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Discovery

Scripture & Science for Kids





Mutations, Creation, and Evolution

ERIC LYONS

If you have ever seen a one-eyed cat, a two-headed calf, or a five-legged frog, you have witnessed a mutated animal. A mutation is a permanent change in the genetic material of an organism. Whereas most cats, calves, and frogs have one head, two eyes, and four legs, altered DNA (deoxyribonucleic acid) within the nuclei of cells can cause living organisms to look very different from other animals of the same kind, including their parents. Although a child's

parents may have brown skin, if the child's gene for skin color is mutated, he may be born without color in his skin, eyes, and hair. This mutation is known as albinism (which comes from a Latin word meaning white).

Suppose that a certain gene's DNA sequence is represented by the following sentence made up of three-letter words:

The big cat ate the owl and the dog ate the pie.

This sentence (representing a gene) is clearly understandable. Every letter functions perfectly for its intended purpose. However, if the sentence mutated so that the first letter attached

itself to the end of the sentence (or gene) rather than the beginning, you would simply have a line of jumbled letters (representing a mutated gene).

Heb igc ata tet heo wla ndt hed oga tet hep iet.

These groups of letters no longer communicate a clear thought. One letter changed position, and the entire sentence was altered. Similarly, if the genetic information in a living organism is changed ever so slightly, mutations can form. Color blindness, albinism, and sickle cell anemia are all examples of mutations.

So what do mutations have to do with creation and evolution? According to evolutionists, life evolved from simple to complex organisms (or from amoebas to humans) by gene mutations. Supposedly, nature "selected" certain genes that mutated, so that over hundreds of millions of years, those mutations eventually caused fish to become amphibians, amphibians to become reptiles, reptiles to become lower mammals, and certain lower mammals eventually to become humans. There are, however, fatal problems with this idea.

First, genetic mutations are without purpose or pattern. They are entirely random. Nature does not control mutations or predict with accuracy when they will occur. Nature does not "select" specific gene mutations. Rather, nature must accept whatever gene mutations appear.

