

Quiz 1 - Science

What is Bio Unit

Name: _____

Very Important Instructions: Don't trust cats. Good luck on your quiz.

1. Francis Bacon is known as the father of what?



- ☒ A Empirical Science ☐ B Rocket Science
☐ C Historical Science ☐ D Biological Science

2. Before Bacon, who lived in the 1500s, how did most thinking people try to explain the scientific things?

- ☐ A They guessed based on what their friends believed at the time. ☐ B They did careful experiments and made charts and graphs.
☒ C They thought really hard about it, and used what ancient people had said before them. ☐ D They used computers to collect data and do simulations.

3. What did Bacon use for his first experiment?

- ☒ A Chicken ☐ B Mouse
☐ C Frog ☐ D Pig

4. Different flavors of juice are given to pet parrots to see which one makes them squawk the most.

MV: Flavor of juice

RV: How much parrots squawk

5. A teen tests whether wearing different superhero capes affects how far their little brother jumps off the porch.

MV: Type of superhero cape

RV: How far the brother jumps

6. A group of friends builds paper airplanes using homework from different classes to see which subject flies farthest.

MV: Subject on the paper

RV: Distance the plane flies

7. To test focus levels, a student plays different types of background noise during study time: classical music, cat meows, or action movie explosions.

MV: Type of background noise

RV: Amount of studying completed

8. A student sprays different smells (vanilla, lemon, stinky socks) near a plant to see if it affects how many bees come.

MV: Type of smell

RV: Number of bees that visit

9. What do you need to do an **empirical** science experiment?

- ☐ A Old facts ☒ B Observation
☐ C Educated Guessing ☐ D Talking

10. Match the picture with the correct term.

A. c Historical Science

a.



B. a Empirical Science

b.



C. d Scientism

c.



D. e Dualism

d.



E. b Francis Bacon

e.



11. What is **historical** science based on?

- (A) Building machines (B) Trying things over and over
(C) Best Guesses (D) Observation

12. Which idea says you have a soul?

- (A) Historical Science (B) Scientism
(C) Dualism (D) Empirical Science

13. What are variables in science?

- (A) Things that can change (B) Moving objects in a machine
(C) Things that always stay the same (D) Rules that can't change

14. What should science help us do?

- (A) Doubt (B) Be confused
(C) Worship God (D) Fight

15. What does God's creation show us?

- (A) His greatness and glory (B) Total chaos
(C) How great we are (D) Nothing special

16. When properly understood, Christian faith and Science....

- (A) Cannot coexist together (B) Fight and create problems
(C) Agree and work together (D) Are totally unconnected

Quiz 2 - Medicine

What is Bio Unit

Name: _____

Very Important Instructions: Watch out for trash pandas. Good luck on your quiz.

1. Andreas Vesalius was known as the father of what?



- (A) Empirical Science (B) Modern Anatomy
(C) Modern Physiology (D) Biological Science

2. William Harvey was known as the father of what?



- (A) Biological Science (B) Empirical Science
(C) Modern Anatomy (D) Modern Physiology

3. What is it called when a scientist does an experiment on a living animal to learn how its body works?

- (A) Vivisection (B) Observation
(C) Dissection (D) Preservation

4. Match the correct terms together.

- | | |
|------------------------------|-----------------|
| A. <u>d</u> Andreas Vesalius | a. Lungs |
| B. <u>e</u> William Harvey | b. Body |
| C. <u>a</u> Pulmonary | c. Life Science |
| D. <u>b</u> Systemic | d. Cadavers |
| E. <u>c</u> Biology | e. Vivisection |

5. Which path does blood follow in the systemic circuit?



- (A) Lungs → Heart → Body (B) Heart → Body → Heart
(C) Heart → Lungs → Heart (D) Body → Heart → Lungs

6. What is it called when a scientist cuts open a dead animal or body to study how it is made?

- (A) Experimentation (B) Preservation
(C) Dissection (D) Vivisection

7. Which path does blood follow in the pulmonary circuit?



- (A) Heart → Brain → Heart (B) Lungs → Body → Heart
 (C) Heart → Lungs → Heart (D) Heart → Body → Heart

8. What is the arrow pointing at?



- (A) Tune Up (B) Vivisection
 (C) Cadaver (D) Surgery

9. A student tries watering 3 identical plants with different liquids (water, soda, juice) and observes how well they grow. Write down the manipulated and responding variables.

MV: Liquid used in watering

RV: Plant Growth

10. People watch different videos (calm, normal, or scary) to see if their heart rate changes. Write down the manipulated and responding variables.

