

Nature Quiz

TMN-COT Meeting January, 2014
by Rich Tillman

Oysters

Species Quiz # 1



- **Clues:**
 - **The common oyster found on reefs in Galveston bay is valued as a food-source.**

- **Questions:**
 - **What is the common name of the oyster and what is its scientific name?**

Species Quiz # 2



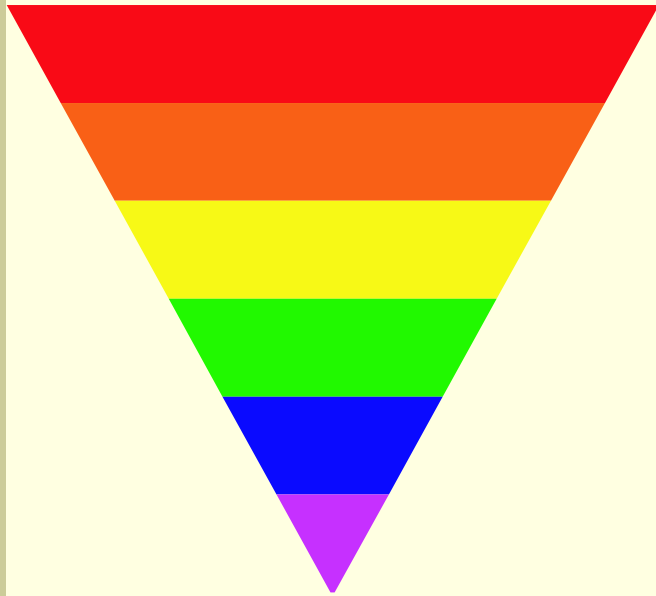
■ Clue:

- The oyster has very irregular shells, the shape of which is dependent on what it is attached to.

■ Question:

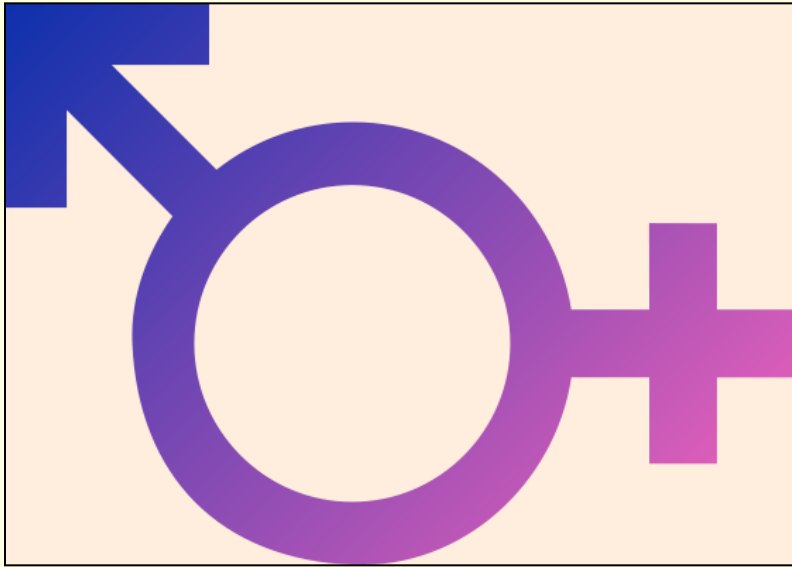
- Which half of the shell is usually cemented to the hard substrate and is flatter?

Species Quiz # 3



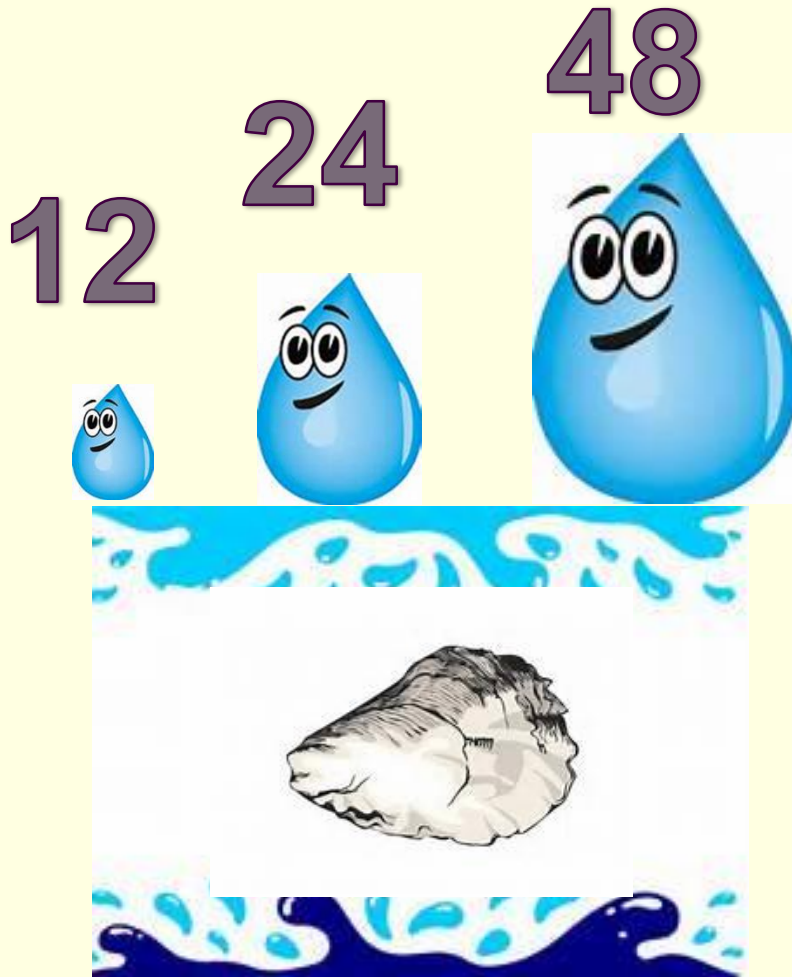
- Question:
 - How many muscle scars are there per shell and what color are they?