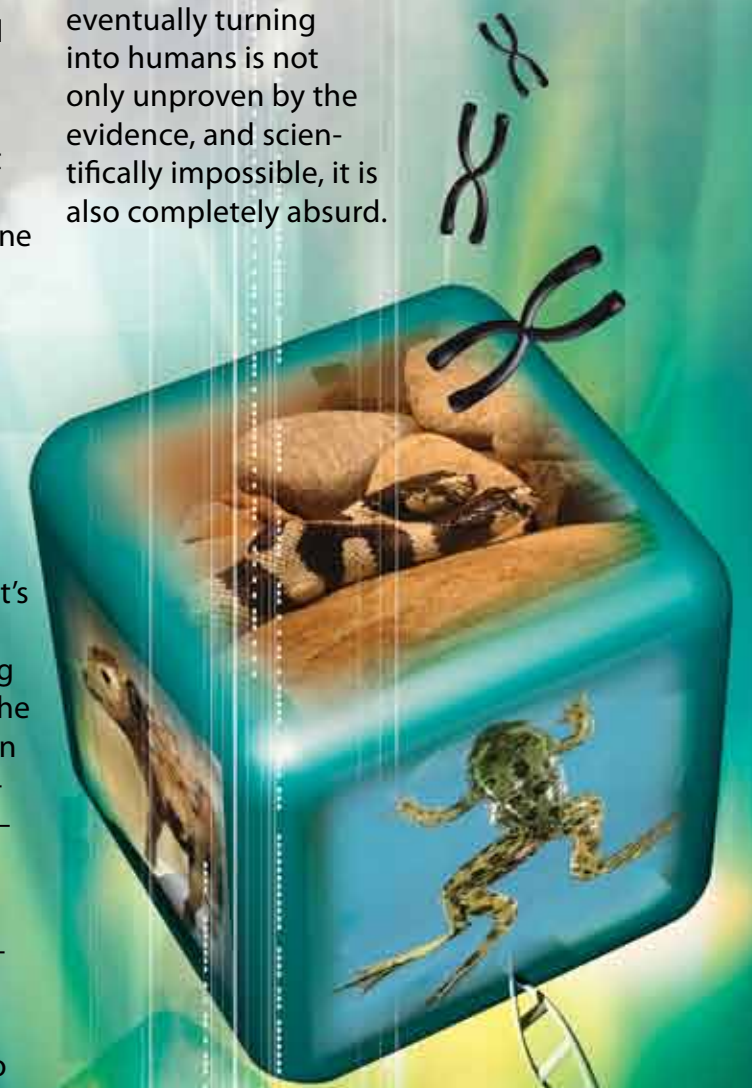
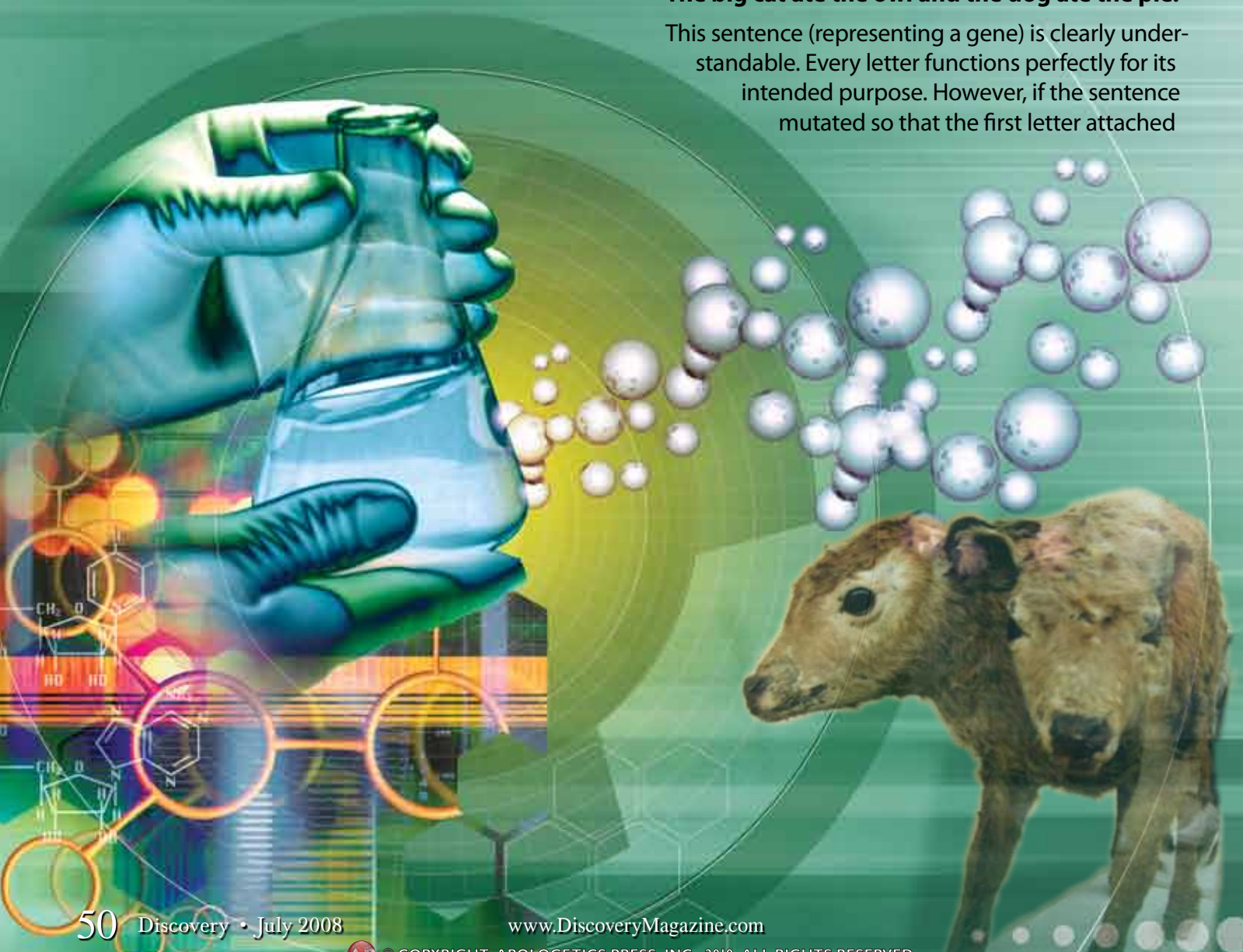
Second, genetic mutations are rare. (For this, we should be very thankful.) Even evolutionists admit mutations are rare. How rare are they? One evolutionary scientist explained: "It is probably fair to estimate the frequency of a majority of mutations in higher organisms between one in ten thousand and one in a million per gene per generation." What's more, a series of related mutations is even more unusual. Scientists estimate that the odds of having just two related mutations are one in 100 trillion. The odds of only three related mutations (and evolution would need many more than just three to have occurred) are one in 1,000,000,000,000,000,000—that's one in a billion trillion.

