

HOMESCHOOL COURSE PROPOSAL

COURSE NAME: Science of the Body

AGE GROUP: 8-10

COURSE DESCRIPTION:

SCIENCE OF THE BODY

Wednesdays, January 25-April 26 (no class Feb 22, Apr 5; 12 weeks)

11:00am-12:15pm

Ages 8-10

Students learn about the tools doctors use, study how our bodies work, use microscopes to see what different cells look like, and investigate real hearts, kidneys, and brains. All lab costs are included in registration fee.

Instructor: Q Collins, BSc

Location: Discover Science Center (suite 5)

CLASS NAMES AND ACTIVITIES/DESCRIPTIONS:

WEEK 1: Dentistry and Teeth - Wednesday, January 25

This week, we learn about the makeup of our teeth and how to care for them. We experiment with different chemicals and how they affect our teeth.

WEEK 2: First Aid - Wednesday, February 1

Students review the contents of a first aid kit, learn how to treat and prevent minor injuries, and practice basic first aid skills.

WEEK 3: Microscopy and Cells - Wednesday, February 8

This week, we learn how to properly use a microscope, study basic cell structure, and compare the cells of different tissues throughout the body.

WEEK 4: Musculoskeletal System - Wednesday, February 15

In lab today, we learn about bones and muscles by examining x-rays, learning the names of bones in our skeleton, three types of muscle cells and where they are located, and dissect chicken wings to investigate how tendons connect skeletal muscle to bone.

WEEK 5: Nervous System - Wednesday, March 1

Students have the chance to investigate a mammalian brain to learn the parts of the nervous system. We also learn about our senses and what part of the brain is responsible for interpreting the world around us.

WEEK 6: Circulatory System - Wednesday, March 8

In this lab, we study what makes up our blood, test synthetic blood to see how real blood types are characterized, and study how blood moves through the body by looking at a real mammalian heart.

WEEK 7: Respiratory System - Wednesday, March 15

Students learn how and why we breathe, study the organs that make up our respiratory system, and create a model of our trachea, lungs, and diaphragm.

WEEK 8: Digestive System - Wednesday, March 22

In this fun, gross lab, we discuss the function of the digestive system, learn the organs involved in the digestion process, and make a model of our digestive system to see how it works.

WEEK 9: Urinary System - Wednesday, March 29

Students investigate a mammalian kidney in this lab to learn how the body removes excess water and liquid waste through the urinary system.

WEEK 10: Immune System and Germs - Wednesday, April 12

We study germs and the immune system in lab this week. Students test their hand-washing skills, investigate bacteria under a microscope, and learn how our body fights off germs.

WEEK 11: Genetics and DNA - Wednesday, April 19

This week, we investigate our genetic code. Students learn what DNA is and where it is located in a cell, build a model of DNA, and extract DNA from strawberries.

WEEK 12: Surgery - Wednesday, April 26

Students test their skills at surgically removing foreign objects embedded in their "patients" without scarring them.

BEFORE SUBMITTING YOUR PROPSAL:

- Read it over to see if what you wrote makes sense and sounds right.
- Spell check. Spell check. Spell check.
- Check your dates and number of weeks again.

- Make sure if it is 12-week course you have 12 weeks of classes listed.
- Make sure everything is in the correct format (commas, bold, upper/lower case, no abbreviations).