

Intro to Life Science

Intro to Life Science Unit includes:

- Print and digital Interactive Notebooks
- Editable Resources, including notes, PowerPoints, and test
- Instructional Videos
- Teacher-led Demos & Guided Inquiry Labs
- Task Cards & Digital Task Cards
- Study Guides



Suggested Pacing Guide

The following is a **suggested pacing guide** for my COMPLETE COURSES (Earth, Life or Physical Science) which are based on 50-minute class periods. There are three variations below. **Each variation is based on the number of sections in your SCIENCE INTERACTIVE NOTEBOOK chapter.**

Based on a **4-Section Chapter**

Day	Lesson/Activity	Engage	Explain	Explore	Elaborate	Evaluate
1	• Teacher Demo	x				
	• Section 1 Notes – INB input		x			
	• INB Activity – INB output (homework if not completed in class)			x		
2	• Mini-quiz					x
	• Section 2 Notes – use PowerPoint		x			
	• INB Activity			x		
3	• Mini-quiz					x
	• Guided Inquiry Lab – Student Led			x		
4	• Section 3 Notes – use PowerPoint		x			
	• INB Activity			x		
	• Mini-quiz					x
5	• Section 4 Notes – use PowerPoint		x			
	• INB Activity			x		
	• Mini quiz					x
6	• Science Stations				x	
	• Science Stations				x	
8	• Final draft and testing for Creation Station (STEM)				x	x
9	• Task Card Review (game-style, full class, partner)				x	
10	• Chapter Test					x
	• Have students complete notes for next chapter*	x				

* **Note-taking option:** Once students are done with chapter test, they get the next set of notes and work quietly on completing them while other students finish up. All notes are to be completed when they return to class. Have students glue each page of notes into the next few pages of their INB (right side only). This way, when you go over the PowerPoint each day, they have already reviewed topic and are ready for class.

5 E Model

Engage – Teacher-led demos foster wonder and classroom discussion and serve as the hook for the lesson. Videos and images of natural phenomena also foster questioning and communication. NGSS phenomena are aligned to middle school NGSS standards.

Explain – PowerPoints, instructional videos, and guided notes (input side of interactive notebooks) provide definitions, explanations, and information through mini-lecture, text, internet, and other resources which encourages students to explain concepts and definitions in their own words.

Explore – Students investigate problems, events, or situations. As a result of their mental and physical involvement in these activities, students question events, observe patterns, identify and test variables, and communicate results.

Elaborate – It is important to involve students in further experiences that apply, extend, or elaborate the concepts, processes, or skill they are learning. Elaborate activities provide time for students to apply their understanding of concepts and skills. They might apply their understanding to similar phenomena or problems.

Evaluate – Use a variety of assessment to gather evidence of student's understanding and provide opportunities for them to assess their own progress.

- Actual photos of both the INPUT and OUTPUT pages of Science Interactive Notebook
- Instructions on how to create/use/complete activity for OUTPUT side
- Mini-Quizzes for each concept to check students' understanding
- Answer Keys for all mini-quizzes
- Appendix with Teacher Notes for Interactive Notebook in LARGE print.

Introduction

If you are new to the idea of using a Science Innovation classroom, stop by my Nifty Grifty Science shop and Science Interactive Notebooks Tutorial For FREE! In how to begin with your students, what materials to use, importantly, how it will enhance your students' learning creativity.

Getting Started with Differentiated Instruction

Read on the following pages cover National Science Education Standards

This is always a good thing 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.

