

Name	
Teacher Name	
Class	
Date	

DECODE THIS MESSAGE CHALLENGE

Directions

Translate the following as quickly as possible:

Good example of a Brain Study: If you can read this you have a strong mind:

7H15 M3554G3
53RV35 7O PR0V3
H0W 0UR M1ND5 C4N
D0 4M4Z1NG 7H1NG5!
1MPR3551V3 7H1NG5!
1N 7H3 B3G1NN1NG
17 WA5 H4RD BU7
N0W, 0N 7H15 LIN3
Y0UR M1ND 1S
R34D1NG 17
4U70M471C4LLY
W17H 0U7 3V3N
7H1NK1NG 4B0U7 17,
B3 PROUD! 0NLY
C3R741N P30PL3 C4N
R3AD 7H15.

XXXXXXXXXXXXXXXXXXXXXXXXX

Translation

XXXXXXXXXXXXXXXXXXXXXXXXX

Breaking the Code: Why Your Brain Can Read This

By Natalie Wolchover | February 9, 2012 12:51pm ET

You might not realize it, but your brain is a code-cracking machine.

For example, it doesn't matter in what order the letters in a word appear, the only important thing is that the first and last letter are in the right place. The rest can be a total mess and you can still read it without problem.

Passages like these have been bouncing around the Internet for years. But how do we read them? And what do our incredibly low standards for what's legible say about the way our brains work?

According to Marta Kutas, a cognitive neuroscientist and the director of the Center for Research in Language at the University of California, San Diego, the short answer is that no one knows why we're so good at reading garbled nonsense. But they've got strong suspicions.

"My guess is that context is very, very, very important," Kutas told Life's Little Mysteries. We use context to pre-activate the areas of our brains that correspond to what we expect next, she explained. For example, brain scans reveal that if we hear a sound that leads us to strongly suspect another sound is on the way, the brain acts as if we're already hearing the second sound. Similarly, if we see a certain collection of letters or words, our brains jump to conclusions about what comes next. "We use context to help us perceive," Kutas said.

It's not a perfect system, however. In the above passages, Kutas suspects that you probably didn't get every single word right just from knowing what came before it. You only thought you were reading the passage perfectly, because you automatically (and subconsciously) went back and filled in any gaps in your knowledge based on subsequent context — the words that came later.

Additionally, in the case of the first example (the words with jumbled middle letters), it helps that your brain processes all the letters of a word at once, rather than one at a time. Thus, the letters "serve as contexts for each other," Kutas said.

In the case of the second passage (with the numbers in place of some letters), a 2007 study by cognitive scientists in Spain found that reading such passages barely activates the brain areas that correspond to digits. This suggests that the letter-like appearance of the digits, as well as their context, has a stronger influence on our brains than their actual status as digits. The researchers think some sort of top-down feedback mechanism (our consciences telling our sensory processors what to do, sort of) normalizes the visual input, allowing us to ignore the funny bits and read the passage with ease.

This story was provided by Life's Little Mysteries, a sister site to LiveScience. Follow Natalie Wolchover on Twitter @nattyover. Follow Life's Little Mysteries on Twitter @lilmysteries, then join us on Facebook.

The Seven Ages of Man by William Shakespeare

All the world's a stage,
 And all the men and women merely players,
 They have their exits and entrances,
 And one man in his time plays many parts,
 His acts being seven ages. At first the infant, 5
 Mewling and puking in the nurse's arms.
 Then, the whining schoolboy with his satchel
 And shining morning face, creeping like snail
 Unwillingly to school. And then the lover,
 Sighing like furnace, with a woeful ballad 10
 Made to his mistress' eyebrow. Then a soldier,
 Full of strange oaths, and bearded like the pard,
 Jealous in honour, sudden, and quick in quarrel,
 Seeking the bubble reputation
 Even in the cannon's mouth. And then the justice 15
 In fair round belly, with good capon lin'd,
 With eyes severe, and beard of formal cut,
 Full of wise saws, and modern instances,
 And so he plays his part. The sixth age shifts
 Into the lean and slipper'd pantaloons, 20
 With spectacles on nose, and pouch on side,
 His youthful hose well sav'd, a world too wide,
 For his shrunk shank, and his big manly voice,
 Turning again towards childish treble, pipes
 And whistles in his sound. Last scene of all, ²⁵
 That ends this strange eventful history,
 Is second childishness and mere oblivion,
 Sans teeth, sans eyes, sans taste, sans everything.



1. Break the code to name and describe the seven ages **using your own words.**

1. Infancy	His mother holds him while he cries, whines and vomits.
2.	
3.	
4.	
5.	
6.	
7.	

2. This whole poem compares people's lives to acting on stage. What is this literary device called?

3. What is Shakespeare's character saying about the nature of life? Do you agree? Explain.

4. On a scale of 1-10, how difficult is the poem to translate and comprehend?
