
INTRO TO
EARTH
SCIENCE
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Intro to Earth Science

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Introduction

If you are new to the idea of using a Science Interactive Notebook in your classroom, **stop by my Nitty Gritty Science shop and download my Intro to Science Interactive Notebooks tutorial for FREE!** In there you will find tips on how to begin with your students, what materials to have on hand and, most importantly, how it will enhance your students' learning through reflection and creativity.

Focused Lessons with Differentiated Instruction

The lessons shared on the following pages cover National Science Standards and meet students' needs. I have given you the notes that I would give my students (Right Side – Input Side of Notebook) so you can understand what I'm having the students focus on when working on their creative assignments (Left Side – Output Side of Notebook). Each lesson focuses on a Question of the Day (QOD) represented in red in the top margin of each "Input" page with the student giving an answer in red on the "Output" page.

Left Side – Output

Instructions for each Output Side are included. This includes cut-outs, foldables or master copies where applicable. You may find that students work slowly at first, but once groups are organized and students know what is expected from them, not only will you see more energy focused on the final product, but also you will be shocked at the level of creativity certain students have in certain areas.

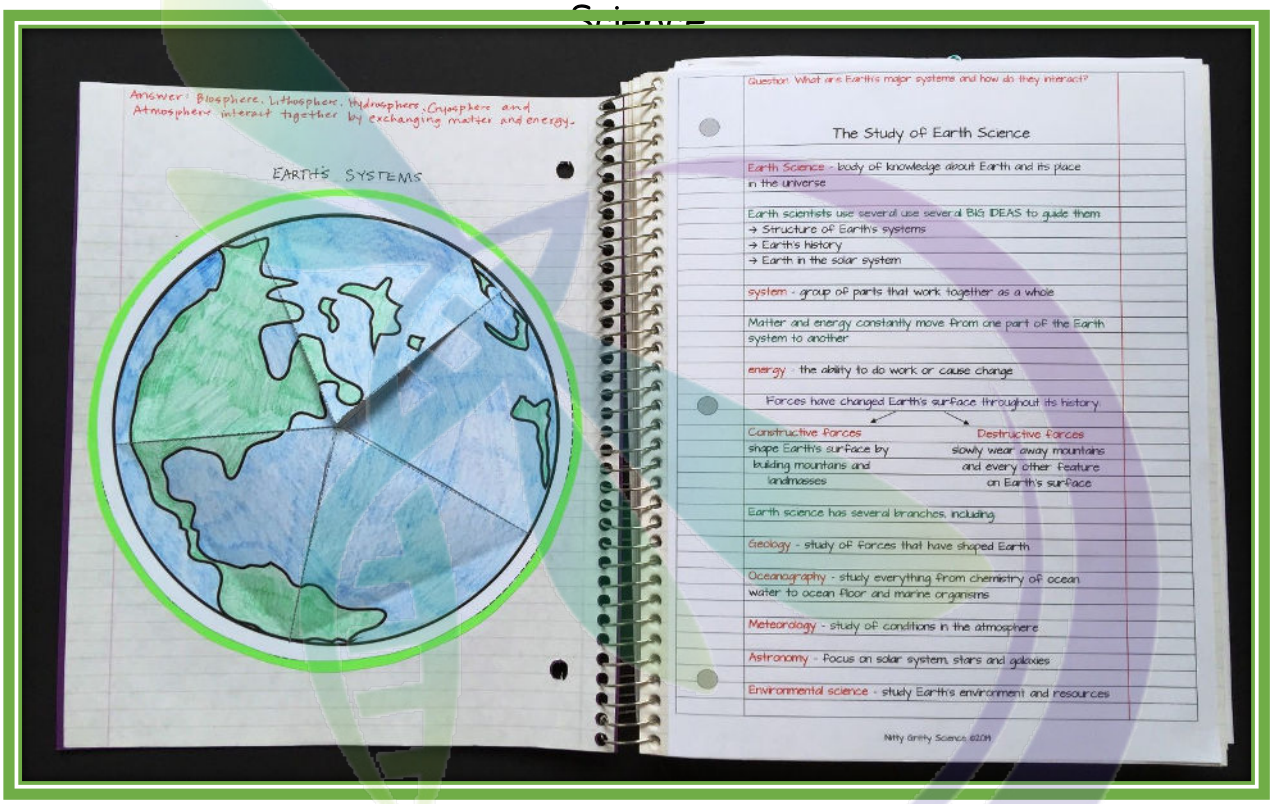
Mini-Assessments

Mini quizzes will be given for each section so you may monitor student's level of understanding. For reproduction purposes, there are two quizzes to a page so you can cut them in half and save on some paper ☺

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MULTIPLE LEARNING STYLES ADDRESSED WITH ORIGINAL ACTIVITIES – NO REPEATS!

Section 1: The Study of Earth Science

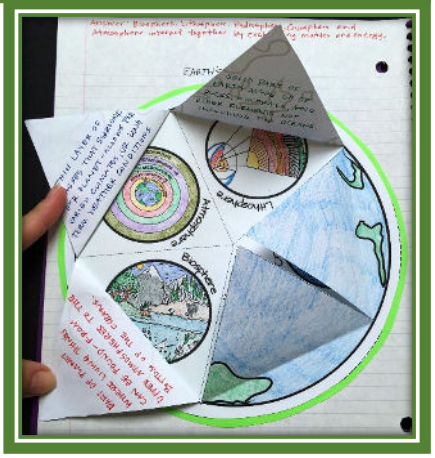


Instructions:

Students will start off with a strong foundation in Earth Science with this activity which will give them an overview of Earth's systems and how everything they learn this year will somehow connect to one or more of the systems.

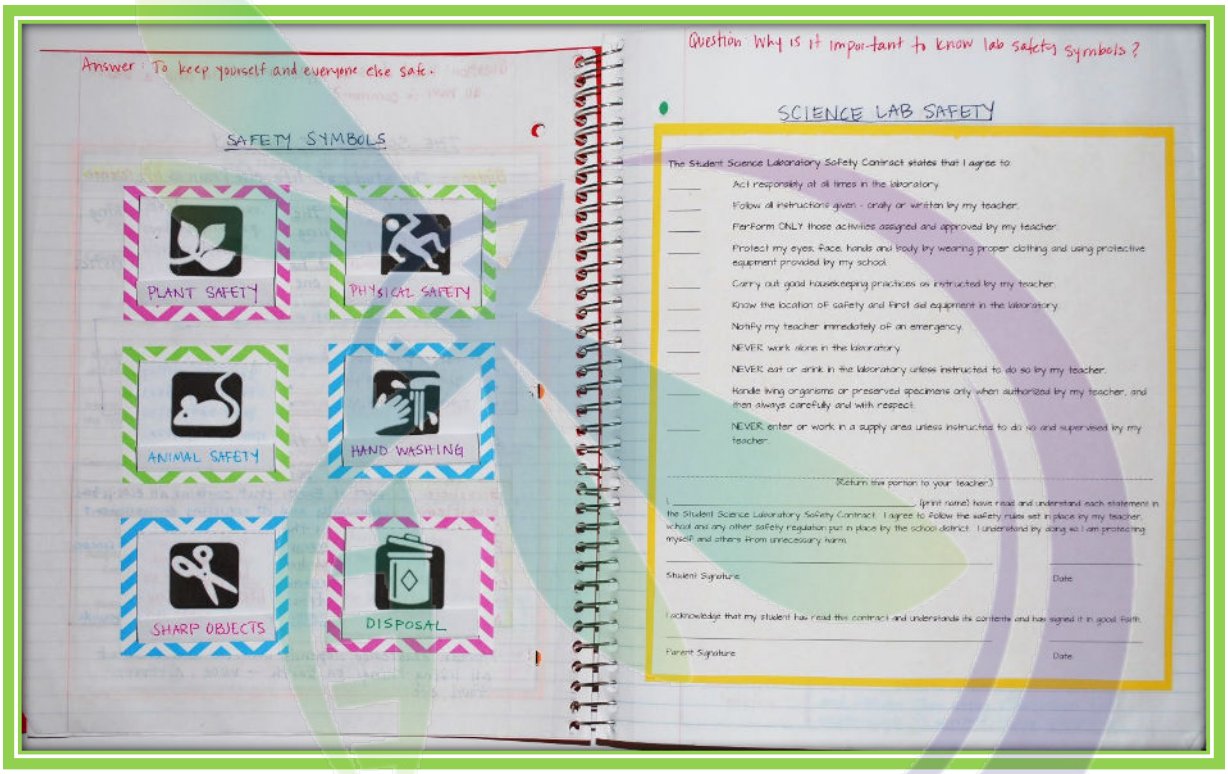
Two versions of the Earth Systems printable is included – one with cryosphere, one without, along with cut-outs, an answer key and a mini-quiz.





