve."



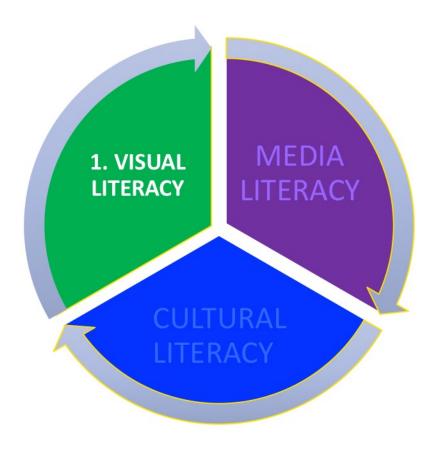
Prof. Donald J. Leu
Director, New Literacies Research Lab
University of Connecticut

In the 21<sup>st</sup> century, it is very important for learners to develop \_\_\_\_\_ literacy.

## Literacies for the 21st Century

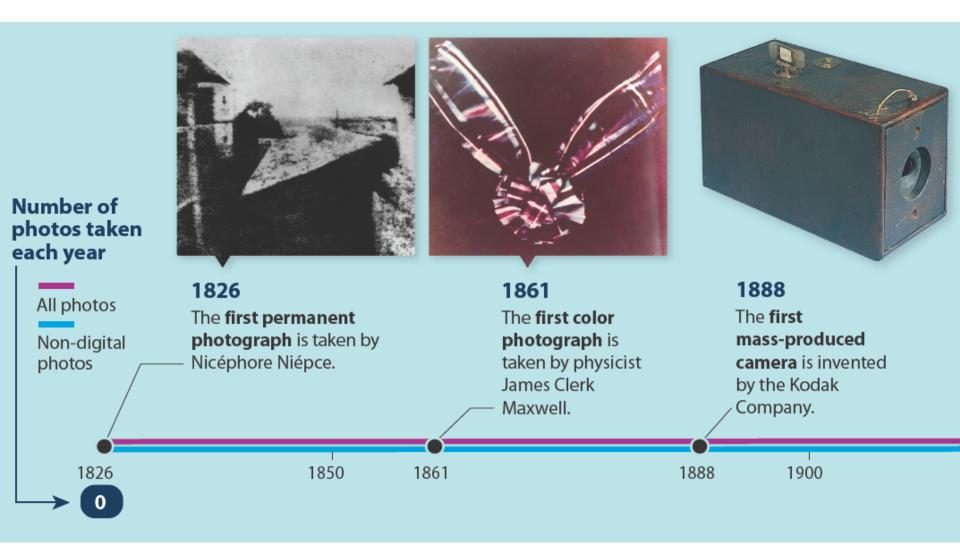


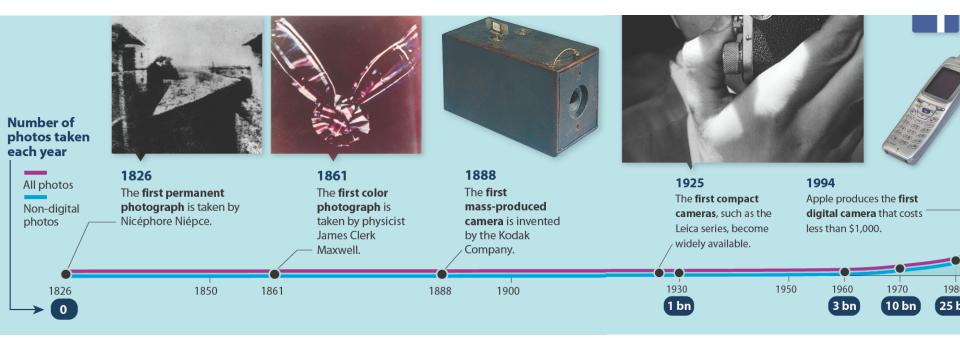
## Literacies for the 21st Century

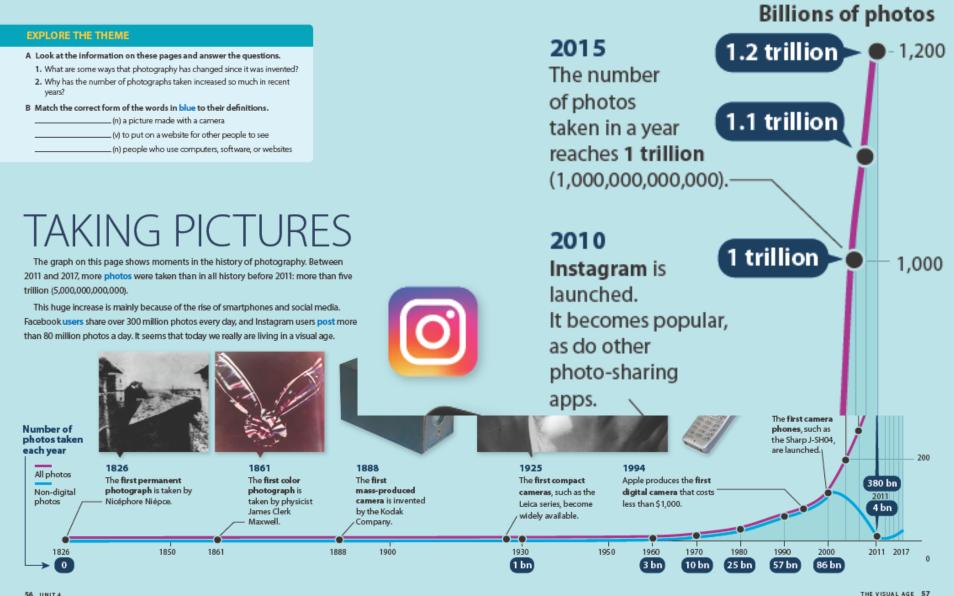








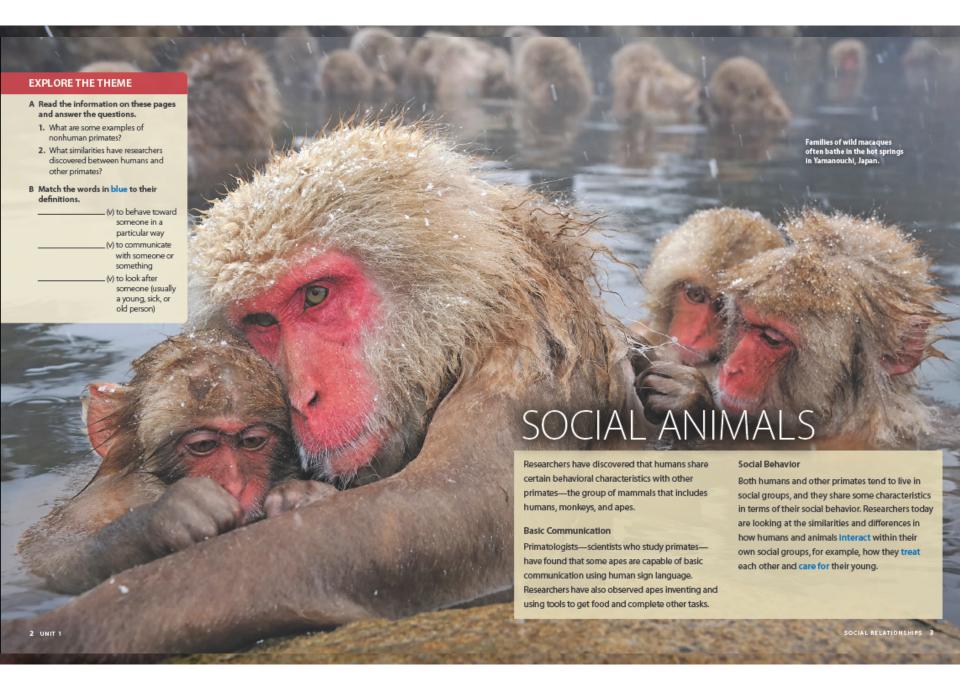




56 UNIT 4









## Why use images in the classroom?

- 1. To elicit / introduce vocabulary
- 2. To generate interest, inspire curiosity
- 3. To help explain concepts or tell a story
- 4. To give visual support for presentations
- 5. To promote critical thinking, e.g. visual analysis and evaluation skills

# Evaluating images: 3 criteria

Light

Composition

Moment