Third, not only are mutations both random and rare, the overwhelming majority of them are harmful. Evolutionists themselves have admitted that more than 99% of mutations are bad. One evolutionist even suggested that good mutations "are so rare that we may consider them all as bad." Consider the gene mutation that causes color blindness. Is

it good? Does it allow for a better life? Although it is not as detrimental as many mutations, a person can function better in life by seeing all colors clearly. Truly, the vast majority of the mutations that appear are harmful, not helpful.

Finally, mutations do not create new genetic information; they simply alter existing information. Mutations cannot account for the origin of life or for the new genetic information that would be needed to turn a perch into a person. A perch might have mutations that cause deformed fins or scales, but it will never be able to mutate into a person (regardless of what you read in comic books!).

Although many evolutionists continue to promote evolution by genetic mutation, the evidence for helpful, related, large-scale changes is still lacking. The idea that hundreds of millions of years of non-intelligence, plus blind chance, plus random mutations equals fish eventually turning into humans is not only unproven by the evidence, and scientifically impossible, it is also completely absurd.



“Evolutionary Detective Story”? No Clues Here

CALEB COLLEY

Blood is very important, because it delivers nutrients to every part of the human body. In fact, God told the Israelites that “the life of the flesh is in the blood” (Leviticus 17:11). Normal red blood cells are very flexible. They are smooth, round, shaped like a doughnut without a hole, and can slide through blood vessels easily. Sickle cell anemia is a blood disease in which red blood cells become stiff and shaped like a sickle (or a crescent). In this shape, cells tend to clump together and block blood flow. People who have sickle cell anemia often feel weak or unusually tired. They have pain, fever, strokes, and swelling. They typically get infections more

easily, and frequently die unusually early.

Sickle cell anemia is inherited—passed from one generation to the next. A child gets sickle cell anemia if he receives two mutant hemoglobin genes (one from each parent) that cause his red blood cells to change. Most states test newborn babies for sickle cell anemia. If a child receives only one sickle cell gene, he is said to have the sickle cell trait, but not anemia, and can live normally.

In the 1940s, some doctors in Africa noticed that patients with the sickle cell trait were more likely to survive malaria (a deadly disease spread by mosquitoes). Red blood cells tend to “sickle” when infected by the malaria parasite, and so the spleen works hard to cut out the infected cells. Evolutionists claim that the survival of the sickle cell gene in Africa is an example of natural selection at work. One popular evolutionary Web site calls it an “evolutionary detective story.”

However, only those who have the sickle cell “trait,” rather than anemia, are protected from malaria. Those who have sickle cell anemia can suffer from both malaria and the symptoms of the mutation. Those who carry the trait for sickle cells may have anemic children. Either way, sickle cell mutation is not helpful, and it adds no new genetic information to change a person into a different kind of creature. Sickle cell anemia is another example of harmful mutations.