Notes: French enlightenment

THE FRENCH ENLIGHTENMENT

Notes

1715-1789

French Revolution

Enlightenment

1789-1799

1799-1804

1804-1815

1815-1830

1830-1848

1848-1871

1871-1914

1914-1918

1918-1945

1945-1959

1959-1979

1979-1989

1989-1999

1999-2009

2009-2019

2019-2029

2029-2039

2039-2049

2049-2059

2059-2069

2069-2079

2079-2089

2089-2099

2099-2109

2109-2119

2119-2129

2129-2139

2139-2149

2149-2159

2159-2169

2169-2179

2179-2189

2189-2199

2199-2209

2209-2219

2219-2229

2229-2239

2239-2249

2249-2259

2259-2269

2269-2279

2279-2289

2289-2299

2299-2309

2309-2319

2319-2329

2329-2339

2339-2349

2349-2359

2359-2369

2369-2379

2379-2389

2389-2399

2399-2409

2409-2419

2419-2429

2429-2439

2439-2449

2449-2459

2459-2469

2469-2479

2479-2489

2489-2499

2499-2509

2509-2519

2519-2529

2529-2539

2539-2549

2549-2559

2559-2569

2569-2579

2579-2589

2589-2599

2599-2609

2609-2619

2619-2629

2629-2639

2639-2649

2649-2659

2659-2669

2669-2679

2679-2689

2689-2699

2699-2709

2709-2719

2719-2729

2729-2739

2739-2749

2749-2759

2759-2769

2769-2779

2779-2789

2789-2799

2799-2809

2809-2819

2819-2829

2829-2839

2839-2849

2849-2859

2859-2869

2869-2879

2879-2889

2889-2899

2899-2909

2909-2919

2919-2929

2929-2939

2939-2949

2949-2959

2959-2969

2969-2979

2979-2989

2989-2999

2999-3009

3009-3019

3019-3029

3029-3039

3039-3049

3049-3059

3059-3069

3069-3079

3079-3089

3089-3099

3099-3109

3109-3119

3119-3129

3129-3139

3139-3149

3149-3159

3159-3169

3169-3179

3179-3189

3189-3199

3199-3209

3209-3219

3219-3229

3229-3239

3239-3249

3249-3259

3259-3269

3269-3279

3279-3289

3289-3299

3299-3309

3309-3319

3319-3329

3329-3339

3339-3349

3349-3359

3359-3369

3369-3379

3379-3389

3389-3399

3399-3409

3409-3419

3419-3429

3429-3439

3439-3449

3449-3459

3459-3469

3469-3479

3479-3489

3489-3499

3499-3509

3509-3519

3519-3529

3529-3539

3539-3549

3549-3559

3559-3569

3569-3579

3579-3589

3589-3599

3599-3609

3609-3619

3619-3629

3629-3639

3639-3649

3649-3659

3659-3669

3669-3679

3679-3689

3689-3699

3699-3709

3709-3719

3719-3729

3729-3739

3739-3749

3749-3759

3759-3769

3769-3779

3779-3789

3789-3799

3799-3809

3809-3819

3819-3829

3829-3839

3839-3849

3849-3859

3859-3869

3869-3879

3879-3889

3889-3899

3899-3909

3909-3919

3919-3929

3929-3939

3939-3949

3949-3959

3959-3969

3969-3979

3979-3989

3989-3999

3999-4009

4009-4019

4019-4029

4029-4039

4039-4049

4049-4059

4059-4069

4069-4079

4079-4089

4089-4099

4099-4109

4109-4119

4119-4129

4129-4139

4139-4149

4149-4159

4159-4169

4169-4179

4179-4189

4189-4199

4199-4209

4209-4219

4219-4229

4229-4239

4239-4249

4249-4259

4259-4269

4269-4279

4279-4289

4289-4299

4299-4309

4309-4319

4319-4329

4329-4339

4339-4349

4349-4359

4359-4369

4369-4379

4379-4389

4389-4399

4399-4409

4409-4419

4419-4429

4429-4439

4439-4449

4449-4459

4459-4469

4469-4479

4479-4489

4489-4499

4499-4509

4509-4519

4519-4529

4529-4539

4539-4549

4549-4559

4559-4569

4569-4579

4579-4589

4589-4599

4599-4609

4609-4619

4619-4629

4629-4639

4639-4649

4649-4659

4659-4669

4669-4679

4679-4689

4689-4699

4699-4709

4709-4719

4719-4729

4729-4739

4739-4749</

Directions: Cut out and read the following descriptions that apply to all levels of biology for all living organisms. Match each description to the correct Biology/Life Science theme and paste into the table. When the table is complete, cut and paste it into your Science Interactive Notebook.