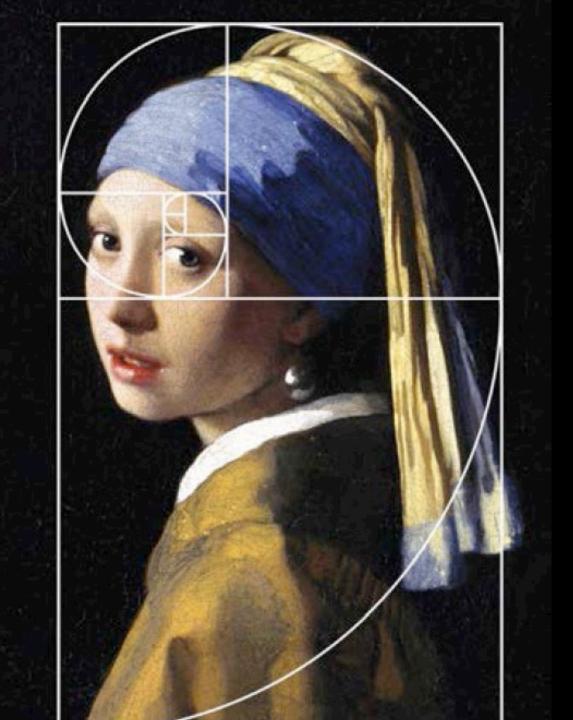












#### **EXPLORE THE THEME**

#### A Look at the information on these pages and answer the questions.

- 1. What is aesthetics?
- 2. According to the text, what factors affect aesthetic principles?
- 3. Is the image on the opposite page beautiful, in your opinion? If so, what makes

#### B Match the correct form of the words in blue to their definitions.

\_\_\_\_ (n) the basic rules or laws of a particular theory \_ (n) the size of something or its size in relation to other things \_ (adj) relating to patterns and shapes with regular lines

### WHAT IS BEAUTY?

Aesthetics is a branch of philosophy concerned with the study of beauty. Aesthetic principles provide a set of criteria for creating and evaluating artistic objects such as sculptures and paintings, as well as music, film, and other art forms.