BACTERIA

Does Not Help Evolution

KYLE BUTT

Have you ever had an ear infection? If so, then you probably went to the doctor. The doctor looked into your ear, saw the infection, and wrote a prescription for some medicine. The medicine for the infection was most likely an antibiotic. What is an antibiotic? Tiny microscopic organisms called bacteria grow in your body. Some are good and help you. But others are bad and can hurt you. The infection in your ear was caused by bad bacteria. An antibiotic is a substance that kills bacteria. That is why it helped get rid of your infection.

But some bacteria build up a resistance to antibiotics. Genetic mutations can cause the bacteria to change slightly so that antibiotics no longer work on them. People who believe in evolution claim that bacteria that build up resistance to antibiotics prove that evolution is true. They believe these small changes in bacteria prove that bacteria could evolve over billions of years into a human.

People who use small changes in bacteria to “prove” evolution have several problems. First, the bacteria change a little, but they always stay the same type of bacteria. For instance, bacteria called *E. coli* has changed in many small ways, but it has always been *E. coli* and has never changed into another kind of organism.

It has never evolved into part-bacteria and part-fish or part-lizard. The fact that bacteria stays the same kind of bacteria is exactly what you would expect if God created it and commanded it to multiply after its own kind.

Second, most of the mutations that change bacteria are not helpful. The mutations might help the bacteria live when attacked by an antibiotic, but in the long run, they hurt the bacteria. For example, suppose that a certain kind of bacteria has something like a right hand and a left hand. And suppose that an antibiotic kills the bacteria by attaching itself to the left hand of the bacteria. Then imagine that the bacteria mutates so that it loses its left hand. The antibiotic cannot kill the bacteria any longer, but the bacteria now has only one hand. “One-handed” bacteria might be resistant to antibiotics, but they are “crippled” and do not survive long. The fact that some bacteria become resistant to antibiotics certainly does not prove the bacteria could evolve into humans.

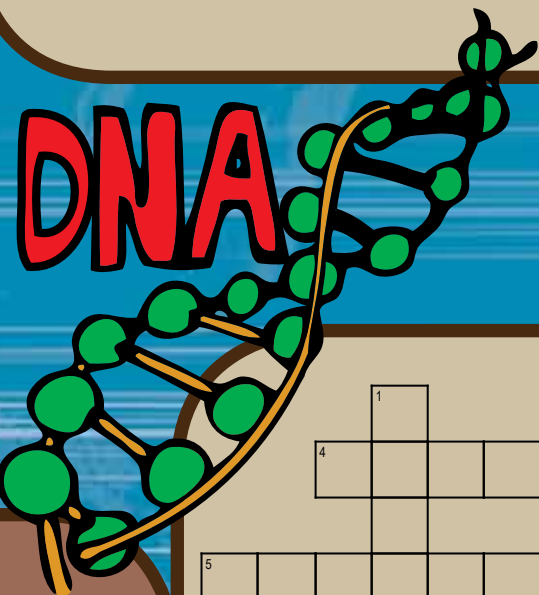
Even though bacteria can change in small ways, these changes do not prove evolution. In fact, they do just the opposite. They prove that bacteria remain bacteria, exactly as God instructed them to do during the Creation week.

ACTIVITY PAGES



FILL IN THE BLANKS

1. A person born without color in his skin, eyes, and hair suffers from _____.
2. The common _____ is called *Drosophila melanogaster*.
3. *E. coli* is a type of _____.
4. Genetic _____ are random and rare.
5. Mutations simply alter _____ information.



