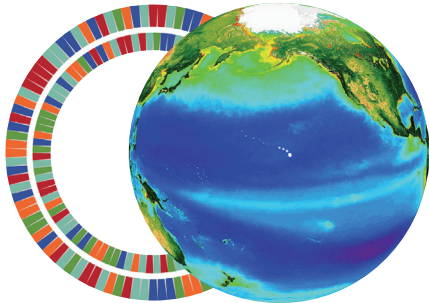


WHAT MICROBE ARE YOU



c.more

center for microbial oceanography:
research and education

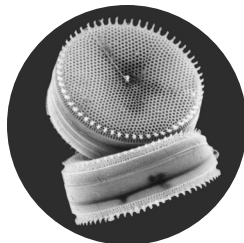
cmore.soest.hawaii.edu



Thalassiosira weissflogii!

Terrific job! Scientists call you *Thalassiosira weissflogii*, but your special code name is **Lasso!**

You, "Lasso":



- are neat and tidy
(*T. weissflogii* is organized,...)



- wear glasses
(...protects itself with hard glass cell walls, and...)



- go to bed early
(...does its work during the daytime.)



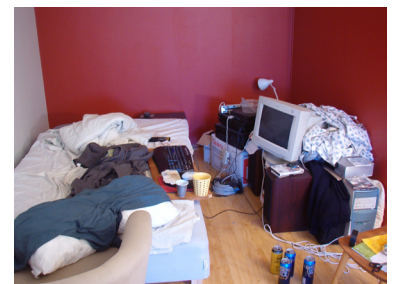
My room is neat and tidy.

(go to page 14)



My room is messy.

(go to page 2)



Unless otherwise noted, all photos courtesy of Wikimedia Commons.

In a bunk bed, I like the **top** bunk.

(go to page 3)



In a bunk bed, I like to sleep on the **bottom**.

(go to page 10)

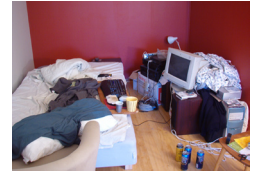
Trichodesmium erythraeum!

Yippee! Scientists call you *Trichodesmium erythraeum*, but your special code name is **Trickster!**



You, "Trickster":

- are messy
(*T. erythraeum* is disorganized,...)
- likes to be with friends
(...forms colonies with others, and...)
- cook your own food
(...makes its own food.)



Microbe photo: Micro*scope

Synechococcus!

Fantastic job! Scientists call you *Synechococcus*, but your special code name is **Sy!**



You, "Sy":

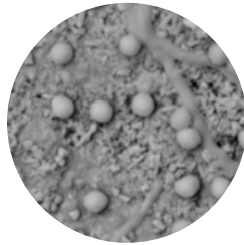
- like to play alone
(*Synechococcus* likes to live alone,...)
- like the upper bunk
(...lives near the surface,...)
- cook your own food
(...makes its own food, and...)
- like all types of weather
(...can live in cold temperatures.)



Microbe photo: Dr. R. Wagner, www.dr-ralf-wagner.de.

Salinispora tropica!

Incredible work! Scientists call you *Salinispora tropica*, but your special code name is **Sporty!**



You, "Sporty":

- like to eat at restaurants
(*S. tropica* eats other living things,...)



- like the color purple
(...is a gram positive microbe, and...)



- can't hold your breath for a long time
(...needs oxygen to survive.)



I enjoy to cook at home.

(go to page 4)



I prefer to eat at restaurants.

(go to page 6)



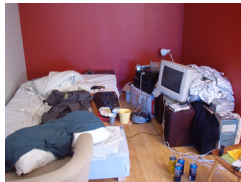
Rhodferax ferrireducens!

Yahoo! Scientists call you *Rhodferax ferrireducens*, but your special code name is **Ferret!**



You, "Ferret":

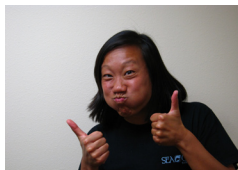
- are messy
(*R. ferrireducens* is disorganized,...)