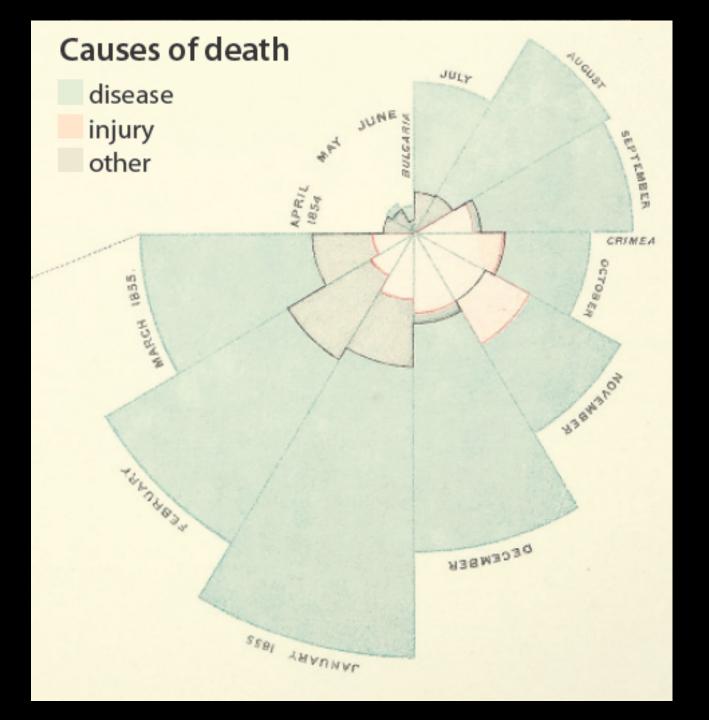
Aesthetic principles have existed almost as long as people have been producing art. Aesthetics were especially important to the ancient Greeks, whose principles have had a great influence on Western art. The Greeks believed that beautiful objects were intrinsically beautiful; that is, their beauty did not depend on people's interpretation of them. Concepts such as proportion, symmetry, and order made objects beautiful.

For example, the "golden spiral," applied here to a painting by Johannes Vermeer (1632-1675), is thought to illustrate the geometric proportions that people find aesthetically pleasing.



Today, however, most people would agree that aesthetic principles are culturally influenced and are not universal. Ideas on how the human form is represented, for example, vary widely. In traditional African art, sculpture is often abstract and stylized rather than realistically representing particular individuals.







- A Look at the information on these pages and answer the questions.
  - 1. What is a megacity?
  - 2. Which is the closest megacity to you?
- B Use the correct form of the words in blue to complete the sentences.

Our\_\_\_\_\_\_ is the Earth and all the people and things on it.

A\_\_\_\_\_\_ is a place like Brazil, Spain, and Japan.

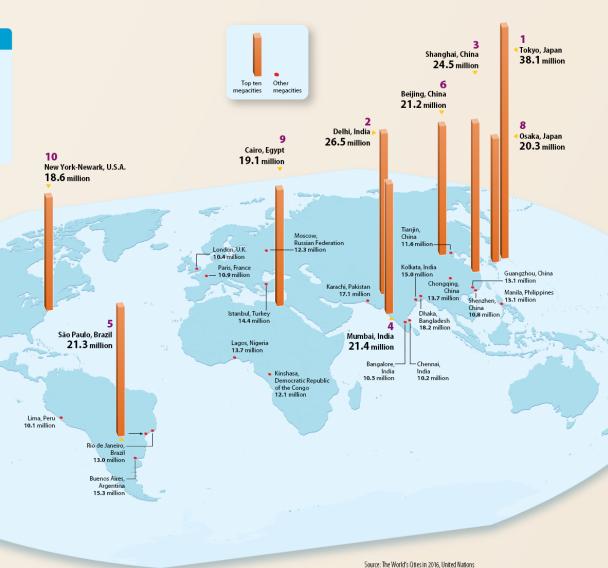
A \_\_\_\_\_\_\_\_ is a place like Brazil, Spain, and Japan.

A \_\_\_\_\_\_\_ is a place like Tokyo, New York, and London.

7 Mexico City, Mexico 21.2 million

# RISE OF THE MEGACITIES

As the world's
population grows,
more and more people
are living in cities. Many
of these people live in
megacities—cities with
populations of more than ten
million. In 1951, there was just one
megacity: New York. In 2016, there were
31 megacities in countries all around the world.



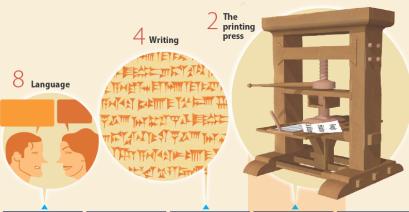
2 UNIT I OUR WORLD 3

?

Q. What's the greatest invention of all time?

#### **EXPLORE THE THEME**

- A Look at the information on these pages and answer the questions.
- 1. Do you agree with the list of the most important inventions? Can you think of other inventions to add?
- 2. Of these top 10 inventions, how many were developed within the last 200 years? Why do you think this is?
- B Match the words in blue to their definitions.
  - (n) a plan or drawing that shows the look and function of something
  - (ad)) being effective without wasting time or energy
    - (n) the tools, machines, and other items needed for a particular task



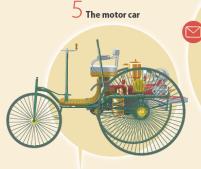
### WHAT'S THE WORLD'S GREATEST INVENTION?

