

Mr. Sean Bowles
Thomas A. Blake Middle School
7th Grade - Life Science (White Cluster)

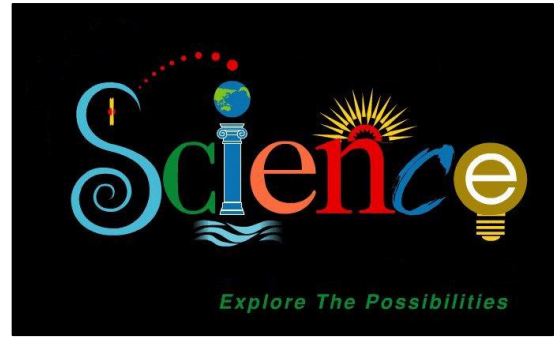
Course Description

HOW TO CONTACT ME:

Email: sbowles@email.medfield.net (best way to reach me)

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WHAT YOU WILL LEARN:

Life science explores the origins, changes and growth of all living things. The following topics will be covered throughout the year:

1. **Living Things-**
Characteristics and Needs of Life (Review)
2. **Cell Chemistry-**
Chemistry of Life
Enzymes
3. **The Cell-**
The Microscope
Eukaryotic vs Prokaryotic
Cell Theory and History
Cell Structures and Functions
4. **Cell Processes-**
Diffusion/Osmosis
Cell Cycle
Differentiation
Photosynthesis (making food)
Cellular Respiration (making energy)
5. **Human Body-**
Organization
Body Systems
Digestion
6. **DNA and the Cell-**
DNA Structure and Function
Replication
Protein Synthesis
7. **Heredity-**
Mendel's Experiments
Human Genetics
Evolution
8. **Classification-**
Six Kingdoms/ Protists
Dichotomous Keys
9. **Ecology-**
Cycles
Ecological Succession
Food Chains/Webs
Symbiosis

WHAT YOU WILL NEED:

- A Three-ring binder labeled with the following five sections:
 1. Unit 1
 2. Unit 2
 3. QODs
 4. Lab Reports
 5. Science Exploration**(Share this binder only with Science Exploration)**
- Lined paper for your binder (100 pages)
- 500 lined 3x5 index cards
- Pens (black or blue only), a correcting pen (any other color), pencils, and a highlighter

HOW YOU WILL BE GRADED:

There are several types of assignments that will be given throughout the term and each type of assignment is worth a certain number of points. The work worth many points (tests & projects) is assigned less often, while the work worth fewer points (classwork & homework) is assigned more often.

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|----------------------------|---------------------|
| • Unit Tests and Projects: | 50 – 80 points each |
| • Quizzes: | 25 – 50 points each |
| • Classwork & Lab Reports: | 15 – 35 points each |
| • Reaching your Potential: | 35 points each term |
| • Homework: | 3 points each |

For example, if you do very well on two classwork grades, it would be like getting a great test grade!

Homework will be graded based on 3 points. Incomplete homework will receive either a 2 or 1. You cannot receive higher than a 2 if the homework is late. **If your homework is late, it is your responsibility to turn it in for credit.** If you are absent, you have up to one week to finish the assignment after returning for a full 3 points. Homework will either be turned-in to the class box or will be checked in the beginning of class. Once homework is graded, keep it all in the unit section of your three ring binder.

Classwork will include "Question of the Day" (QOD), group and individual in-class work and lab reports. By staying focused, being curious, & asking questions you are bound to do well on this part of your grade. The number of points for each assignment will vary depending on the length.

- Not all classwork will be graded, but it will be collected. All work should be completed as if it is being graded.
- Your grade on an assignment depends on the number of correct answers, effort and completeness. If you put the correct answers, but fail to be specific and include relevant details, you will receive a lower grade. **(Take your time and do it well!)**
- Your QODs will be collected at the end of each unit for a classwork grade.
- All other classwork assignments should be turned into the class box and will be returned to you. Please keep them in the unit section of your binder.

Quizzes will be given anytime during a unit. They will vary in size – some will be very short, while others will be long (but not as long as a test). Difficulty and/or length of a quiz will be shown on a 4 bar scale – 1 bar for a short/easy quiz, 3 bars for a longer/more difficult quiz. There is also the possibility of short pop quizzes (1 bar) so make sure you are staying on top of your studies in science.

Tests and/or Projects – Tests will be given after covering one or two units, depending how difficult the topic or topics are. Tests will always be 4 bars on the same 4 bar scale mentioned above. Some projects will be done alone, while others will be done in small groups. Projects will be graded with a rubric. The number of points for projects and tests will vary depending on their size.

In **Science Exploration**, students will meet for one additional period of science per week to explore a variety of themes in biology. Designed to be primarily activity based, this class will utilize computer skills as a scientific tool.

How to Reach Your Potential: You will be given one 35 point grade each term based on criteria below

- **Be curious** and ask questions when you do not understand something (because someone else is thinking of the same question!).
- **Be respectful** of your teacher, other students, the classroom materials, and the subject.
- **Be safe.** Science class involves lots of hands-on activities that require you to pay close attention to instructions that will keep you and your classmates safe.
- **Be organized.** Keep your binder neat and complete – making sure everything is in its correct section. It is really useful to be organized to do well on quizzes and tests.
- **Be responsible** for your learning. Hand in work you missed or need to make up, and figure out the way you study best. If you have a hard time with this one, ask for help!
- **Be helpful** to those students struggling to understand. Being a teacher to others will help you figure out what you still have questions about. You never stop learning.
- **Be a SCIENTIST** – investigate, explore, predict, analyze, and ask questions about the world around you. In this class you are a scientist! Don't forget, all scientists began as science students. It was their curiosity and motivation that pushed them to discover.

I have read and understood this course description and am ready to be successful in Life Science!

STUDENT SIGNATURE: _____

PARENT/GUARDIAN SIGNATURE: _____

ONCE MR. BOWLES CHECKS THIS, KEEP THIS IN THE FRONT OF YOUR BINDER

AS A REMINDER FOR THE REST OF THE YEAR