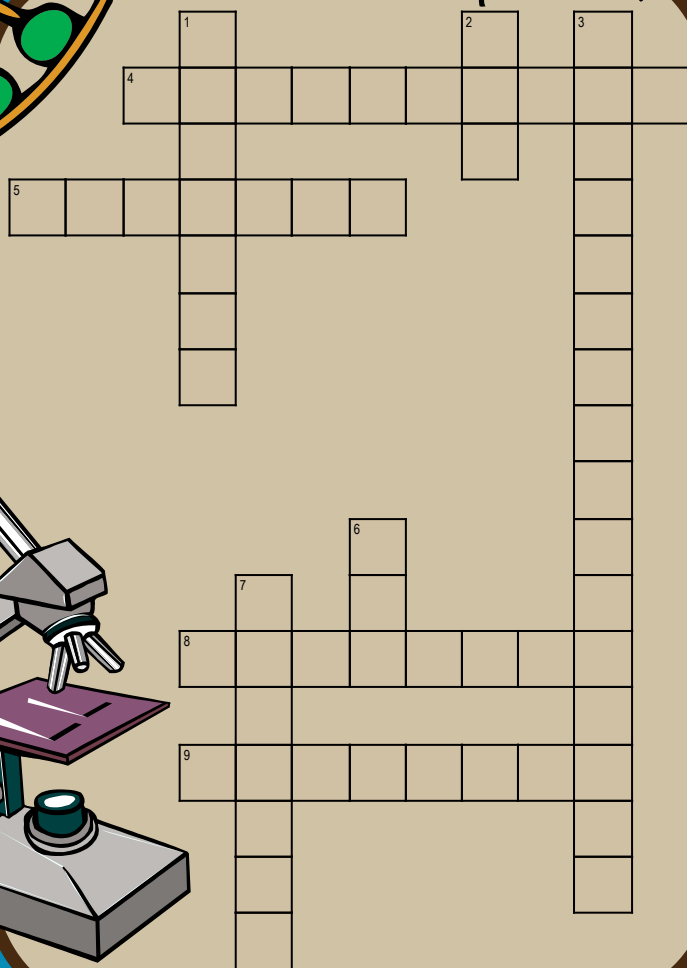
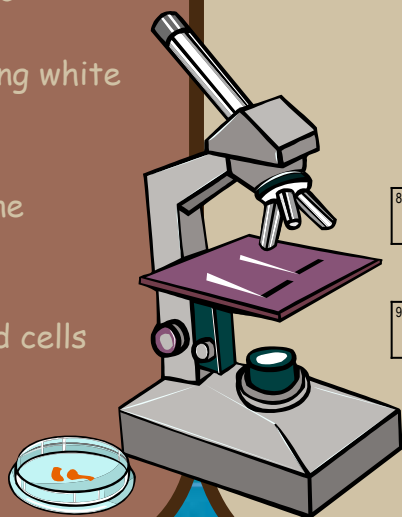
CROSSWORD CHALLENGE

ACROSS

4. A substance that kills bacteria
5. In the first chapter of this book, God told animals and plants to multiply after their own kind
8. A permanent change in the genetic material of an organism
9. Comes from the Latin word meaning white

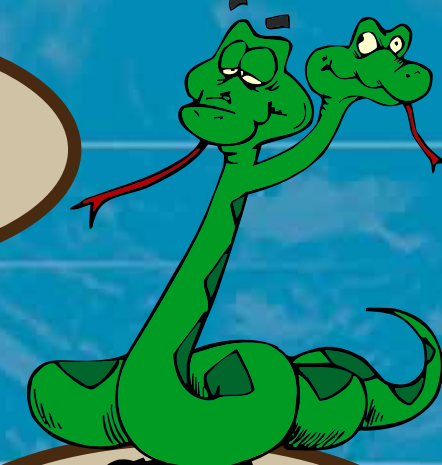
DOWN

1. To receive what is passed from one generation to the next
2. The giver of life
3. A blood disease in which red blood cells are stiff and sickle-shaped
6. Short for deoxyribonucleic acid
7. DNA is found in this part of the cell



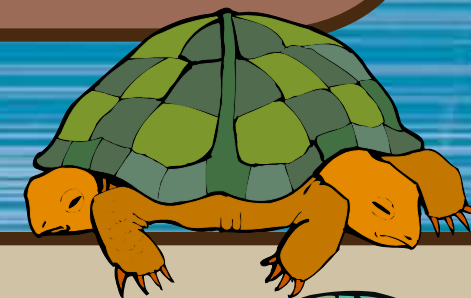
TRUE OR FALSE

1. Most mutations are good.
2. Fruit flies can breed new flies every 12 days.
3. Fruit fly mutations prove that evolution is true.
4. Bacteria eventually evolve into worms.
5. Blood is very important to the human body.
6. Sickle cell anemia is another example of harmful mutations.
7. Mutations do not create new genetic information.
8. Scientists have successfully turned fruit flies into caterpillars by mutating their genes.