The publishing company Raconteur asked over 400 people to name the world's most important inventions. Here are the top 10. Some inventions—like the car—make everyday life easier. Medical inventions—such as antibiotics save lives. Others—like the smartphone changed the way we communicate.

And the number one invention? According to survey results, the greatest invention of all time is the World Wide Web, followed by the printing press and the wheel.

The World

Wide Web



DATE: Unknown

3500 B.C.

3200 B.C.

1439

1826

1929

1974

1989

In the 1980s, scientists at the

1992

3 The wheel

No one knows who invented the wheel, but historians believe that it first appeared in Mesopotamia around 3500 B.C. Today, wheels are used for transportation and in energy-generating equipment.



Johannes Gutenberg invented a new type of printing press in 1439. He based his design on existing technologies, but his invention had movable type. This made the printing process much faster. Soon, thousands of books were being printed on his presses throughout Europe, and later the world.



The match



Antibiotics



O The personal computer

European Organization for Nuclear Research (CERN) needed an efficient way to access each other's work. Tim Berners-Lee, a software engineer at CERN, created a system that made it easy to share information. In 1989, he had the idea of creating a similar system for the whole world. This became the World Wide Web—what most people today call "the Internet."



The smartphone

**22** UNIT 2 INVENTIVE SOLUTIONS 23

#### 

Hood

#### **EXPLORE THE THEME**

- A Look at the information on these pages and answer the questions.
- 1. What does the infographic show?
- 2. Do you think it's an effective infographic? Why or why not?
- B Match the words and phrases in blue to their definitions.

(v) to communicate (v) to be noticeable or easy to see (v) to understand the

meaning of something

Windshield Grille Made in: Netherlands Made in: Belgium Made in: Germany Company Company Headquarters: France Company Headquarters: Germany Headquarters: Austria Gasoline engine Made in: Brazil Company Headquarters: Brazil Diesel engine (not shown) Made in: Japan Company Headquarters: Japan

and rear

bumpers

Company Headquarters: Canada

Made in: U.K.

When you think of infographics, you might think of pie charts and line graphs—or you might picture more complex images such as the globe on the previous page. But infographics can take almost any form. With a single infographic, designers are now able to convey complicated information and help us interpret the meaning of vast data sets.

The infographic on these pages, for example, has a 3-D design that allows a viewer to understand

a large amount of information about a car in a small amount of space. In the image, the outer shell of a BMW Mini has been lifted away from the car's body so that the viewer can see its inner workings. This treatment lets each piece of the car stand out as an individual part. In addition, the infographic allows a viewer to see a bigger storyalthough the car is made by a German company, it is actually a global product.

Wheel bearings Made in: U.K. Company Headquarters: U.S. Wheels Made in: Italy, Germany Company Headquarters: U.S.

Exhaust system

Company Headquarters: U.S.

Made in: U.K.

Headliner

Made in: U.K.

Company Headquarters: Spain

#### Where do the pieces come from?

**Outside mirrors** 

Made in: Germany

Company Headquarters: Canada

Seats

Made in: U.K.

Company Headquarters: U.S.

A selection of the car's parts reveals how automakers are increasingly using suppliers from around the world to stay competitive.

**124** UNIT 6 INFORMATION DESIGN 125



#### ∩ 2.02

When we think of language, we usually think of words, but visuals are also a part of communication. And like written language, visual symbols are not universal. An English speaker,

A for example, may place their hand near their chest as a gesture to mean "me," while a Japanese speaker is likely to point at their nose to indicate the same. Similarly, the way visual information is used can vary depending on the cultural context.

Take the color of money. Charles Apple, an American visual journalist, was working for a newspaper in South Africa when green was proposed as a color for the business section. The newspaper preferred blue, however, and for a simple reason: not every country has green money.

And that's not all. "In the United States, red Apple says, "but that's not true in all countries." Apple says, "but that's not true in all countries." Xan Sabaris, a Spanish infographic artist who has worked for the Beijing-based China Daily, agrees: "For the Western culture, red has negative connotations. In China, it's the opposite. You could see Chinese newspapers where stock market charts use green for negative values and red for positive ones."

Shapes are influenced by culture, too. Antonio Farach, from Honduras, D and Adonis Durado, from the Philippines, both work at the *Times of Oman*. Farach noticed how subtle details play a role. In

<sup>1</sup>A connotation is an idea that a word makes you think of, apart from its meaning.

Western cultures, he says, "rounded corners are more accepted than in Arabic countries. In typography, Arabs prefer blade-like typefaces ..."

Sometimes the differences are not so subtle.

"The big difference is orientation," says Durado.

"Arabs write and read from right to left." This

sometimes means inverting, or flipping, images,
but this can present challenges. "[N]ot all
images can just be flipped," says Durado, citing
examples such as maps.

Konstantinos Antonopoulos, a Greek designer working for Al Jazeera English in Qatar, remarks how different publications within the same company often need different visuals for the same stories. Al Jazeera Arabic, F for example, "has a strong visual language, spearheaded by the brilliant typography of the Arabic alphabet." But the company may change the visuals for its publications in Turkey or the Balkans, for example. "They] have their own visual languages," Antonopoulos explains.

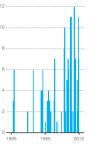


Graphics director Alberto Lucas López moved from Spain to work for the South China Morning Post in Hong Kong. He thinks that some differences in style have to do with Chinese writing. "I could clearly see the parallelism" between the Chinese characters and the visual preferences, "he says. His

<sup>2</sup>Parallelism is a likeness or connection between two or more things.