MV: Type of video watched

RV: Heart Rate

11. Students hold their breath for short or long times and then check how fast their hearts are beating. Write down the manipulated and responding variables.

MV: Breath holding duration

RV: Heart Rate

12. A. e Blood Pumper a. Medicine
 B. c How living things work b. Cadaver
 C. a The science of diagnosing, treating and preventing disease c. Physiology
 D. d The study of the structures of the body d. Anatomy
 E. b A dead body used for research e. Heart

13. William Harvey is most famous for discovering this:

- (A) How blood circulates (B) The structure of DNA
 (C) The function of the lungs (D) The process of digestion

14. Andreas Vesalius is most famous for this:

- (A) Explaining how the heart pumps blood (B) Creating the first microscope
 (C) Publishing detailed drawings of Human Anatomy (D) Discovering a drug that could kill bacteria

Quiz 3 - Microbiology

What is Bio Unit

Name: _____

Very Important Instructions: Always bring a spoon. Good luck on your quiz.

1. Antonie van Leeuwenhoek was known as the father of what?



- (A) Cell Biology (B) Modern Physiology
(C) Microbiology (D) Modern Anatomy

2. Ignaz Semmelweis, called the 'savior of mothers,' helped start this important idea when he showed that microorganisms can make people sick. What idea did he help discover?



- (A) Germ theory of disease (B) Gene theory
(C) Homeostasis (D) Cell Theory

3. What do we call tiny living things that are so small you need a microscope to see them?

- (A) Insects (B) Organs
(C) Minerals (D) Microorganisms

4. Which tiny living things are made of many cells and have a nucleus?

- (A) Fungi (B) Squirrels
(C) Bacteria (D) Protists

5. Which tiny living things only have one cell and do not have a nucleus?

- (A) Squirrels (B) Fungi
(C) Bacteria (D) Protists

6. Which tiny living things usually have one cell and do have a nucleus?

- (A) Bacteria (B) Protists
(C) Squirrels (D) Fungi

7. What is the study of tiny living things called?

- (A) Medicine (B) Science
(C) Microbiology (D) Ecology

8. The tool used to look at microscopic things.

- (A) Telescope (B) Selfie Scope
(C) Microscope (D) Endoscope

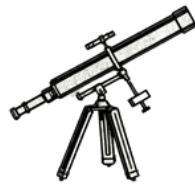
9. The tool used to look at the stars.

- (A) Telescope (B) Endoscope
(C) Selfie Scope (D) Microscope

10. Match the correct picture with the correct term.

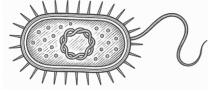
A. e Protist

a.



B. d Fungi

b.



C. b Bacterium

c.



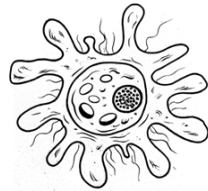
D. a Telescope

d.



E. c Microscope

e.



11. Who made the microscope much better than it was before?

(A) Vesalius

(B) Semmelweis

(C) Harvey

(D) Van Leeuwenhoek

12. How did Semmelweis become the savior of mothers?

(A) Discovered a vaccine

(B) Invented new medicine

(C) Started hand washing

(D) Created a machine

In case you need a reminder: Dr. Ignaz Semmelweis worked at a hospital where many mothers were dying after having babies. He noticed that doctors were not washing their hands. They would go from touching dead bodies to helping women give birth. Semmelweis had an idea: what if washing hands could stop the sickness? So he told the doctors to wash their hands with soap and a strong cleaner. After that, fewer mothers got sick or died. This showed that clean hands could save lives.

13. What was the variable Semmelweis changed in his experiment?

(A) Whether or not doctors washed their hands

(B) The number of nurses in the room

(C) How long doctors stayed at the hospital

(D) The kind of babies being born

14. What was the result Semmelweis measured in his experiment?

(A) The number of babies born each day

(B) The number of mothers who got sick or died

(C) How clean the hospital looked

(D) The cost of soap and water

15. The variable Semmelweis changed would be called what?

(A) Responding Variable

(B) Manipulated Variable

(C) Control

(D) Unknown

16. The result Semmelweis measured would be called what?

(A) Manipulated Variable

(B) Responding Variable

(C) Control

(D) Unknown

Quiz 4 - Pathology

What is Bio Unit

Name: _____

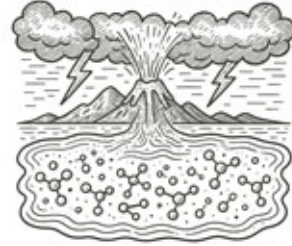
Very Important Instructions: Obey your parents. Good luck on your quiz.