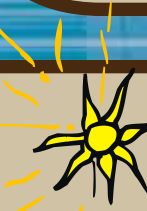


ON A SEPARATE SHEET OF PAPER

1. Explain what mutations have to do with evolutionary theory.
2. Give four reasons why using mutations to defend evolutionary theory is seriously flawed.



Dear Digger Doug,
How far is the Sun from us?
—Cadence, Albuquerque, NM



Dear Cadence,

Thank you for sending me this good question. The Earth's orbit around the Sun is elliptical (more like an oval than a perfect circle). On average, the Sun is 93 million miles from the Earth. This distance is perfect for life on Earth. If the Sun were 10 percent closer, we would burn up. However, if it were 10 percent farther away, we would freeze to death.

When the Earth's orbit brings it closer to the Sun, it speeds up in order to avoid being pulled into the Sun. As the Earth moves in its orbit, it departs from a straight line by 1/9th of an inch every 18 miles. If it departed from that orbit by 1/10th of an inch, we would freeze. If this departure were halved, the seasons would be doubled. Obviously, this arrangement is purposeful, not accidental. God created the solar system with us in mind. One evolutionist wrote that the Universe "appears to be designed." Thankfully, we have the privilege of serving that Designer, and praising Him for His creative work.



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THE FLY THAT STAYS A FLY

KYLE BUTT

Imagine looking at a table covered with jars. Each jar contains several fruit flies. Some of the flies have no wings, some have tiny, useless wings, and others have several pairs of wings. Other jars have flies with legs growing out of their heads where antennas should be. Some of the flies are yellow, others are black. Some of the flies have 25 bristles, others have

50 bristles. Some of the flies have red eyes, others have orange eyes, and others have no eyes at all. What is going on?

The common fruit fly, called *Drosophila melanogaster*, is often used by scientists to study mutations. Since the flies can breed new flies every 12 days, scientists can see thousands of generations of flies in a

few short years. Scientists often expose the flies to radiation in order to mutate their DNA. The mutated flies give birth to strange offspring. The mutations cause all of the different kinds of flies that were just described.

Some scientists hoped that speeding up the mutation rate of the fruit fly would help them learn how evolution works. In fact, scientists have studied fruit flies for almost 100 years and have seen millions of generations. But the fruit flies have not shown scientists how evolution works—because evolution does not work.

The fruit fly has proven that evolution is false. Even after millions of mutated generations, the fruit fly has not evolved into anything else. There are no half-fly/half-birds. There are no flies that have mutated into lizards or half-mice. In fact, the fruit fly shows that mutations cannot combine to form a kind of animal different from the original animal.

The result of the research on fruit flies is exactly what you would expect if the fly was created by God. In the first chapter of Genesis, God told the animals and plants to be fruitful and multiply **after their own kind**. The fruit fly has been multiplying after its own kind in science labs all over the world for many years. It has never changed into another kind of creature, even though scientists have caused it to mutate every way they possibly can. It is amazing how such a small creature can provide so much important evidence for creation!



ANSWERS

FILL IN THE BLANKS: 1. albino; 2. fruit fly; 3. bacteria; 4. mutations; 5. existing; 6. DNA; 7. nucleus. TRUE OR FALSE: 1. F; 2. T; 3. F; 4. F; 5. T; 6. T; 7. T; 8. F.

ACROSS: 4. antibiotic; 5. Genesis; 8. mutation; 9. albino; 10. God; 11. inherit; 12. God; 13. sickle cell anemia; 14. DNA.

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