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Section 2: Science Lab Safety



Instructions:

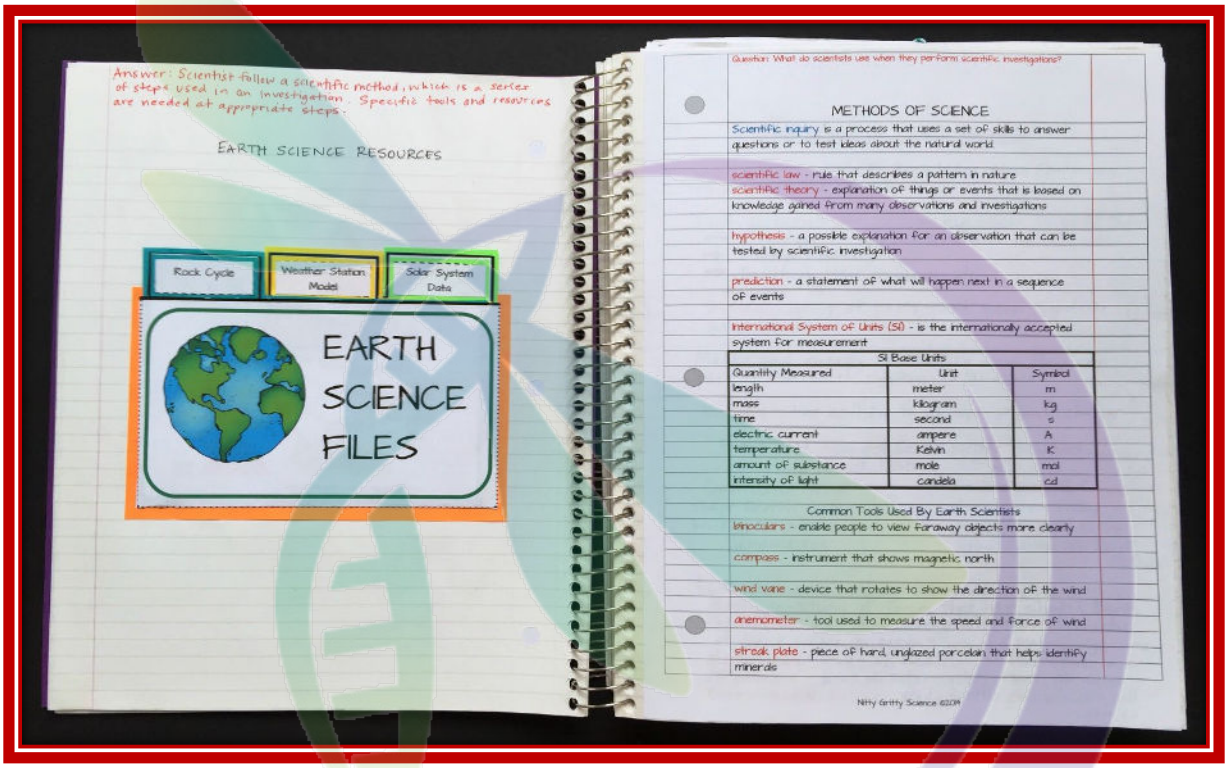
This is always good to have in the Science Interactive Notebooks as a reminder to students that they signed a Lab Safety Contract and agreed to follow the safety guidelines.