1. He did many science experiments to learn how diseases work and helped create the idea that tiny germs can cause people to get sick.



- (A) Andreas Vesalius (B) Louis Pasteur
(C) William Harvey (D) James Tour
2. What was the manipulated variable in Pasteur's swan neck flask experiment?
- (A) Whether the broth was boiled (B) The type of liquid inside the flask
(C) The temperature of the room (D) Whether the flask was open or had a swan neck
3. What was the responding variable in Pasteur's swan neck flask experiment?
- (A) The amount of light shining on the flask (B) Whether or not microbes (germs) grew in the liquid
(C) The shape of the flask's neck (D) How long the experiment lasted
4. In Pasteur's swan neck flask experiment, he ended up demonstrating that bacteria come from what?
- (A) Fermentation (B) Spontaneous Generation
(C) Spores (D) Broth

5. What idea does this picture represent?



- (A) Big Bang (B) Primordial Soup
(C) Natural Disaster (D) Protosquirrel
6. As Christians, what inference can we make based on Pasteur's work?
- (A) Life can start all by itself under just the right conditions (B) Life appears when chemicals get struck by lightening
(C) Life comes from God, not from non-living things (D) Life comes from sunlight and air
7. James Tour is a scientist who studies how life began. He says we are now even farther from finding a natural way to explain how life could start on its own. People used to call this idea "spontaneous generation," but now it's called this:



- (A) Mutation (B) Fermentation
(C) Pathology (D) Abiogenesis

8. Pasteur tested different temperatures and times for heating milk to kill harmful bacteria without ruining it, measuring whether the milk spoiled afterward to see if the bacteria were killed. This process became known as pasteurization. What was the manipulated variable?



- ☐ A The type of milk used. ☐ B The amount of milk in the bottle
☐ C The kind of bottle used to hold the milk ☒ D The temperature and time the milk was heated
9. What was the responding variable in Pasteur's milk experiment?
- ☐ A How thick the milk became after heating ☐ B How much milk was used
☐ C What color the milk turned ☒ D How long the milk stayed fresh before spoiling
10. The branch of medicine that studies disease.
- ☒ A Pathology ☐ B Immunology
☐ C Microbiology ☐ D Science
11. James Tour says that chemistry does not naturally move in which direction?
- ☐ A Simple to random ☐ B Water to ice
☒ C Life friendly ☐ D Cold to hot

12. Pasteur did an experiment to see how yeast helps turn sugar into alcohol, like when grape juice becomes wine. This process is called fermentation. He discovered that fermentation only happened when yeast was there. It didn't happen just from mixing chemicals. What was the manipulated variable in his experiment?



- ☐ A How much alcohol was made ☐ B The kind of sugar used
☒ C Whether or not yeast was added ☐ D The color of the grape juice
13. What was the responding variable in Pasteur's fermentation experiment?
- ☐ A How sweet the grape juice was ☒ B If the juice turned into alcohol
☐ C The temperature of the room ☐ D How long the experiment took
14. What did Louis Pasteur believe about science and God?
- ☐ A He only trusted experiments, not God ☐ B God is not needed to explain science
☐ C Science and faith cannot go together ☒ D Science helped him believe in God even more

Quiz 5 - Ecology

What is Bio Unit

Name: _____

Very Important Instructions: The floor is lava. Good luck on your quiz.

1. Which scientist said that animals could pass on traits they used a lot—like a giraffe stretching its neck—to their babies?



- ☐ (A) William Harvey ☐ (B) Louis Pasteur
☐ (C) William Paley ☒ (D) Jean Baptiste Lamarck

2. With this 'use or disuse' idea of how a species could change over time, Lamarck had proposed the first attempt at what?