#### Months of severe drought

Palmer Drought Severity Index



#### **شهور القحط الشديد** مؤشر بالمر لقياس القحط

The same graph presented in English (left) and Arabic (right) editions of the same publication

Data visualization journalis Alberto Cairo thinks that "wor powerful enough to communica you also need visuals." Visual d effective when there is an "aha" the information provides "spon These visuals immediately creat of complex concepts. Cairo cite (Figure 1) that shows the sudde temperatures as an example of sharp curve upward, the chart c how rapidly our planet is warm

Visual data also appears to r seem more credible. A study car Cornell University in New York 67 percent of participants believ when they read it in a document graph. However, when a graph v 96 percent believed the same inf Alberto Cairo agrees that "a me scientific when you put charts in out that visual data can also mis it makes textual information loc and academic than it perhaps is.

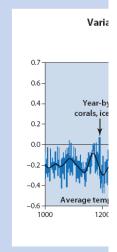
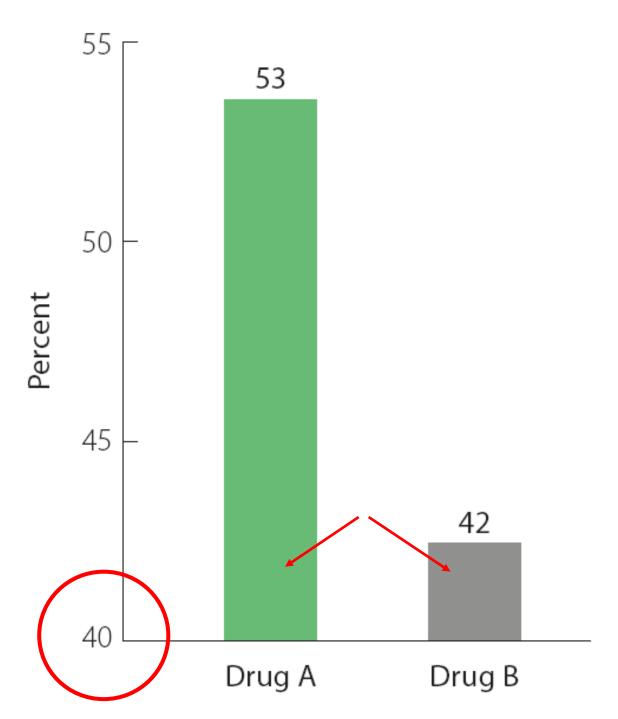
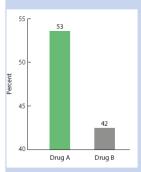


Figure 1: Average global tem







jure 3: Effectiveness of Drug A

#### G THE FUTURE

to Geoff McGhee—a data tanford University—new forms are pushing the boundaries of rocess. Unlike traditional visual w types of visuals use thousands, such as the map showing global n Facebook (the first image in assage). Many of these modern feature a huge number of thin, and semi-transparent³ lines. The ws viewers to "see through" at others behind.

alists worry that complex such as these may make beautiful sk confusing readers instead; them. For Alberto Cairo, the visualization is not complexity whether the public is reliably en creators of visual data are nonest, he says, "great visualizations's mind for the better."

overlapping, part of one line covers part of the

i-transparent, you can see through it, but not

INFORMATION DESIGN 129

#### Microsoft Employees Raise \$117 Million

In 2014, Microsoft employees raised a record-breaking \$117 million for nearly 20,000 nonprofits and schools around the world





## Why use images in the classroom?

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"Image, rather than writing, [is now] the centre of communication..."

"In this 'new media age' the screen has replaced the book as the dominant medium of communication."

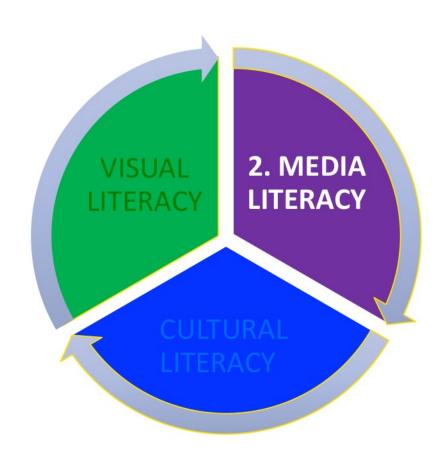
Gunther R. Kress, Literacy in the New Media Age

"Image, rather than writing, [is now] the centre of communication..."

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Gunther R. Kress, Literacy in the New Media Age

## Literacies for the 21st Century



"Nudents dents tell you have don't believe everything they read on very little in the way of the Internet a but the kins."



Prof. Donald J. Leu Director, New Literacies Research Lab University of Connecticut

## MailOnline

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### It must be true, I read it on the Internet: Elusive 'tree octopus' proves how gullible web generation is

By DAILY MAIL REPORTER

UPDATED: 12:30 GMT, 3 February 2011













#### CEPHALON

2017-12-27 A New Spe Hiding In Plain Sigh (Earther)

When it comes to the Internet, it seems Giant Octopus Has Ekids will believe anything.

Some previously assum But it was thought that something as Giant Pacific Octopuse: absurd as an octopus that lives in a tree might be enough to cast some doubts in their minds - it wasn't.