Species Quiz # 4



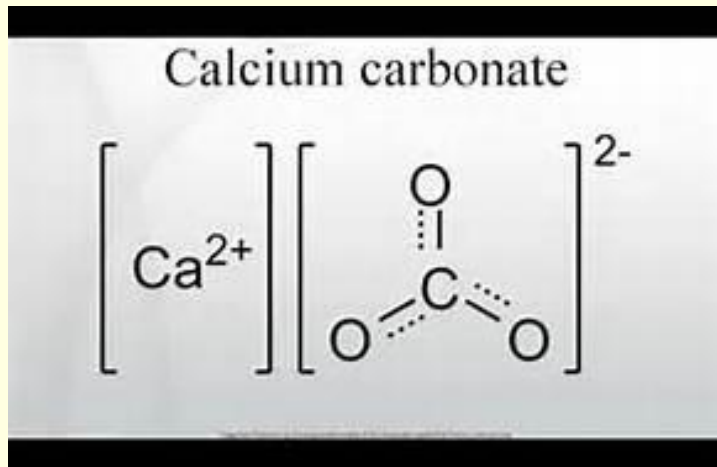
- **Clues:**
An hermaphroditic organism has both sex organs.
- **Question:**
 - **True or false:**
Oysters are true hermaphrodites.

Species Quiz # 5



- Clues:
 - Oysters are filter feeders, feeding on plankton in the water.
- Question:
 - An oyster can pump how many gallons of water through it in 24 hrs: 12, 24, or 48?

Species Quiz # 6



■ Clues:

- The oyster shell is made mainly of calcium carbonate.

Question:

- Where does the oyster get the calcium from?

Species Quiz # 7



- Clues:
 - A legal oyster in Texas is 3 inches.
- Question:
 - How long does it take a Texas oyster to reach market size?

Species Quiz # 8

Thousands
000

Millions
000000

Billions
000000000

■ Clues:

- Our oysters spawn in the spring of the year as the water temps begins to warm.

■ Question:

- A female oyster will spawn more than once during the spring, with each spawn ranging in the: **thousands, millions, or billions?**

Species Quiz # 9

■ Clues:

- The egg is fertilized in the water column and then, within four to six hours, the embryonic bivalve begins to develop rudimentary shell and rows of cilia. In 15 to 20 days it begins to set.

■ Question:

- **The most critical factor at 'setting' is:
Water temp or
Salinity?**



Species Quiz # 10



September,
October,
November,
December.....

- Clues:
 - The Texas oyster season is November through April.
- Question:
 - True or False: Only eat oysters during the months with an “R”.

Bonus Question

- **What type of Oysters did Baxter Black write about in his poem “The Oyster”?**



Species Quiz # 1 Answer



Photo from txmarspecies.tamug.edu

■ Answer

- **Eastern Oyster**
- **Also known as Atlantic oyster or Virginia oyster**
- *Crassostrea virginica*

Species Quiz # 2 Answer



Photo from txmarspecies.tamug.edu

- **Answer**
 - **The left shell is usually cemented to a hard substrate and is flatter than the right shell**