TEN THEMES OF BIOLOGY	
Theme	Description
Biological	

you and your parent/guardian how you are to appropriately act in the classroom, including classroom behavior. You and your parent/guardian will both sign and date this letter to acknowledge and confirm your understanding of the classroom rules. Please turn the top part Section 1 (Attachment) back.

Adapt especially at first to a new laboratory

Follow all instructions given – orally or written by my teacher.

Perform ONLY those activities assigned and approved by my teacher.

Personal safety: Wash hands thoroughly with soap and diluting solution; appropriate protection by my teacher.

Carry out your workkeeping projects as recommended by my teacher.

Know the location of safety and first aid equipment in the laboratory.

Notify my teacher immediately of any emergency.

NEVER smoke alcohol in the laboratory.

NEVER eat or drink in the laboratory unless instructed to do so by my teacher.

Handle toxic organisms or preserved specimens only when authorized by my teacher; and then always carefully and with respect.

NEVER borrow or work on a supply container unless authorized to do so by my supervisor, my teacher.

(Return this permission to your teacher.)

I _____, (print)
and understand each statement in the Student Science Laboratory Safety Contract. I
safety rules set in place by my teacher, school and any other safety regulations put in
district. I understand by doing so I am protecting myself and others from unnecessary

Student Signature _____ Date _____

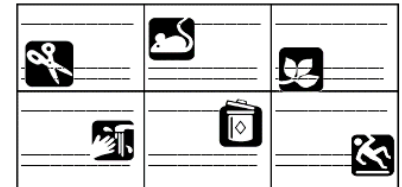
I acknowledge that my student has read this contract and understands its contents with good faith.

Parent Segment	Child
----------------	-------

Name _____ Date _____

Chem: Science 1 lab Safety

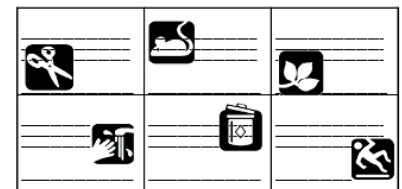
Identify the safety symbol and explain its meaning.



Name _____ Date _____

Quiz: Science Lab Safety

Taken together, the authors conclude and suggest the following:



Student Digital Notebook

The student notebook is on Google Drive and ready for you to share with your students. Here's a quick overview of the features:

Set up like a traditional interactive notebook with input and output sides.

Hyperlinked tabs so student can easily move through chapter for review

Students watch video < 6 min to complete notes.

The screenshot displays a digital notebook interface with several key components:

- Left Sidebar:** A vertical list of topics for selection: Interaction with Environment, Regulation, Cellular Basis of Life, Scientific Inquiry, Energy of Life, Form and Function, Biology and Society, Biological Systems, Reproduction & Inheritance, and Adaptation and Evolution.
- Top Left:** A box with directions: "Directions: Click and drag the theme below and place them with the correct description."
- Main Content Area:**
 - THE 10 THEMES OF BIOLOGY:** A grid of 10 boxes, each with a theme and a description. Themes include: Shows a combination of parts, Organisms are made of cells, How something works is related to its structure, The ability of organisms to reproduce, As part of an ecosystem, Life requires organisms to perform work, Organisms have the ability to regulate their internal conditions, Changes in genes, Humans apply biology in many ways, and Involves asking questions.
 - THE SCIENCE OF BIOLOGY:** A section with a table of "Characteristics of a Living Thing" (1-8) and a table for "Life can be studied at the following levels" (Levels and Descriptions).
- Right Sidebar:** A vertical list of tabs: THE SCIENCE OF BIOLOGY, SCIENTIFIC RESEARCH AND TOOLS, LAB SAFETY, and CLASSROOM LIBRARY.
- Bottom Right:** A video player showing "THE SCIENCE OF BIOLOGY" with a play button. Below it is a "Digital Textbook" button and a "For further exploration, click button(s) below:" section with a "Characteristics of Life" button.

