



Mr. Blackman's
7th Grade Science

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PNMS 7th Grade Science 2022-2023

Mr. Blackman's Science Expectations for Students

The Jr. Huskie Way "Classroom Expectations"

Respect

Respect self, others
and school property
Use polite words
Honor the personal
space of others

Responsibility

Enter and Exit Quietly
Bring all materials
needed to class daily
Follow adult directions
immediately

Relationships

Treat others the way
you want to be treated
Own your behavior
Include everyone
Follow adult directions
immediately

Expectations

You are expected to be on time to class with all materials and ready to learn. *If you choose not to bring the appropriate materials to either our virtual or face to face class, you will be given two warnings before a phone call is made home. On the fourth offense you will be referred to the office. Please reach out to me or the office if you are having difficulty with technology or getting connected to our Google Meets*


Participation is an important ingredient in the learning process. In order to facilitate classroom discussions, you must focus on the task at hand and be an active part in the lessons by listening, asking questions for clarification, and contributing your thoughts and ideas. *Please try to engage as much as possible during our Whiteboard meetings. We will be collaborating as a class on many of the concepts and labs. At times you will be put into small groups. It is expected that you work with your small group on the assigned task or discussion. Part of being engaged is asking questions if you don't understand something, need directions repeated or are having difficulty with technology or how to do something that is being asked of you. I am here to help and want you to be successful in our class!*

What work should my child expect?

All of the student's work is on Google Classroom. Students are expected to work to their full potential during their science class at their own pace. If you find that your child is falling behind in the assignments, he/she will be asked to join me for time in XTS or during my Friday office hours. Your child is expected to do the homework to the best of their ability and turn it in completed by the due date. In science, homework is mostly used as practice for the assessments. The homework will be utilized for feedback with minimal point value.

If you need assistance getting supplies or would like to have a textbook checked out to your student, please contact Renee Smith at rsmith3@portageps.org or at 323-5759. Our goal is to make sure your students receive any requested items by the second week of



"There is a theory which states that if ever anybody discovers exactly what the Universe is for and why it is here, it will instantly disappear and be replaced by something even more bizarre and inexplicable. There is another theory which states that this has already happened." —  Douglas Adams (1952–2001).

Energy in the Atmosphere and Human Impact

- Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.
- Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.
- Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.
- Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.

Chemistry

- Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.
- Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.
- Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.

Energy Transfer and States of Matter

- Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample.
- Develop a model that predicts and describes changes in particle motion, temperature and state of a pure substance when thermal energy is added or removed

Structure and Properties of Matter



- Develop models to describe the atomic composition of simple molecules and extended structures.
- Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.
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- Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.
- Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.

Cells and Reproduction

- Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells
- Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function.
- Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.
- Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.
- Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.
- Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the

Matter Cycling and Photosynthesis

Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.

Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.

Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.

Dear Students,

There are a few supplies that you want to make sure you have to help you have a successful year at PNMS. Please check to make sure you have as many of the supplies listed below as possible and that you bring them to school on a regular basis. If you can't acquire any of these items, come and see us, and we will make sure that you have them.

These items are required and used for science:

___ 75ish page (1 subject) notebook dedicated just for science

___ Pencils

___ **HEADPHONES- this is very important. We have a virtual blended learning environment and you will use these every day for instructional purposes.**

These items are strongly recommended and used regularly for science but not required.

___ Colored Pencils

___ Highlighters

___ Handheld mouse for easier navigation with use of the Chromebook

These items are for all school use (up to the student and teacher discretion):

binder and dividers

Pencils- even though we use technology, not a day will go by that we will not use pencils

pencil pouch for your binder

colored pencils

blue or black pens

red pen

ultra-fine Sharpie black marker

Mr. Blackman's Classroom Wish List

Dry erase markers

Clorox Wipes

Kleenex