- ☒ (A) Theory of Evolution ☐ (B) Germ Theory
☐ (C) Gene Theory ☐ (D) Cell Theory

3. At the same time, who used fancy watches to explain that living things must have been designed by God?



- ☒ (A) William Paley ☐ (B) Jean Baptiste Lamarck
☐ (C) Louis Pasteur ☐ (D) William Harvey

4. What are the Galapagos Islands?

- ☐ (A) A group of cold, icy islands near Antarctica ☒ (B) A set of islands 1000 miles west of South America
☐ (C) A country in South America ☐ (D) A chain of underwater volcanoes

5. What does the "Watchmaker" idea say about living things?

- ☐ (A) Life is full of surprises and random changes ☒ (B) Life is carefully designed, like a watch, by a Creator
☐ (C) All watches turn into living animals over time ☐ (D) Life doesn't need any explanation

6. What does "fixity of species", an idea creationists today reject, mean?

- ☐ (A) Animals can change anytime ☐ (B) Only birds can evolve
☒ (C) Species cannot change or adapt in any way ☐ (D) All animals move around a lot

7. What is a tortoise in the Galápagos Islands known for?

- ☐ (A) Its ability to run faster than any other reptile on the islands ☒ (B) Being the largest land plant-eating animal on the islands
☐ (C) Being the smallest land plant eating animals on the islands ☐ (D) Its bright colors that attract visits from all over the world

8. What is special about the marine iguana?

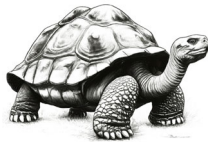
- (A) It is the only lizard that has glowing skin
 (B) It is the only lizard that can breathe underwater
 (C) It is the only lizard that feeds in the ocean
 (D) It is the only lizard that lives in Antarctica

9. Match the picture to the term

A. d Succession a.



B. a Marine Iguana b.



C. b Giant Tortoise c.



D. f Galapagos



E. c Lamarck



F. e Paley



10. What does ecology mean?

- (A) A list of wild animal names
 (B) How living things interact with nature
 (C) The study of air and wind flow
 (D) How animals behave in zoos

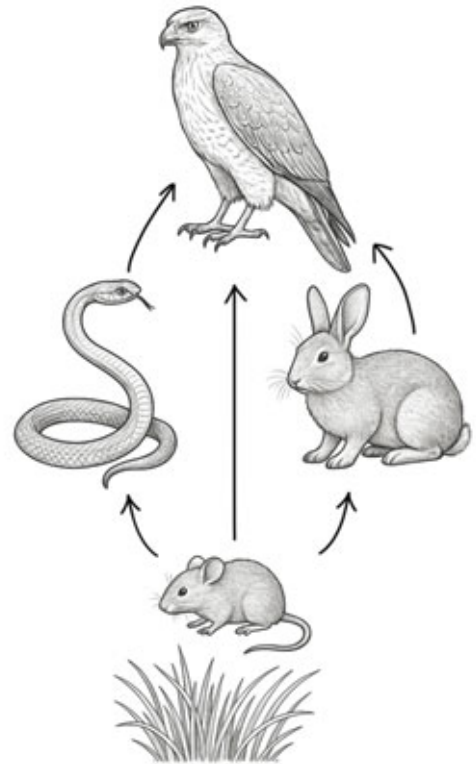
11. What is succession in nature?

- (A) A type of animal survival race
 (B) How a forest changes over time
 (C) Slow changes in nature after a disturbance
 (D) When animals follow a group leader

12. Grass → Grasshopper → Frog
 What level consumer is the frog?

- (A) Producer
 (B) 1° Consumer
 (C) 2° Consumer
 (D) 3° Consumer

13. What level consumer is the mouse?



- (A) Producer
 (B) 1° Consumer
 (C) 2° Consumer
 (D) 3° Consumer

Quiz 6 - Evolution

What is Bio Unit

Name: _____

Very Important Instructions: Don't eat the yellow snow. Good luck on your quiz.

1. What idea is Charles Lyell most famous for?



- ☒ A The Earth changes slowly through natural processes
- ☐ B All rocks formed during one big flood
- ☐ C Life was created in six days
- ☐ D Animals can pass on traits they use a lot

2. This image represents Lyell's big idea. What is it's fancy name?



- ☐ A Natural Selection
- ☒ B Uniformitarianism
- ☐ C Catastrophism
- ☐ D Physiology

3. Before Charles Lyell's ideas became popular, many scientists believed the Earth was young and that its features were shaped by big disasters like Noah's Flood. What was this idea called?



