



GRADE 9 SCIENCE (10F)

COURSE OUTLINE

WONDER. INVESTIGATE. UNDERSTAND. REPEAT.

CONTACT INFORMATION

 Kristi Ann Aston
 Room 112
 aston.kristiann@bsd.ca
 204-729-3900

ATTENDANCE

 If absent, have a parent/guardian call **204-729-3915** or **204-729-3900 (press 1)**.

Please give your name, date, and reason.

 Absences must be reported by 3:00 p.m. for parent approval.

EXTRA HELP

 Most days at lunch or by arrangement.

SCIENCE IS MORE THAN CONTENT

In this course, you will:

 **Investigate & experiment.**
Ask questions, test ideas and make observations.

 **Think & analyze.**
Use evidence and data to solve problems and explain your thinking.

 **Connect science to the world.**
Explore how science impacts technology, society, Indigenous perspectives and everyday life.

1

MATTER (CHEMISTRY)

- Atomic models and structure of the atom
- Elements, compounds and mixtures
- Physical and chemical changes
- Properties of matter (metals, non-metals, metalloids)
- The periodic table and patterns
- Chemical reactions and evidence of change
- Conservation of mass



2

ENERGY (PHYSICS)

- The nature of static and current electricity
- Positive and negative charge
- Electrical circuits (series and parallel)
- Uses of AC and DC electricity
- Forms and transfers of energy
- The law of conservation of energy
- Energy sources and their uses in society



3

GENETICS (BIOLOGY)

- DNA, genes and chromosomes
- Traits and heredity
- Mendel and patterns of inheritance
- Asexual and sexual reproduction
- Cell division (mitosis and meiosis)
- Human reproduction and development
- The role of genetic information in living things



4

EVOLUTION (BIOLOGY)

- Evidence for evolution (fossils, comparative anatomy, embryology, DNA, etc.)
- Natural selection and adaptation
- Variation within populations
- How populations change over time
- The fossil record and deep time
- The tree of life and common ancestry
- Human evolution



Units may be taught in a different order throughout the year.



GRADING

85%

COURSE WORK

Major & Minor Evidence of Learning
Tests • Investigations • Projects •
Check-ins • Applications

15%

FINAL EXAM

Cumulative final examination

HOW WE LEARN TOGETHER



RESPECT

People. Learning. Things.



People

Treat everyone with care and respect.



Learning

Give yourself and others the chance to learn.



Things

Take care of our classroom, equipment and materials.

**Something isn't right?
Let me know.**



SAFETY

Think. Follow. Act.



Think

Consider safety before you act.



Follow

Follow written and verbal safety instructions.



Act

Use equipment and materials safely and responsibly.

**Something feels unsafe?
Stop and tell me.**



INTEGRITY

Try. Grow. Own it.



Try

Make an honest attempt using your own thinking.



Grow

Ask for help and use approved supports and feedback to improve.



Own it

Your work should reflect your own learning.
AI use will be clearly identified when appropriate.

**Is the work really yours?
Don't copy others' work —
or give others your work to copy.**



PHONE-FREE CLASSROOM

- Phones & smart devices stay in lockers.
- Phone brought to class? Home will be contacted.**
- Parents:** Call the main office to reach your child.
- School computers provided when needed.



Binder/notebook



Paper



Pens/pencils



Calculator



Ruler

COME PREPARED



**Leave hats, bags & jackets
in your locker.**

IMPORTANT INFORMATION



DEADLINES & LATE WORK

Meet deadlines.
If you're falling behind,
talk to me early.



MISSED CLASS?

Before you next class:

- 1 Check Teams
- 2 Check the Missed Class Station
- 3 Check with a classmate



**Still unsure?
Check with me.**



COMMUNICATION

STUDENTS

Questions?
Talk to me in
class/help time
or message me
on Teams.

PARENTS/GUARDIANS

Questions or
concerns?
Email or
call me.



EVERYONE CAN DO SCIENCE

Science is for everyone.
Be curious. Ask
questions. Keep
learning.