Encouraging independent learners. Directions for output side are here along with what they need to complete the activity.

Notes are chunked into manageable sections with large spaces for textboxes

Some pages have links so students can go deeper into the topic if they need.

Demos, Labs, & Science Stations

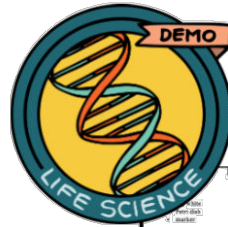
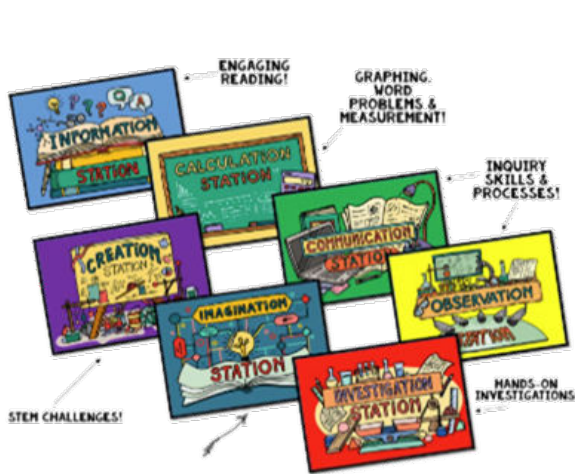
Working in the lab and being engaged in science experiments is the most exciting part of science.



Demo, Labs, and Science Stations Includes:

1. **SCIENCE STATION SIGNAGE** for all 7 stations is provided in color and in black and white (see preview) and all student answer sheets have icons that correspond with each station for ease of use.
2. **DEMONSTRATION** (teacher-led) allows teachers to invite scientific discussions and can help uncover misconceptions and, most importantly, lead to heightened curiosity and interest in the topic being studied.
3. **GUIDED INQUIRY LAB** which is a traditional lab that allows students to perform an investigation in order to solve a problem. Students will hypothesize, collect and analyze data and communicate their results.
4. **TEACHER GUIDES to DEMOS & SCIENCE STATIONS** help get you started and give you background information to make your science lessons engaging.
5. **7 SCIENCE STATIONS** which are designated locations in the classroom with activities that challenge students to extend their knowledge and elaborate on their science skills by working independently of the teacher in small groups or pairs. Stations included are:
 - **INFORMATION STATION** – Group members will read an interesting and relevant science passage then complete a task to help increase science literacy and deepen their understanding of the science concept.
 - **OBSERVATION STATION** – Group members will have images, illustrations, or actual samples at this station that show applications or processes of the science topic. Using what they've learned, they will need to apply their observation skills to complete the questions attached to each.
 - **CALCULATION STATION** – Group members use their math skills to complete the station challenge. Skills may include graphing, analyzing data, using models, measurement, and calculating formulas or word problems.
 - **INVESTIGATION STATION** – Group members will work with one another to explore the concept through hands-on activities so they may practice specific inquiry process skills as they learn.
 - **COMMUNICATION STATION** – There are three different options for this station: interviews, video, group essay. Depending on the option you choose, group members will communicate what they know by answering questions in creative ways.
 - **CREATION STATION** – Group members will work together to solve a STEM (Science, Technology, Engineering, Math) challenge by creating models or designs that demonstrate their understanding of the science topic being taught.
 - **IMAGINATION STATION** – This station makes science concepts relevant for students by asking them to imagine scenarios that will bring about discussion and critical thinking.
6. **INQUIRY PROCESS SKILLS CHECKLIST** is provided with each set to show teachers and administrators the inquiry skills used by students in each activity. These skills include, but are not limited to, communicating, creating models, inferring, classifying, identifying variables, measuring, observing, predicting, gathering and organizing data, comparing and contrasting, interpreting data, and manipulating materials.

