

Boston Collegiate Charter School 5th Grade Science

We Are All SCIENTISTS!

Course Overview

Welcome to Fifth Grade Science! This year, we will explore many areas of science. Our goal for this year is to enhance students' scientific curiosity and skills and get them prepared for the rigor of upper school science.

Yearly Essential Questions

Throughout the year in all of our activities, we will answer the following questions:

- Who are scientists?
- How do scientists examine the physical world around us?
- How do scientists conduct scientific inquiry?
- How do scientists communicate their ideas, understandings, findings, and questions?

Units of Study

- 1--How do scientists explore the world around us?
- 2--How do scientists conduct experiments?
- 3--How do simple machines work?
- 4 and 5--What cycles are evident in the natural world?
- 6--How do animals and plants survive in their ecosystems?
- 7--How do scientists design, build, and analyze different structures?

By the end of the fifth grade, students will be able to:

- recognize patterns and connections in the natural world.
- appreciate that science is an ever-changing field to which they can contribute.
- read non-fiction references (text and photographs) with guidance to identify main points and important vocabulary.
- measure and estimate dimensions of objects with the appropriate metric units.
- safely and appropriately use meter sticks/rulers, glassware, timers, and other appropriate science equipment.
- design and execute with guidance an experiment with a guided question, testable hypothesis, clear manipulated and measured variables, constants, and a written procedure.
- collect, organize, analyze and display data and draw conclusions based on evidence collected.
- communicate clearly the results of an experiment visually, orally, or in written form.

Class Activities

Class time will be spent on many different activities, including:

- ✓ unit lessons
- ✓ indoor and outdoor experiments and demonstrations
- ✓ large and small group discussions and work
- ✓ stations
- ✓ readings from different fiction and non-fiction text

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Tutoring

This year, the Lower School has moved to a targeted tutoring program, designed to provide additional skill support to struggling students. **As a result, tutoring is by invitation only.** More information about this change will be coming soon.

Grades

Student grades will be based on four averages:

- 30% Unit Tests
- 20% Homework (See section below.)
- 30% Quizzes, Labs, and Projects
- 20% Classwork (Class participation and written classwork)

Student assessment will be done in a variety of ways: multiple choice and short answer tests and quizzes, stations, tests and/or laboratory activities, oral and written projects and presentations, binder checks, and positive participation in class and group discussions.

- “Test Alerts” are sent home approximately one week before every major Unit Test.
- Please note that students can **MAKE UP ANY QUIZ** that they are not satisfied with. They must make arrangements to retake the quiz within one week during lunch or after school. They will receive an average of the two grades.

Homework

Students should expect science homework each night!

- Each homework assignment is worth 10 points.
- If a student earns a **6 or below** on any homework, he/she will earn homework club.
 - Students **MUST** hand in corrected HWC work **the next day** to receive half credit on that assignment.
 - Students who hand in the assignment the **next day** can earn up to 5 points.
 - Students earn the original grade if the HWC work **is not turned in.**
- If a student **does not complete an assignment**, he/she will earn homework club.
 - This assignment **MUST** be completed and handed in **the next day** to receive half credit.
 - Assignments that are 2 or more days late will earn no credit.
- If a student is absent, he/she has one day per day of absence to complete missing work without consequence.

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Organization

- Each student is expected to keep all science work in his/her double folder
- Each pocket will start with an index where all papers will be recorded and sequenced.
- Students are expected to keep all work, unless directed by teacher.
- There will be both announced and unannounced folder checks that will be graded as quizzes
- There is a “I Love My Folder” sample folder in the classroom that students can check as often as needed to help them organize their required papers.

Materials

To be prepared for class **EACH** day, students need to have:

- Their double-stapled folder with loose-leaf paper
- Multiple pencils and a pencil sharpener with a catch basin – NOT battery-powered
- Metric ruler (with cm and mm)
- Colored pencils
- General class supplies used in each class

Communication

I can be reached at 617.282.6710 x 297. If I am unable to answer your call, please leave a message, and I will return your call within 24 hours. I can also be reached at kporter@bostoncollegiate.org.

Please separate the attached sheet and return with your child on Friday.

Thanks, and I look forward to working with you, your child, and your family and having a great successful year in 5th grade science!

Scientifically yours,

Kristen Porter

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Name of Student: _____

Name of Parent(s)/Guardian(s): _____

Yes, I have read over the course description and understand the expectations in 5th grade science.

Student Signature

Date

Parent/Guardian Signature

Date

Materials

To be prepared for class EACH day, students need to have:

- Their double-stapled folder with loose-leaf paper
- Multiple pencils and a pencil sharpener with a catch basin – NOT battery-powered
- Metric ruler (with cm and mm)
- Colored pencils
- General class supplies used in each class

Yes, my child will be able to have his/her materials by **Monday, August 30th**.

Parent/Guardian Signature

Date

If this is a concern, please contact me at 617.282.6710 x 297. Thanks.