- eat at restaurants
(...eats organic material in sediment, and...)



- can hold your breath a long time
(...lives without oxygen.)



I don't like cold weather.

(go to page 30)



I like all sorts of weather.

(go to page 35)



In my free time, I like playing alone.

(go to page 5)



I like playing with my friends.

(go to page 37)



4

I can hold my breath for a long time.

(go to page 9)



I can't hold my breath for a long time.

(go to page 7)



6

Ruegeria pomeroyi!

Good for you! Scientists call you *Ruegeria pomeroyi*, but your special code name is **Rugger!**



You, "Rugger":

- like to eat at restaurants
(*R. pomeroyi* eats other living things,...)



- don't like purple
(...is gram negative, and...)



- can't hold your breath for a long time
(...needs oxygen to survive.)

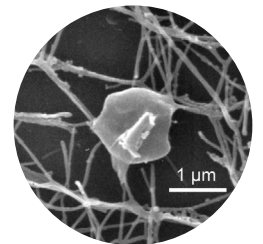


Microbe photo: Gonzalez et al. 2003 *Int. J. Syst. Evol. Microbiol.* 53: 1261-1269.

33

Pyrodictium abyssii!

Super job! Scientists call you *Pyrodictium abyssii*, but your special code name is **Pyro!**



You, "Pyro":

- like the bottom bunk
(*P. abyssii* lives on the bottom of the ocean floor,...)



- like lemonade
(...likes acidic conditions, and...)



- have relatives that live all around the world
(...can live in different areas.)



Microbe photo: Gertraud Rieger, Karl O. Stetter, Reinhard Ravel, University of Regensburg, René Hermann, Zuerich, Switzerland.

31

Prochlorococcus marinus!

Right on! Scientists call you *Prochlorococcus marinus*, but your special code name is **Pro-Klo!**



You, "Pro-Klo":

- like to cook at home
(*P. marinus* makes its own food,...)
- like to play alone
(...likes to live alone, and...)
- don't like the cold
(...gets cold easily and prefers warmer waters.)



30 Microbe photo: Claire Ting.

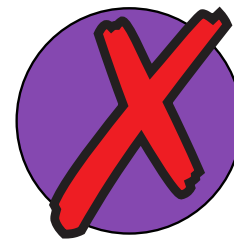
Purple is one of my favorite colors.

(go to page 34)



I don't like the color purple.

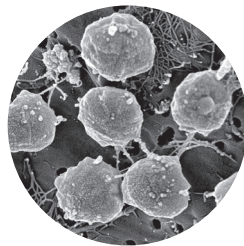
(go to page 8)



7

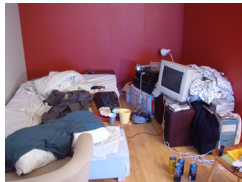
Methanococcus jannischii!

Great work! Scientists call you *Methanococcus jannischii*, but your special code name is **Jammin'!**



You, "Jammin'":

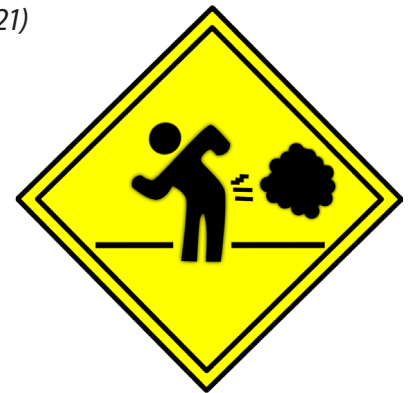
- are messy
(*M. jannischii* is disorganized,...)
- have relatives that live close by
(...is found in the same area, and...)
- like the bottom bunk
(...lays low on the ocean bottom.)



28 Microbe photo: courtesy of B. Boonyaratanakornkit and D.S. Clark, Chemical Engineering, and G. Vrdoljak, Electron Microscope Laboratory, University of California, Berkeley.

When I eat beans, I make a stinky gas.

(go to page 21)



I don't make a stinky gas after eating beans.

(go to page 32)



9

I stuff my backpack with a lot of things.