Science Stations



Eye Safety
SCIENCE SKILLS AND LAB SAFETY

1. ☐ goggles
2. ☐ strong acid (HCl or acetic acid)
3. ☐ eye dropper
4. ☐ water

Procedure:

1. Show us how to use the underside of the Petri dish and display for class using the projector.
2. Check open the egg and place the egg white only in the Petri dish.
3. Explain that the proteins in egg whites are similar to those found in the protein layer of the eye.
4. Tell them that scientists were not being cautious and too spilled acid into their eye - and drop of acid to the egg whites.
5. Ask students to make observations of what is happening to the egg whites.
6. Try making water to remove the acidic. Have students make observations.

What's Happening?

The proteins in the egg white become cloudy first and are creating a fine-grained of the proteins. This is an irreversible chemical reaction and students need to understand that a chemical can even across changes in their own skin if not used properly. Students must be made aware of the safety procedures students take, such as wearing goggles, gloves and aprons. Make sure they are aware of safety equipment - eye wash station, shower, fire blanket, etc.

Discussion:

Q: What happened to the eye?
A: The protein layer became cloudy and denatured the eye.

Q: What type of safety equipment must be worn when doing lab?
A: goggles, aprons, hair ties, gloves

©2009 Wiley InterScience



Discussion questions and teacher set-up included!

Teacher guide and answer key offered for every lab!

Easy-to-get materials!



Measure with SI Units
SCIENCE SKILLS AND LAB SAFETY

The standard system of measurement used by scientists around the world is known as the International System of Units, which is abbreviated as SI. SI units are easy to use because they are based on multiples of 10. Each unit is set with a prefix that tells whether you are dealing with the size of the unit being used. The following table lists the prefixes used to name the most common SI units.

Prefix	Symbol	Amount
kilo-	k	1,000
hecto-	h	100
deci-	d	1/10
centi-	c	1/100
milli-	m	1/1,000

Materials:

- 1. graduated cylinder
- 2. paper
- 3. balance
- 4. petting well
- 5. right-angled ruler with vernier
- 6. graduated cylinder
- 7. graduated cylinder
- 8. metric ruler
- 9. 10 mL graduated cylinder
- 10. colored pencils

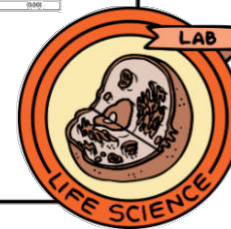
Procedure:

1. ☐ graduated cylinder
2. ☐ paper
3. ☐ balance
4. ☐ petting well
5. ☐ right-angled ruler with vernier
6. ☐ graduated cylinder
7. ☐ graduated cylinder
8. ☐ metric ruler
9. ☐ 10 mL graduated cylinder
10. ☐ colored pencils

Station:

LAB

LIFE SCIENCE



Drip, Drop, Splat!
How does the density of a liquid and drop height affect the size and shape of droplet splatters?

Materials:

- colored water (graduated cylinder A)
- colored syrup (graduated cylinder B)
- eye dropper
- paper
- metric ruler
- meter stick

Procedure:

1. Make a hypothesis of how density of a liquid will affect splatter size on your lab sheet.
2. Place the piece of paper down on the lab table in order to catch splatters.
3. Measure the heights listed in the data table using a meter stick. Place meter stick with end starting at zero on paper and move up stick when increasing height of drop.
4. Use the eye dropper to drop ONE drop of colored water and ONE drop of colored syrup. Make sure to drop on different places on paper.
5. Measure the size of the splatter in MILLIMETERS. Record in data table on answer sheet.
6. Repeat for each height.
7. Use the collected data to graph the splatter size versus drop height for each liquid.

