

Westmont Junior High School
Mr. Johnson
7th Grade Science

This year, students will be discovering major science concepts and building key scientific and engineering skills **by engaging in the work of actual scientists**. Within each unit, students will:

1. Observe phenomena
2. Ask questions about what they saw
3. Conduct investigations to gather data and information
4. Collaboratively answer questions using the data that was gathered
5. Use answers to identify big ideas about how the world works

What will we be getting better at?

The main goal of this class is for you to develop the skills that scientists use in their work. These come from the Next Generation Science Standards (NGSS), and they are:

1. *Asking questions and defining problems*
2. *Developing and using models*
3. *Planning and carrying out investigations*
4. *Analyzing and interpreting data*
5. *Using mathematics and computational thinking*
6. *Constructing explanations and designing solutions*
7. *Engaging in argument from evidence*
8. *Obtaining, evaluating, and communicating information*
9. *Collaborating with others*

What units will we be learning about?

To build these skills we'll be working through these units (and answering these questions) during the year:

- *How can containers keep stuff from warming up or cooling down? (Thermal Energy)*
- *Why does a lot of rain, hail, and snow fall at some times and not others? (Weather and Climate)*
- *How do changes in the Earth's systems impact our communities, and what can we do about it? (Earth Resources and Human Impacts)*
- *Why do things sometimes get damaged when they hit each other? (Forces and Motion)*
- *How can a magnet move another object without touching it? (Electricity and Magnetism)*

What do we need to bring to class?

- Science folder (kept in the classroom)
- Science notebook (kept in the classroom)
- Chromebook
- Headphones
- Assignment notebook/Agenda - digital or paper copy
- Pen or pencil

A textbook will be available in school as a resource and can be checked out if needed.

Daily Educational Activities: Many formative assessments will be a part of our daily educational activities. These assessments can be in the form of bell ringer work, Otus assignments, discussion,

exit tickets, argumentative writing assignments, etc. Homework, if assigned, will be written in the *assessment section* of our daily lesson plan in Otus. Writing the assignment in an assignment notebook or agenda is encouraged.

How will our grades be calculated?

Over the course of the year, students will be assessed on the 9 skills listed above (see *What Will We Be Getting Better At?*). Every unit will end with a final unit project, and **100% of your grade will be based on the skills that are assessed in these projects**. I believe that a student's grade should reflect what they have shown they know and are able to do on large, summative work. Things like classwork, homework (when there is any), discussion, checks for understanding, are done to help you learn and are the practice that prepares you for those final performances. They won't be used to calculate your grade, but they do get you ready for the things that do count, so you still need to do them! Not doing this work will mean that you are not ready for when your work will count.

Absences/Missed Work: Students will be responsible for making up missed work. An absent student should check the Otus lesson tab from the day that was missed.

Communication:

Otus will be used to communicate assignments and should be checked by students on a daily basis.

Contact information: Mr. Johnson's Phone/Voicemail: 630-468-8218
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"We keep moving forward, opening new doors, and doing new things, because we're curious and curiosity keeps leading us down new paths." - Walt Disney