Species Quiz # 3 Answer



Photo by P. Romfh

- Answer
 - One muscle scar per shell
 - *Purple*

Species Quiz # 4 Answer



■ Answer

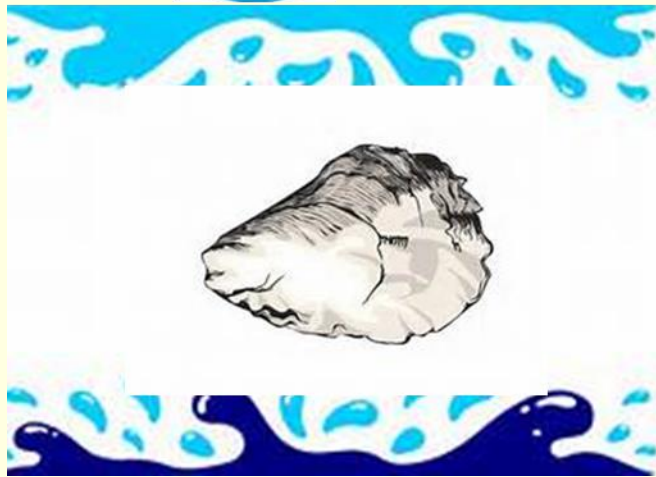
- **False: An oyster is a protandrous hermaphrodite. It has the ability to change its sex.**

I'm a
protandrous
hermaphrodite!



Species Quiz # 5 Answer

24



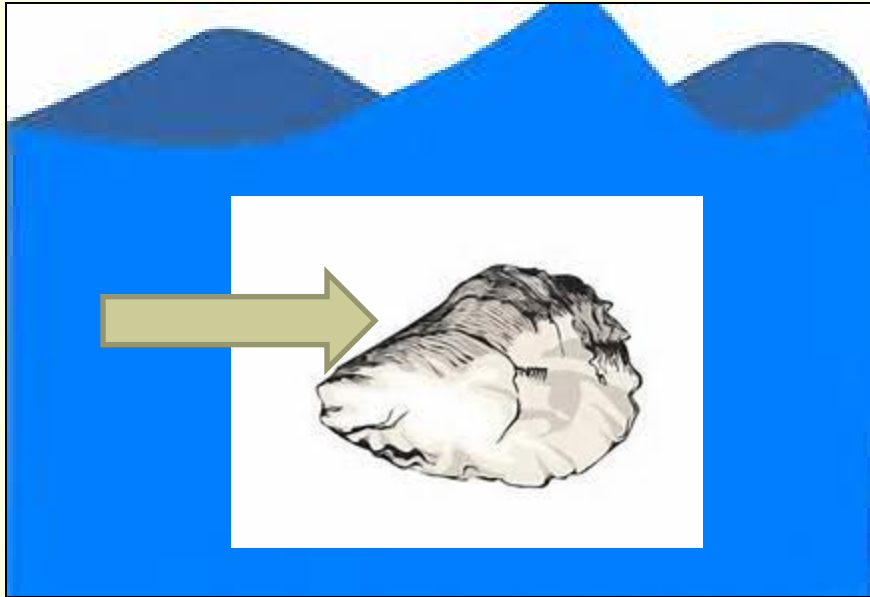
■ Answer

- As much as 24 gallons in one day is spent moving the water across its gills and then the plankton to its mouth and stomach.

Species Quiz # 6 Answer

■ Answer

- The water. The shell construction is extracted from the water and converted into shell material by the mantel and internal organ.



Species Quiz # 7 Answer

**18
months**

- **Answer**

- **Eighteen months;** shell growth is temperature-dependant and our shells continue to grow year-round, compared to East Coast oysters that stop growing as water temperatures drop below 40 degrees F.

Species Quiz # 8 Answer

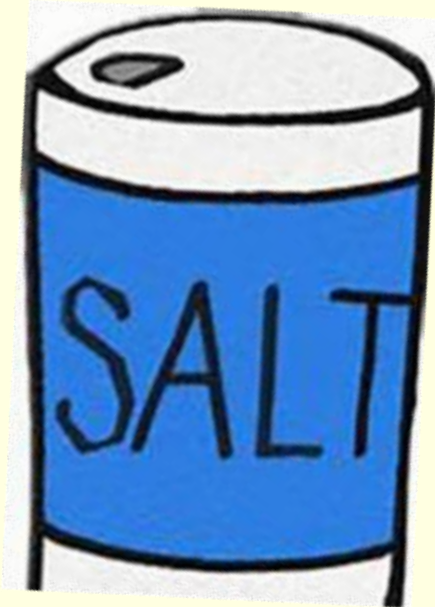
- Answer

15 to 115 M

- From 15 to 115 million eggs per spawn

Millions
000000

Species Quiz # 9 Answer



■ Answer

- **Salinity:** if the water is too salty the spat will not sink and set. It must set on something hard.
- About one in every 3 million eggs survive to become a spat, a little better odds than the Texas Lottery.

Species Quiz # 10 Answer



- **Answer**
 - **False. With modern refrigeration oysters may be consumed year round.**

Bonus Question



- Answer
- Rocky Mountain Oysters