Analyze and Conclude

1. Was your hypothesis correct? Explain.
2. What are two controls in your experiment that helped you collect the most accurate data possible?

©2009 Wiley InterScience

USER-FRIENDLY PAGES:
Students easily recognize which answer sheet to use at each station by matching station icons located on each page!!

Name _____ Date _____

Hypothesis

Drop Height (cm)

Color	1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
Colored Water																					
Colored Syrup																					

Height of Drop vs. Splatter Size

Height of Drop (cm)

Drop Height (cm)	Water (mm)	Syrup (mm)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		

Legend

☐ Water
☐ Syrup

Analyze and Conclude:

1. _____
2. _____

©2009 Wiley InterScience

TEACHERS SAVE TIME:
Laminate station pages and reuse for each class and for years to follow!
Inquiry skills used are timeless!

Instructional Videos

The Intro to Life Science Instructional Videos and Digital Assessments are designed to help teachers move instruction from the group learning space to the individual learning space. Not only does this give students independence in their learning, but it also allows more time for dynamic and interactive learning when teachers meet with students in a group setting.

This resource is perfect for:

- Flipped Classroom
- Absent students
- 1:1 Classrooms
- Sub Plans
- Hybrid Schedules
- Teachers who want more time to guide students as they apply concepts and engage creatively in the subject matter

Features of this resource include:

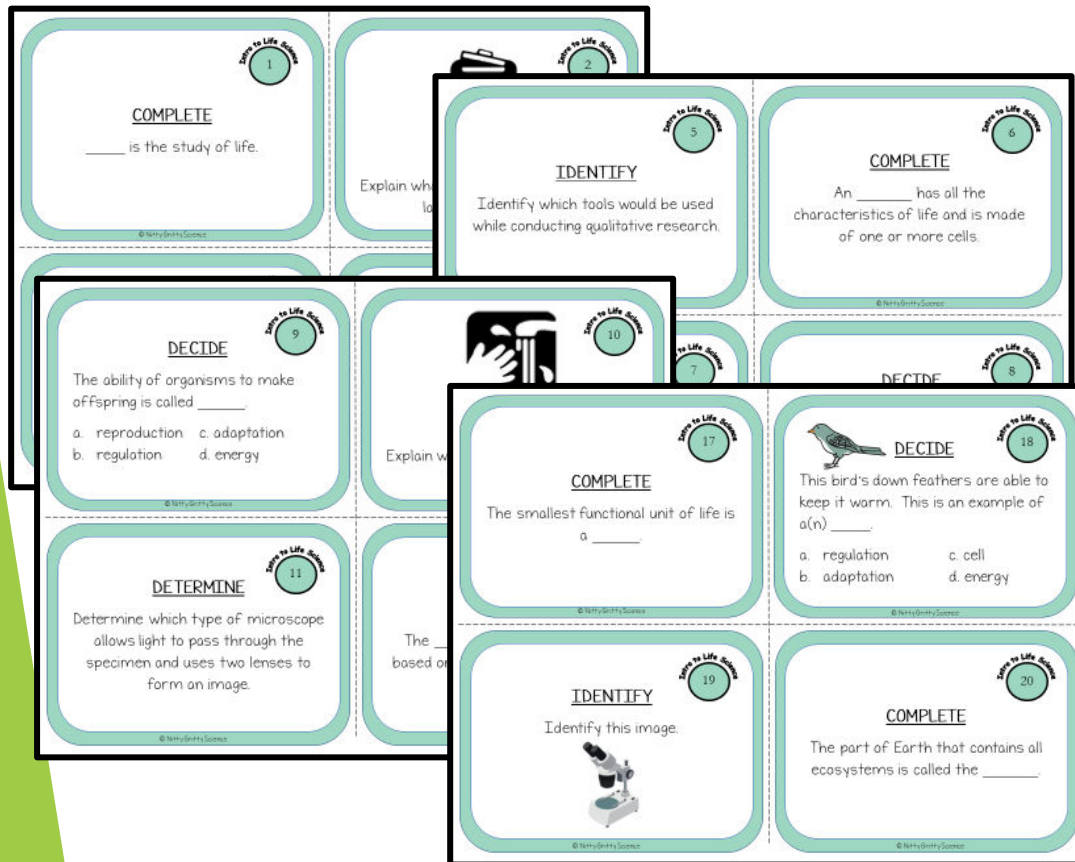
- Instructional videos which are six minutes or less to keep students focus
- Videos and assessments can be completed independently
- Auto grading and reporting in Google Forms
- Share link with students through educational platforms or email
- Quizzes are editable with 5 – 8 questions per quiz
- Information in video pairs with NGS Magnified Interactive Notebooks

