YSC Suggested Science Resources for Students

*\*These resources are collated as a resource of selected videos, interactive websites, and articles that can add to your science knowledge in different science subject areas such as biology, chemistry, physics, and earth science. Feel free to select those that are more problem-solving in nature. These materials are usually science teachers’ favorite resources for teaching middle school to high school science.*

**Suggested YouTube Channels for Science Videos**

Amoeba Sisters (great animation; engaging; clear explanation)

<https://www.youtube.com/@AmoebaSisters>

Bozzman Science (clear explanation; great visual appeal)

<https://www.youtube.com/@Bozemanscience1>

Khan Academy (great for students for step-by-step learning with examples)

<https://www.youtube.com/@khanacademy>

Crash Course (detailed; high level discussions)

<https://www.youtube.com/@crashcourse>

Kurzgesagt in a Nutshell (interesting way of presenting science information)

<https://www.youtube.com/@kurzgesagt>

Sick Science (for cool experiments with quick explanation of science concepts)

<https://www.youtube.com/@sickscience>

ASAP Science (fun and engaging discussion of science concepts; parodies of songs)

<https://www.youtube.com/@AsapSCIENCE>

Minute Physics (quick and bite-size explanation of science principles)

<https://www.youtube.com/@MinutePhysics>

Socratica

<https://www.youtube.com/@Socratica>

Solving Genetics Problems (basics of genetics problem solving using Punnett squares)

<https://www.youtube.com/watch?v=Qcmdb25Rnyo>

Punnett Squares – Basic Introduction

<https://www.youtube.com/watch?v=agQpPPQ5IVQ>

Pedigree Analysis (how to analyze pedigrees)

<https://www.youtube.com/watch?v=6VGcidNwQEo>

Solving Mixture Problems (how to solve chemistry problems involving mixtures)

<https://www.youtube.com/watch?v=e2FAAMlAJ3c>

**Interactive Websites**

Interactive Periodic Table of Elements

<https://ptable.com/?lang=en#Properties>

Simulations for Science Subjects and Math (a great resource for simulations particularly in physics)

<https://phet.colorado.edu/>

Biology Corner (great resource for high school biology)

<https://www.biologycorner.com/>

Chemistry for Kids (simple explanation of chemistry principles for middle school students)

<http://www.chem4kids.com/>

Biology for Kids (simple explanation of biology principles for middle school students)

<http://www.biology4kids.com/>

The Physics Classroom (physics concepts and problem-solving exercises with answers)

<https://www.physicsclassroom.com/>

NASA for STEM

<https://www.nasa.gov/stem>

NASA Science for Kids

<https://spaceplace.nasa.gov/>

Explore Learning Gizmos (needs subscription, great for middle and high school students)

<https://www.explorelearning.com/our-products/gizmos>

BrainPop (needs paid subscription, great for middle school students)

<https://www.brainpop.com/science/>

Cells Alive (good resource for cells and function of cell parts)

<https://www.cellsalive.com/>

Nova Labs – RNA Virtual Lab

<https://www.pbs.org/wgbh/nova/labs/lab/rna/>

Nova Labs – Energy

<https://www.pbs.org/wgbh/nova/labs/lab/energy/>

**Suggested Readings/Websites**

Bill Nye The Science Guy (videos that explain science concepts in a clear and engaging way)

<https://billnye.com/the-science-guy>

Problem Sets in Physics

<https://www.physicsclassroom.com/calcpad/problems>

Chemical Problem-Solving Strategies using Unit Analysis (video included)

<https://ecampusontario.pressbooks.pub/prechemmods/chapter/module-3/>

Visualization and Problem Solving for Chemistry

<https://www.chem.purdue.edu/gchelp/>

National Geographic Kids

<https://kids.nationalgeographic.com/>

Nova Labs – Evolution

<https://www.pbs.org/wgbh/nova/labs/lab/evolution/>