Amazing Photograph of 2016 by Bob Burton Chief photographer of National Geographic. This Shark is awesome







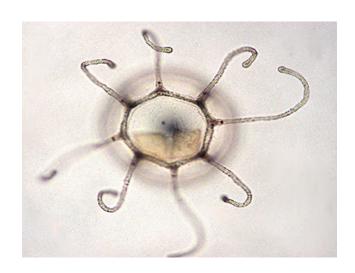




## "Immortal" Jellyfish Swarm World's Oceans

Ker Than for National Geographic News January 29, 2009

A potentially "immortal" jellyfish species that can age backward—the Benjamin Button of the deep—is silently invading the world's oceans, swarm by swarm, a recent study says.



#### The Lightly Braised Turnip

### Science

LBTToday

OPINION

CARTOONS WORLD

**ARTS** 

SM/REGION

**SCIENCE** 

#### Second Giant Sea Creature Washes Ashore Along Santa Monica Coastline - Alarms Sound Over Radioactive Gigantism

Giant Squid Discovered On California Coast And Scientists Suspect Radioactive Gigantism

Published January 10, 2014 Updated 12:53 PM PST Updated 7:36 PM PST

By BUTCH WITT



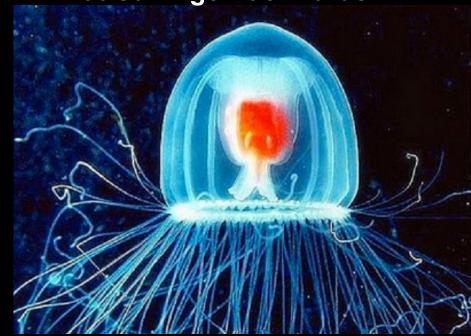
Like 1.3M people like this. Be the first of your friends.



1. Leaping Shark Image Wins National Geographic Photograph of the Year



2. Researchers Find Creature That Can Age Backwards



3. Giant Squid Washes Up on California Beach





# Leaping Shark Image Wins National Geographic Photograph of the Year



## IS IT REAL?

Λ 8

Look at the two shark photos on this page. One is real, but the other is fake. Can you tell which is which?

In 2016, a dramatic<sup>2</sup> photo of a great white shark jumping out of the water appeared on Twitter and went viral.<sup>3</sup> The person who posted the photo called himself Bob Burton. He said he was National Geographic's top photographer, and that the picture was National Geographic's photo of the year.

But none of this was true. There is no one called Bob Burton at National Geographic. There isn't even a National Geographic prize for photo of the year. And, most importantly, the photo itself wasn't real—it was made on a computer by joining together several<sup>4</sup> other photos.



With computer technology and social media, it is much easier now to make and share fake images. So how is it possible to tell if a photo is real? First, look for a source. Where does the photo come from? Is there a photographer's name? Can you find any information about them on the Internet? Second, look for clues in the photo. Sometimes the direction of light and shadows is wrong. Is anything in the photo too big or too small, or is anything missing?

New technology is changing how we create and share images. But don't believe everything you see!

THE VISUAL AGE 67



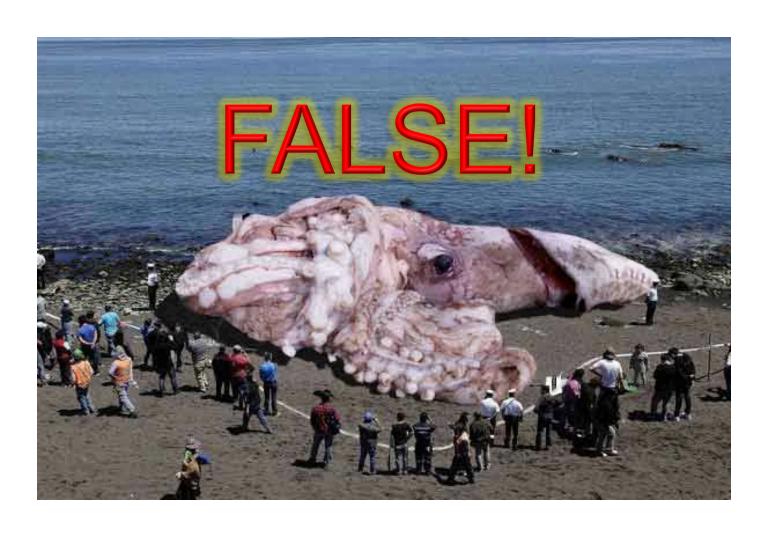
# Researchers Find Creature That Can Age Backwards







# Giant Squid Washes Up on California Beach





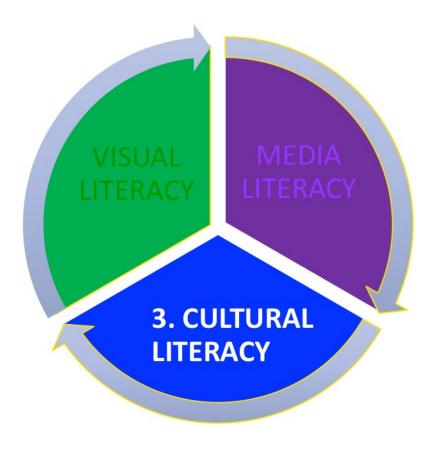
## **Media Literacy:**

3 Steps to evaluating what's real online

- 1. Question your assumptions
- 2. Analyze the evidence
- 3. Evaluate its credibility



