

SCIENCE IN OUR WORLD

Science is Everywhere!

Science is ALL around us, no matter where you look! Whether you are at home, outside, at school...you see signs of science and its happenings everywhere!

Keeping Ourselves Healthy

We know about cells from science. We need to take care of our cells, such as our skin cells, for example. The sun can damage our skin cells leading to disease, but luckily, there are ways we can help protect our skin cells from such damage. One way we can protect our skin cells is to put on sun block before going outside. Sun block protects our skin against too much of the Sun's rays.



Please login or register to download the printable version of this study guide.

www.newpathlearning.com

Everyday Science

You take part in photosynthesis by taking in oxygen and breathing out carbon dioxide and release oxygen into the air for us to breathe.

We breathe in oxygen and breathe out carbon dioxide.

You may observe science right in your front yard:

Let's say a duck laid her eggs near the front porch of a house instead of near the small woods nearby. **Why** do you think a duck would lay her eggs near your house instead of in the woods? Think of it like a scientist. The duck may be fearful of the animals that live in those small woods, animals such as a fox that may eat or harm her eggs. She may have decided to lay her eggs where she thinks they will be safe from animal predators.

You can witness a **complete metamorphosis** life cycle when you view the life cycle of a butterfly. Look for caterpillars in your yard. Do you see any cocoons? How about butterflies? Do you see any flying around outside today?



You may hear about science in the news:

Around the world, several areas have been experiencing warmer than usual temperatures. Warmer temperatures have been causing the surrounding bodies of waters to warm as well which in turn affect the invertebrates and fish which live in them. Some can't survive in warmer waters. What are those organisms going to do to survive? Will they survive?

You listen to the radio and hear that there has been a **4.3** earthquake in California. The 4.3 refers to the earthquake's measurement on the Richter Scale, a scale that determines the magnitude or size of an earthquake.

A tsunami is a **series of huge waves** that occur often because of an underwater disturbance, such as an earthquake or volcano eruption. A tsunami occurred in 2004 due to a large earthquake in the Indian Ocean that greatly affected many countries such as Sri Lanka, India, Maldives, Indonesia and Thailand.

The United States has many laws and Acts that help protect the air we breathe with science:

The United States has been amended to help reduce industries need to tell our government the law was n

 **PREVIEW**
Please login or register to download the printable version of this study guide.
www.newpathlearning.com

This Act has an Air Act that pollutants and safe, and

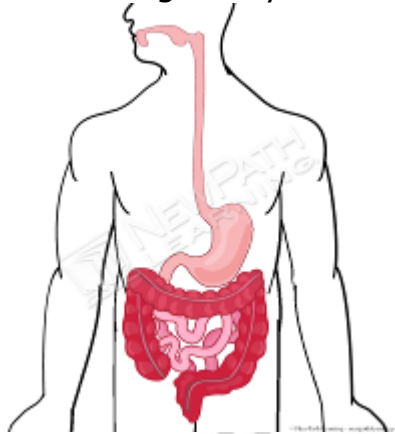


The **Safe Drinking Water Act** was established to protect the quality of **drinking water** in the United States.

You even experience science when you eat:

It's dinner time and you are starving. Your Mom put a delicious piece of pizza in front of you. Even before you take a bite, saliva starts filling your mouth from **glands** inside your mouth. Your saliva contains chemicals that help start to break down your food so your body can digest it, even before you swallow.

Everyday you walk, talk, and move around in many ways. All these things require energy. The **process** of digestion releases energy in your body every day so that you can do all the moving that you do.



Our bodies need minerals, which are natural substances found in the Earth. We get these minerals from the food we eat.

You experience

When you are... your body. L... Your army is... created in yo... infection you... infection. Thi... infection.



PREVIEW

Please login or register to download the printable version of this study guide.

www.newpathlearning.com

the inside of... se attacks... d **cells** are... e worse the... s to fight the... ou have an

New discoveries happen constantly, and scientists update what we know about the world around us and inside us.

Scientists changed one set of animal classification after studying the groups more thoroughly. Animal classifications went from a Five Kingdom classification system to a Six Kingdom classification system. They split the Monera group into two: *eubacteria* and the *archaeabacteria*. Scientists separated the Monera group because they discovered these groups are very different and do not belong in the same group according to many scientists.

There are many organizations that dedicate their time to science.

Take those that help animals from becoming extinct. Animal conservation organizations help **protect and preserve** living species that are in danger of becoming extinct.

Science on display at night:

Have you ever seen a meteor shower? **Meteors** are small fragments of debris from space that enter the Earth's atmosphere at extremely high speed. They then turn into a vapor leaving a streak of light that disappears quickly.



Look at the picture below. You can tell the moon in this phase comes **before** the full moon (the moon is getting larger) because the right side is lit. You can easily tell if the moon is waxing or waning: if it is white on the right, it is waxing.



Please login or register to download the printable version of this study guide.

www.newpathlearning.com

When you listen to the weather report, you're hearing science in action:

You hear on the radio that a **high air pressure system** will be moving in tomorrow, which means there is a very good chance of clear skies. But if you hear that a **low air pressure system** is moving into your area, you may want to grab your umbrella.



Science is FUN:

Did you ever go to an amusement park? Do you like roller coasters? We know roller coasters are ALL about science...gravity, friction, and SPEED...that is what you feel as you fly through the air on a roller coaster!

Electricity is

You can conserve
environment,



Please login or register to download the
printable version of this study guide.

www.newpathlearning.com

leaving room.

Science is helpful and improves the lives of many people everyday!

A cochlear implant is an electronic device that is **implanted during surgery** into the inner ear and restores some hearing to the deaf.

You can make a CAREER out of science too:

There are many types of scientists: a biologist studies living organisms and their environments, a zoologist studies animals, a botanist studies plants, a paleontologist studies fossils, and a cytologist is one who studies cells! The **study of cells** is known as cytology, which many scientists study to find cures for diseases.