Task Cards & Digital Task Cards

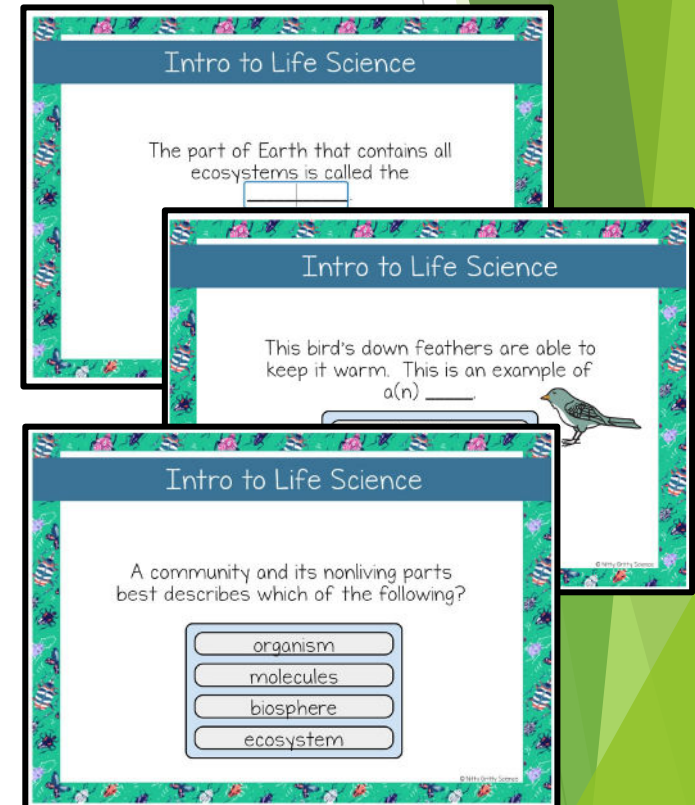
Task cards are a great tool for concept review that can be used in a variety of ways – pairs, small groups, team games, or individually. The reason they are so effective is there is only ONE task per card, allowing students to focus on that single task until they have successfully completed it. Answers sheet and answer key for teachers are included.

The digital, self-checking task cards are hosted at Boom Learning™ and are compatible with Google Classroom. These are perfect for displaying on your interactive whiteboard and leading class games or review sessions.