(go to page 33)



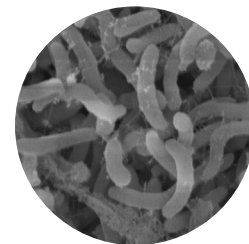
My bag is not full.

(go to page 29)



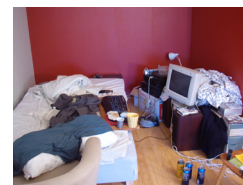
Pelagibacter ubique!

Good work! Scientists call you *Pelagibacter ubique*, but your special code name is **Pele!**



You, "Pele":

- are messy (*P. ubique* is disorganized,...)



- don't have a full backpack (...has a small genome, and...)



- can't hold your breath for a long time (...needs oxygen to survive.)



Microbe photo: Kehau Manoi, C-MORE University of Hawaii. Under guidance of Megan Huggett and Michael Rappé.

My aunts, uncles, and cousins live all around the world.

(go to page 11)



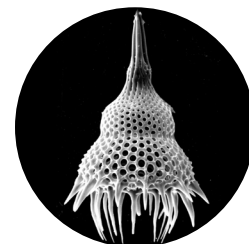
My relatives live near each other.

(go to page 13)



Lamprocyclus maritimalis!

Wonderful! Scientists call you *Lamprocyclus maritimalis*, but your special code name is **Cyclo!**



You, "Cyclo":

- stay up late (*L. maritimalis* catches its prey at night,...)



- are neat and tidy (...is organized, and...)



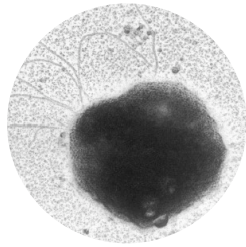
- have straight hair (...has straight extensions that help it float better.)



Microbe photo: Kjell R. Børklund, National History Museum of Norway, U. of Oslo.

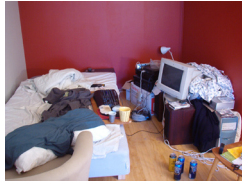
Hyperthermus butylicus!

How exciting! Scientists call you *Hyperthermus butylicus*, but your special code name is **Hyper!**



You, "Hyper":

- are messy (*H. butylicus* is disorganized,...)



- like the bottom bunk (...lays low on the ocean bottom, and...)



- have relatives that live all around the world (...is found all over the world.)



26 Microbe photo: Zillig et al. (1990) *J. of Bacteriology* 172(7): 3959-3965.

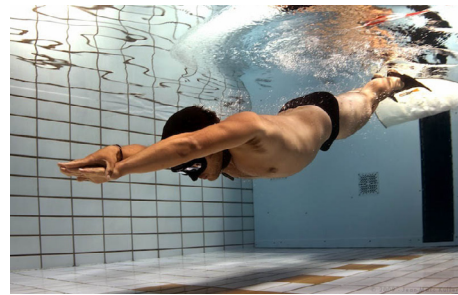
I like being part of a team.

(go to page 20)



I like doing things on my own.

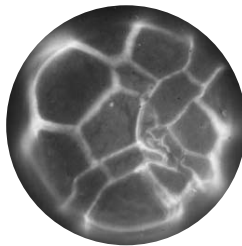
(go to page 12)



11

Fragilidium subglobosum!

Congratulations! Scientists call you *Fragilidium subglobosum*, but your special code name is **Global!**



You, "Global":

- are neat and tidy (*F. subglobosum* is organized,...)



- follow the rules (...can either makes its own food or eat other things, and...)



- go to bed early (...does its work during the daytime.)



I prefer swimming in pools.

(go to page 28)



Swimming in the ocean is the best.

(go to page 25)



24 Microbe photo: Alf Skovgaard, University of Copenhagen.

13

I like to drink milk.
(go to page 26)



I prefer drinking lemonade.
(go to page 31)

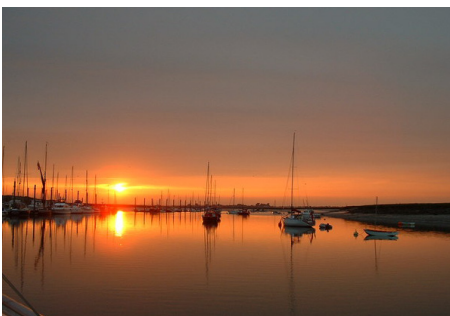


12

I stay up late.
(go to page 15)



I go to bed early.
(got to page 16)



14

Halobacterium salinariumus!