## Literacies for the 21st Century





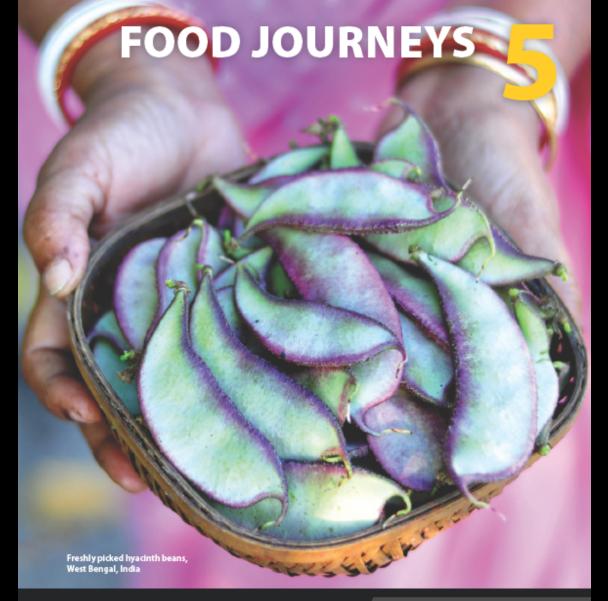












#### ACADEMIC SKILLS

READING Recognizing pronoun references WRITING Paraphrasing using synonyms GRAMMAR Giving reasons

CRITICAL THINKING Justifying your opinion

#### THINK AND DISCUSS

- 1 What do you see in the photo? Do people eat this kind of food in your country?
- 2 Skim through the unit. What types of food do you see?

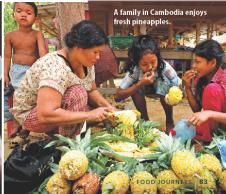


Food photographer Penny De Los Santos believes that photos can tell powerful stories. So she gave photographers an assignment: Take a picture that shows the role of food in your culture.

De Los Santos told the photographers to think about the answers to these questions: What's a typical food scene in your world? What do your friends and family do when they eat together? How do they share meals?

De Los Santos received thousand of photos from photographers all over the world. She evaluated each one based on its color, lighting, composition (form), and story. Here are some of her favorites.







## With food, if you have the right ingredients, you can create the flavor of another place.

It's like armchair travel, but it's faster and easier.



- Sasha Martin

ood over two was an leas about gers cover

What did you hope to teach your daughter by cooking the world?

iaster and easter ream it storetop traver.

I wanted her to feel that she had a place in the world where she belonged. But I also feel it's important for children to grow up knowing people from other countries—their global neighbors.

I call them neighbors because the world is so small now. I remember going on Facebook in its early days. I noticed there were people from different parts of the world commenting on posts, even arguing with each other. I feel that in that environment, young people need to be able to respect and understand each other.

So food is a great way to create that common ground?

Yes. I wanted to share recipes that were bridges to other cultures. A lot of celebrity TV chefs tend to choose the most shocking recipes. But I think you need a bridge first. Then people won't put up a wall in their mind about that culture. They won't just think, "Gross!! Those people eat such weird2 things!"

<sup>1</sup>gross: very unpleasant, disgusting <sup>2</sup>weird: strange



When Adam Roberts was in law school, he needed a break from studying. He decided to teach himself how to cook. Roberts started a blog to keep a record of his learning adventure and share it with other people. Eventually, his blog The Amateur Gourmet led to a new career in cooking.

 In May of 2012, two friends wanted to make each other laugh, so they created a blog for sharing pictures of ugly food. Other people began to send in their own photos of weirdlooking food. By 2014, Someone Ate This was one of the Internet's most popular food blogs.

 A history student named Anje decided to share her love for history and cooking. On her websites, Kitchen Historic and Food Roots, readers can find dishes from the 13th century all the way to the 1980s.

### 10: Beef stroganoff (Russia)

FEBRUARY 8, 2015 / LEAVE A COMMENT

Classic Beef and mushrooms - Russian style

#### 20: Ciulama (Romania)

FEBRUARY 22, 2015 / LEAVE A COMMENT

Fantastic creamy mushroom dish from Romania - try it! R

### 14: Pasta Trapanese (Italy)

NGI series Schedules News

FEDDIIADV 40 004E / IFAVE A CONANAENT

### 30: Huevos pericos (Colombia)

MARCH 29, 2015 / LEAVE A COMMENT

#### 32: Huevos a la Rabona (Peru)



APRIL 5, 2015 / LEAVE A COMMENT



http://perudelights.com/huevos-a-la-rabonabreakfast-on-the-go/

Peruvian breakfast eggs – recipe from http://perudeligbreakfast-on-the-go/

## 44: White fish and coconut curry (Somalia)

MAY 31, 2015 / LEAVE A COMMENT



Recipe from: http://www.somalikitchen.com/fish-

80: Deep-fried Mars

bar (Scotland)

DECEMBER 31, 2015 / LEAVE A COMMENT



Recipe from http://www.food.com/recipe/deepfried-mars-bars-43463?photo=206612

And so the last dish of the year! For #80 I made ded dish from Stonehaven, Scotland. As the recipe says sugar". Recipe from food.com. Happy New Year!