Attached is the Lab Safety Contract, Safety Symbol matchbooks and a mini-quiz.



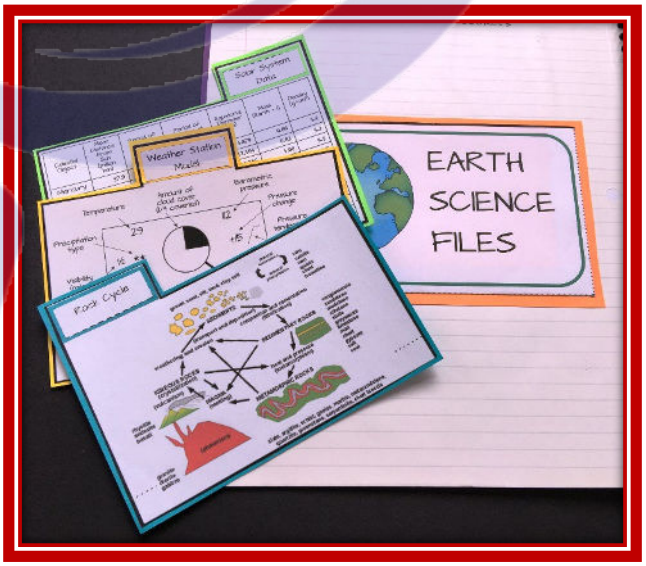
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Section 3: Methods of Science



Instructions:

The Earth Science Reference section is really a page that students will be able to come back to as a reference guide. Add more pockets with other resources down the road if you would like!



All templates and reference materials are provided for the Earth Science Files along with a mini-quiz.

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Name _____ Date _____

Quiz: The Study of Earth Science

Matching

_____1. geology	a. shapes Earth's surface by building mountains and landmasses
_____2. astronomy	b. study of conditions in the atmosphere
_____3. biosphere	c. system that includes all the water on Earth
_____4. cryosphere	d. study of forces that have shaped the Earth
_____5. meteorology	e. part of the planet where all living things can be found
_____6. hydrosphere	f. force that wears away mountains and other features of Earth's surface
_____7. constructive force	g. study whose focus is on solar system, stars and galaxies
_____8. destructive force	h. system that includes all of Earth's frozen water