Great job! Scientists call you *Halobacterium salinariumus*, but your special code name is **Holler Back!**



You, "Holler Back":

- are messy
(*H. salinariumus* is disorganized...)



- have relatives that live close by
(...is found in the same area, and...)



- like to swim in the ocean
(...likes to live in super salty places.)



Microbe photo: science.nasa.gov.

25

Emiliana huxleyi!

Hooray! You did it! Scientists call you *Emiliana huxleyi*, but your special code name is **Hustle!**



You, "Hustle":

- go to bed early
(*E. huxleyi* does its work during the daytime,...)



- are neat and tidy
(...is organized...)



- don't like change and only like one or two kinds of fruit
(...only has one way of making food.)



Microbe photo: Jeremy R. Young, Natural History Museum of London.

23

Elphidium crispum!

Mission accomplished! Scientists call you *Elphidium crispum*, but your special code name is **Crispy!**



You, "Crispy":

- are neat and tidy (*E. crispum* is organized,...)



- have curly hair (...makes swirly shells, and...)



- like to stay up late (...catches its prey at night.)



22 Microbe photo: Spike Walker.

My hair is mostly straight.

(go to page 27)



My hair is curly.

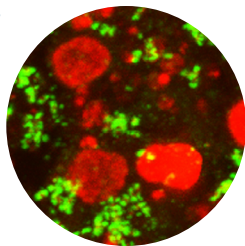
(go to page 22)



15

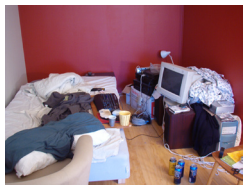
Cenarchaeum symbiosum!

Good work! Scientists call you *Cenarchaeum symbiosum*, but your special code name is **Simby!**



You, "Simby":

- are messy (*C. symbiosum* is disorganized,...)



- like the bottom bunk (...lives near the ocean bottom and...)



- enjoy teamwork (...lives closely with a marine sponge.)



20 Microbe photo: Christina Preston, Monterey Bay Aquarium Research Institute, MBARI.

I go with the flow and follow the rules.

(go to page 24)



I'm a trouble maker and don't follow the rules.

(go to page 19)



17

I like lots of different fruit.

(go to page 17)



I only like one or two kinds of fruit.

(go to page 18)



16

I don't wear glasses.

(go to page 23)



I wear glasses.

(go to page 36)



18

Desulfovibrio desulfuricans!

Nice job! Scientists call you *Desulfovibrio desulfuricans*, but your special code name is **Diesel!**



You, "Diesel":

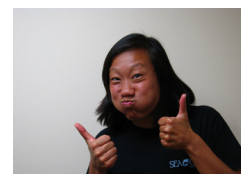
- like to eat out at restaurants (*D. desulfuricans* doesn't make its own food so eats things in the sediment,...)



- have stinky gas after eating beans (...makes gas that smells like rotten eggs, and...)



- can hold your breath for a long time (...lives without oxygen.)

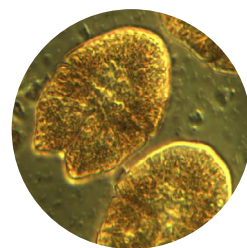


Microbe photo: Alice Dohnalkova, Pacific Northwest National Laboratory.

21

Akashiwo sanguineum!

You did it! Scientists call you *Akashiwo sanguineum*, but your special code name is **Oh, gosh!**



You, "Oh, gosh!":

- are neat and tidy (*A. sanguineum* is organized,...)



- are flexible and eat all kinds of fruit (...can either make its own food or eat other organisms, and...)



- are a trouble-maker (...can kill mussels and oysters.)



Microbe photo: Fernanda Mazzillo, Scripps Institution of Oceanography.

19