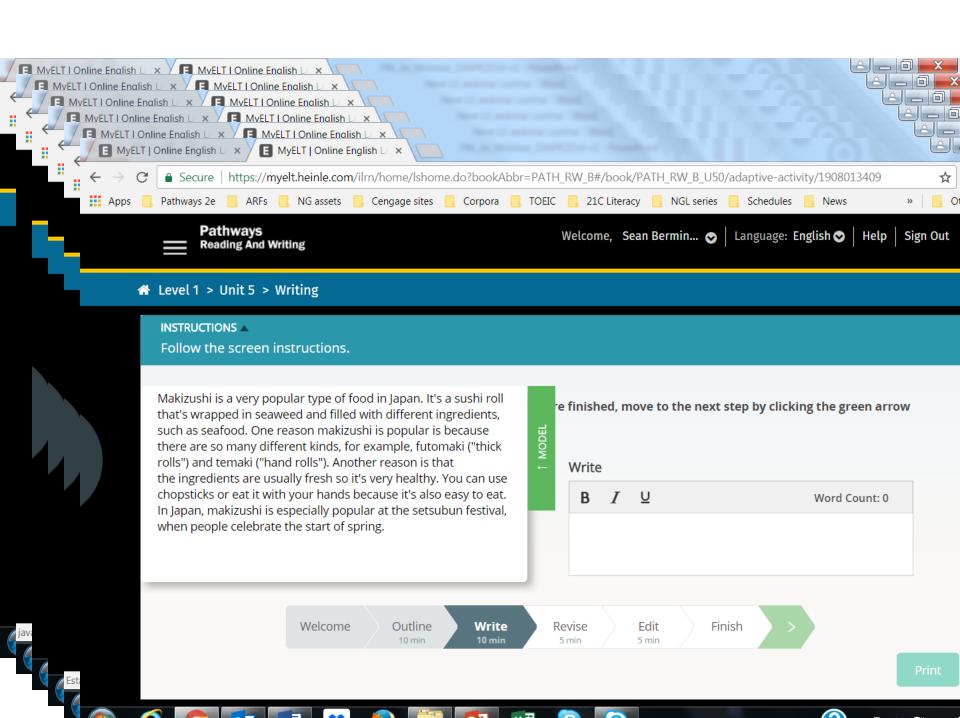
#### worlddishes80

"What separates people is an imaginary wall....
What needs to be done is put cracks in that wall.

[We need] to create a sustainable way of connecting with each other and creating friendships."

le-down' (you have to flip popular in many parts of estion. The recipe I used is ter like I did!







# "cultural agility"

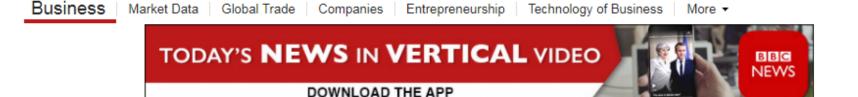


# Cultural Literacy: 3 reasons why it's important

- 1. Comprehension
- 2. Communication
- 3. Collaboration



Stories



Science

Tech

## Pisa tests to include 'global skills' and cultural awareness

Business

By Andreas Schleicher OECD education director

Video

World

Asia

UK

① 27 May 2016











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#### 'No-one around Trump to contain him'

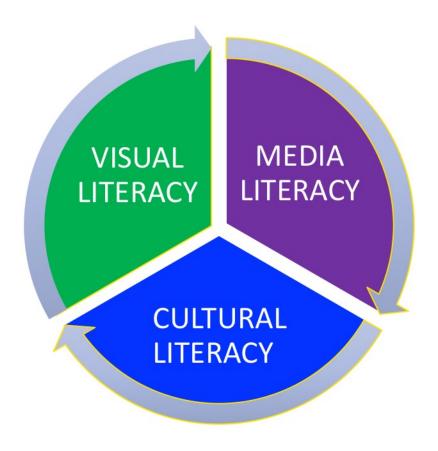
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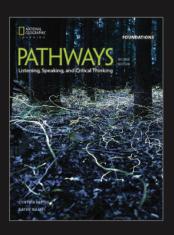
#### Eta apologises ahead of dissolution

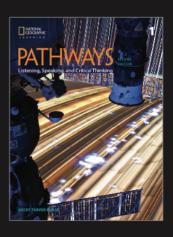
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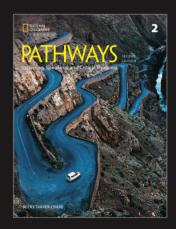


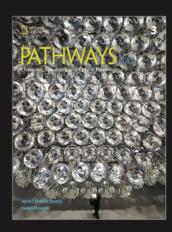
## Literacies for the 21st Century

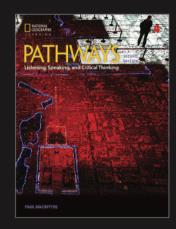


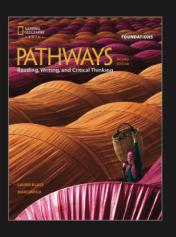




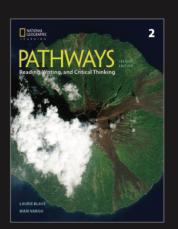


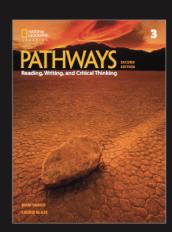














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