MINI QUIZZES INCLUDED FOR EACH SECTION

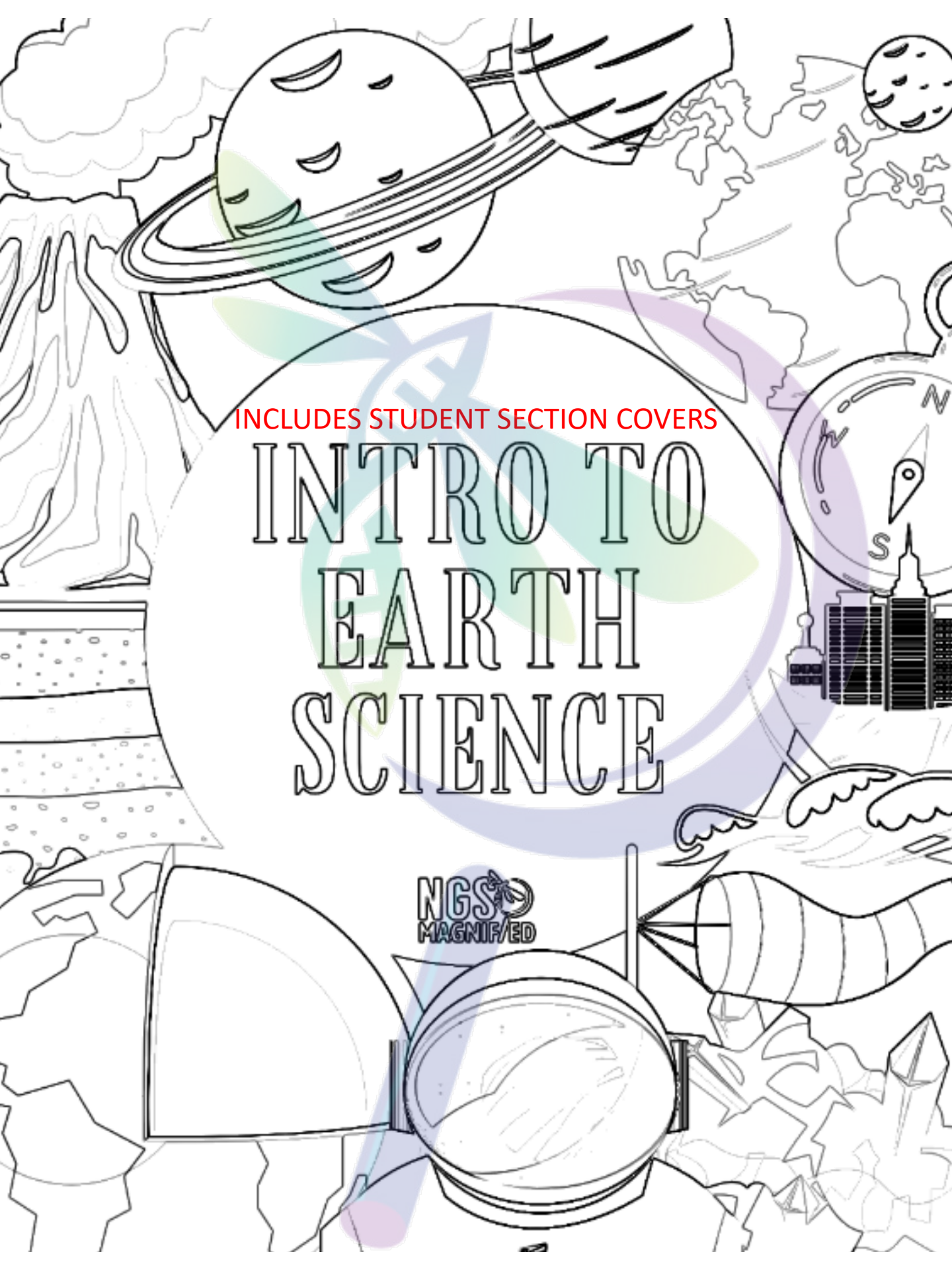
Name _____ Date _____

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INCLUDES STUDENT SECTION COVERS
INTRO TO EARTH SCIENCE
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Question: What do scientists use when they perform scientific investigations?

METHODS OF SCIENCE

Scientific inquiry is a process that uses a set of skills to answer questions or test ideas about the natural world.

scientific law – rule that describes a pattern in nature

scientific theory – explanation of things or events that is based on knowledge gained from many observations and investigations

hypothesis – a possible explanation for an observation that can be tested by scientific investigation

prediction – a statement of what will happen next in a sequence of events

International System of Units (SI) – is the internationally accepted system for measurement

SI Base Units

Quantity Measured	Unit	Symbol
length	meter	m
mass	kilogram	kg
time	second	s
electric current	ampere	A
temperature	Kelvin	K
amount of substance	mole	mol
intensity of light	candela	cd

Common Tools Used By Earth Scientists

binoculars – enable people to view faraway objects more clearly

compass – instrument that shows magnetic north

wind vane – device that rotates to show the direction of the wind

anemometer – tool used to measure the speed and force of wind

streak plate – piece of hard, unglazed porcelain that helps identify minerals

Thank you for sharing NGS Magnified with your students!

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