- ☐ A Natural Selection
- ☒ B Catastrophism
- ☐ C Uniformitarianism
- ☐ D Ecology

4. This man thought very highly of Lyell, and took his ideas from geology, and applied them to biology.



- ☐ A William Paley
- ☐ B Bigfoot
- ☐ C Jean Baptiste Lamarck
- ☒ D Charles Darwin

5. What is natural selection?

- ☐ A The idea that Earth's surface has always looked the same
- ☒ B The method Darwin proposed for how evolution happens
- ☐ C The study of Earth's physical structure
- ☐ D The belief that all species were made at the same time

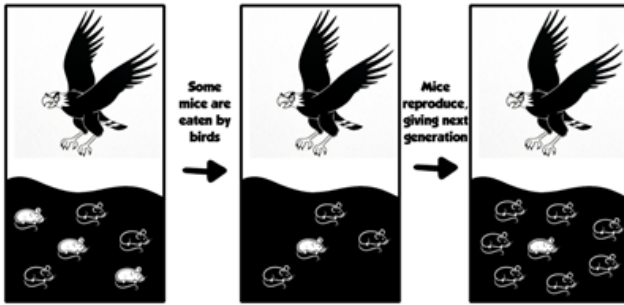
6. What is geology?

- ☒ A The study of Earth's composition
- ☐ B The idea that animals adapt over time
- ☐ C The study of evolution
- ☐ D The process of human history

7. What is On the Origin of Species?

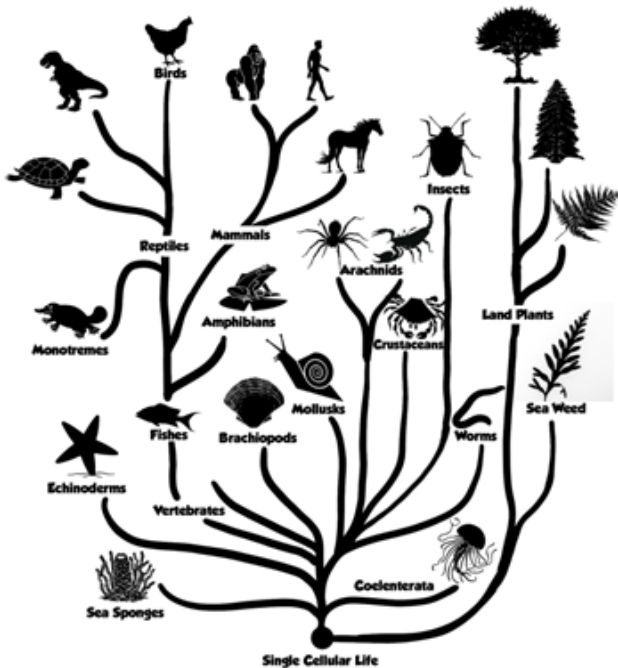
- ☐ A A story book about ancient animals
- ☐ B A guide to reading fossils
- ☐ C A list of all known species
- ☒ D A book that shares Darwin's ideas about evolution

8. What does this picture represent?



- ☒ A Natural Selection ☐ B Uniformitarianism
☐ C Human Evolution ☐ D Universal Common Ancestry

9. What does this picture represent?



- ☐ A Natural Selection ☐ B Uniformitarianism
☐ C Human Evolution ☒ D Universal Common Ancestry

10. What idea from Darwin is something that both creationists and evolutionists can agree was a good scientific contribution?

- ☐ A That all life began by accident ☒ B That natural selection explains how species adapt over time
☐ C That humans evolved from apes ☐ D That the Earth is billions of years old

11. What was Darwin's most controversial proposal?

- ☐ A Natural Selection ☐ B Taco Tuesday (Very Controversial)
☒ C Human Evolution ☐ D Universal Common Ancestry

12. Who first proposed the idea of evolution?

- ☐ A Charles Darwin ☒ B Jean Baptiste Lamarck
☐ C Charles Lyell ☐ D Gregor Mendel

13. What type of science did Darwin spend his time doing?

- ☒ A Historical ☐ B Microbiology
☐ C Empirical ☐ D Pathology

14. Given the type of science both Lyell and Darwin were conducting, what level of confidence should we have in their scientific ideas?

- ☐ A Extreme confidence ☐ B High confidence
☐ C Medium confidence ☒ D Low confidence

Quiz 7 - Genetics

What is Bio Unit

Name: _____

Very Important Instructions: Say yes to pizza. Good luck on your quiz.

