

Scientists unlock secrets to seahorses

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(via Annunako on pixabay.com)

For the first time, scientists have unlocked the secrets to one of the world's most recognizable and unique, but least understood fish - the seahorse. Researchers have worked out the genetic code of the Southeast Asian tiger tail seahorse. They now have the

genetic map of all of its DNA. This means scientists can find out a lot more about this sea creature than before. They can now start to figure out why seahorses are so different to other fish. Unlike other fish, seahorses have no teeth. Another difference is the male brooding of their young - male seahorses carry babies and give birth to them instead of females. In addition, seahorses do not swim horizontally like other fish; they swim vertically (up and down).

Scientists from Germany's University of Konstanz and others from China and Singapore helped to sequence the genome of the tiger tail seahorse. A genome is a map of all the genes and genetic information in a cell or organism. Seahorses started to change from other fish about 100 million years ago. They began to take on their unusual shape, which resembles a horse. There are a total of 54 species of seahorse. Its scientific name is Hippocampus. The word 'Hippocampus' comes from the Ancient Greek word hippos meaning 'horse' and kampos meaning 'sea monster'. The word 'seahorse' can also be written as two separate words (sea horse), or hyphenated with a dash between the two words (sea-horse).

Sources: csmonitor.com / redorbit.com / Wikipedia.org

Writing

Seahorses are the cutest creatures in the world. Discuss.

Chat

Talk about these words from the article.

the first time / secrets / unique / seahorse / map / DNA / teeth / babies / swim / scientists / cell / organism / unusual shape / species / monster / separate / dash

True / False

- a) The seahorse is a fish. T / F
- b) Scientists unlocked the code to the lion tail seahorse. T / F
- c) Male seahorses give birth to baby seahorses. T / F
- d) Seahorses do not swim horizontally. T / F
- e) Scientists from three countries unlocked the seahorse's genome. T / F
- f) Seahorses started to get their shape a million years ago. T / F
- g) There are over 154 different types of seahorse. T / F
- h) The word seahorse comes from Latin. T / F

Synonym Match

(The words in **bold** are from the news article.)

- | | |
|-----------------------|---------------|
| 1. unlocked | a. odd |
| 2. secrets | b. understand |
| 3. figure out | c. also |
| 4. creature | d. different |
| 5. In addition | e. mysteries |
| 6. sequence | f. animal |
| 7. information | g. looks like |
| 8. unusual | h. data |
| 9. resembles | i. order |
| 10. separate | j. opened |

Discussion – Student A

- a) What things interested you about the text?
- b) What can we learn from seahorses?
- c) What would a day in the life of a seahorse researcher be like?
- d) How important are seahorses?
- e) Where does the word seahorse come from?
- f) What books and movies are seahorses in?
- g) Why are there different spellings of the word seahorse?
- h) What questions would you like to ask the researchers?

Phrase Match

- | | |
|-----------------------------------------|--------------------------|
| 1. For the first | a. teeth |
| 2. worked out the genetic | b. the Ancient Greek |
| 3. Unlike other fish, seahorses have no | c. like other fish |
| 4. male seahorses carry babies and give | d. resembles a horse |
| 5. seahorses do not swim horizontally | e. two separate words |
| 6. take on their unusual shape, which | f. time |
| 7. There is a total of 54 | g. between the two words |
| 8. The word 'Hippocampus' comes from | h. code |
| 9. can also be written as | i. birth |
| 10. hyphenated with a dash | j. species of seahorse |

Discussion – Student B

- What do you know about seahorses?
- What did you think about what you read?
- How will knowing the seahorse genome help the world?
- How are seahorses different from other fish?
- How do seahorses eat if they have no teeth?
- Why do you think male seahorses give birth?
- Is it better to swim horizontally or vertically?
- What would you like to know about seahorses?

Spelling

- eiqunu, but least understood fish
- worked out the etingce code
- sea autrerec
- tendisa of females
- seahorses do not swim rotoyahzliin
- they swim iyletlravc
- helped to eueeqscn the genome
- in a cell or srigonma
- ermelsbse a horse
- the etncinA Greek word
- written as two steapear words
- phyndhtaee with a dash

Answers – Synonym Match

1. j	2. e	3. b	4. f	5. c
6. i	7. h	8. a	9. g	10. d

Role Play

Role A – A Happy Life

You think a happy life is the most important secret to unlock. Tell the others three reasons why. Tell them why their secrets aren't so important. Also, tell the others which is the least important of these (and why): the universe, how to get rich or how to stay young looking.

Role B – The Universe

You think the universe is the most important secret to unlock. Tell the others three reasons why. Tell them why their secrets aren't so important. Also, tell the others which is the least important of these (and why): a happy life, how to get rich or how to stay young looking.

Role C – How to Get Rich

You think how to get rich is the most important secret to unlock. Tell the others three reasons why. Tell them why their secrets aren't so important. Also, tell the others which is the least important of these (and why): the universe, a happy life or how to stay young looking.

Role D – How to Stay Young Looking

You think how to stay young looking is the most important secret to unlock. Tell the others three reasons why. Tell them why their secrets aren't so important. Also, tell the others which is the least important of these (and why): the universe, how to get rich or a happy life.

Speaking – Secrets

Rank these with your partner. Put the most important secrets to unlock at the top. Change partners often and share your rankings.

- | | |
|----------------------------|----------------|
| • my best friend's secrets | • UFOs |
| • the human genome | • a happy life |
| • how to stay young | • success |
| • how to get rich | • the universe |

Answers – True False

a	T	b	F	c	T	d	T	e	T	f	F	g	F	h	F
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Answers to Phrase Match and Spelling are in the text.