1. He figured out dominant and recessive genes by studying Pea Plants.



- ☒ A Gregor Mendel ☐ B Francis Crick
☐ C Stephen Meyer ☐ D James Watson

2. Which gene hides when both are present?

- ☐ A Dominant ☐ B Leader
☒ C Recessive ☐ D Nucleotide

3. Which gene takes over when both are present?

- ☒ A Dominant ☐ B Leader
☐ C Recessive ☐ D Nucleotide

4. What is the arrow pointing at?

Bb ←

- ☐ A Dominant Gene ☐ B Follower Gene
☒ C Recessive Gene ☐ D Leader Gene

5. What is the arrow pointing at?

→ **Bb**

- ☒ A Dominant Gene ☐ B Follower Gene
☐ C Recessive Gene ☐ D Leader Gene

6. He was the younger of the two scientists who figured out the structure of DNA.



- ☐ A Gregor Mendel ☐ B Francis Crick
☐ C Stephen Meyer ☒ D James Watson

7. He was the older of the two scientists who figured out the structure of DNA.



- ☐ A Gregor Mendel ☒ B Francis Crick
☐ C Stephen Meyer ☐ D James Watson

8. What is the shape of the structure in image below?



- ☐ (A) Boxy Chain ☐ (B) Straight Line
☐ (C) Circle ☒ (D) Double Helix

9. What is the shape of a DNA molecule?

- ☐ (A) Straight Line ☐ (B) Circle
☒ (C) Double Helix ☐ (D) Boxy Chain

10. What are the building blocks of DNA?

- ☒ (A) Nucleotides ☐ (B) Genes
☐ (C) Helixes ☐ (D) Enzymes

11. Which letter is not a nucleotide found in DNA?

- ☒ (A) J ☐ (B) A
☐ (C) C ☐ (D) T

12. What are the letters that make up DNA?

- ☐ (A) L, M, N, O ☐ (B) A, B, C, D
☒ (C) C, G, A, T ☐ (D) Z, X, Y, W

13. What is the arrow pointing at?



- ☐ (A) RNA ☐ (B) Chromosome
☐ (C) Double Helix ☒ (D) Nucleotide

14. He is the scientist who has made a very strong case for intelligent design from many fields including genetics.



- ☐ (A) Gregor Mendel ☐ (B) Francis Crick
☒ (C) Stephen Meyer ☐ (D) James Watson

15. Meyer says that, based on what we always see, this always comes from a mind.

- ☒ (A) Specified Information ☐ (B) Random Accidents
☐ (C) Machines ☐ (D) Stars

16. This is what DNA has inside it, that is like a signature, showing us it was made by a super smart mind.

- ☒ (A) Specified Information ☐ (B) Free Candy
☐ (C) Nucleotides ☐ (D) Random Chaos

17. Who does Stephen Meyer believe is the intelligent designer?

- ☐ (A) Aliens ☐ (B) Buddha
☒ (C) God ☐ (D) Super Lucky Space Magic

Quiz 8 - Cell Bio

What is Bio Unit

Name: _____

Very Important Instructions: Silent screaming is allowed. Good luck on your quiz.

1. He was one of the founding fathers of cell biology and coined the term metabolism.

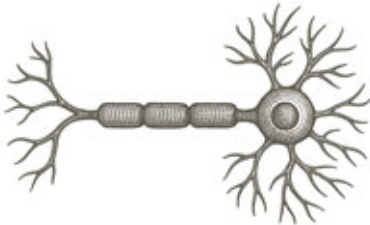


- (A) Michael Behe (B) Theodore Schwann
(C) Gregor Mendel (D) Bart Simpson

2. What type of cell biology did Schwann focus on?

- (A) Microbiology (B) Animal Cells
(C) Plant Cells (D) Squirrel Cells

3. What type of cell is this?

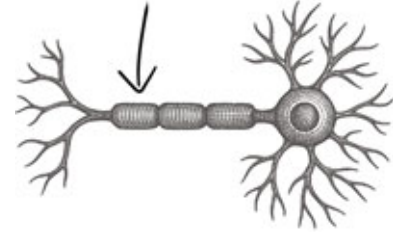


- (A) Bacterial (B) Neuron
(C) Muscle (D) Lung

4. What tool did Schwann use regularly as a cell biologist?

- (A) Mousetrap (B) Telescope
(C) Microscope (D) Computer

5. What is the arrow pointing at?



- (A) Merkel Cell (B) Gangliocyte
(C) Hepatocyte (D) Schwann Cell

6. He is a scientist in the ID movement who coined the term irreducible complexity.



- (A) Michael Behe (B) Theodore Schwann
(C) Gregor Mendel (D) Bart Simpson

7. What does Michael Behe use as a simple example of irreducible complexity?

- (A) Mouse Trap (B) Microscope
(C) Bacteria (D) Watch

8. What does Michael Behe say is a real life example of irreducible complexity?

- (A) Bacterial Flagella (B) Pocket Watch
(C) Ice Cubes (D) Human Skin