Print Task Cards



Digital Task Cards

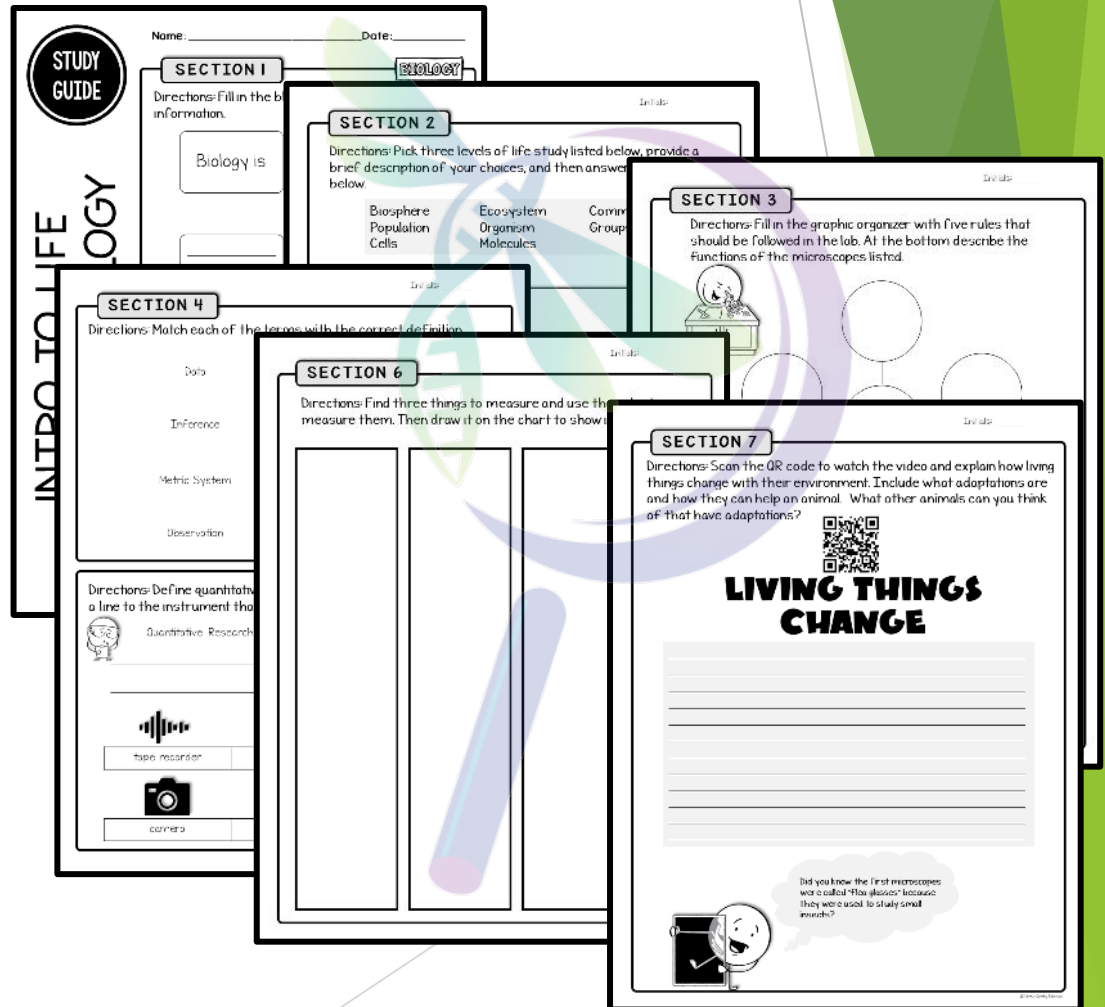


Study Guides: Includes **print** or **digital** options

NGS Magnified Study Guides are directly aligned to the notes and assessments offered by NGS Magnified and include a variety of review strategies that meet the needs of your learners for independent study and indirect instruction.

Each study guide provides a combination of strategies which may include:

- Graphic organizers
- Vocabulary building
- Compare and contrast
- Problem-solving
- Concept mapping
- Interpreting data
- Critical thinking
- Theme connection
- Matching
- Fill-in-the-blank
- Short answer
- Real-world application
- QR videos with accompanying questions



Assessments:

Teachers can use a variety of assessments to evaluate student progress throughout the unit. The curriculum provides mini-quizzes for each Interactive Notebook chapter and an online assessments that goes with the instructional videos. The chapter test includes multiple choice, short answer, interpreting diagrams, and an essay.

Name _____ Date _____

Quiz: The Science of Biology

Matching

1. form and function	a. ability of organisms to make offspring
2. scientific inquiry	b. maintenance of a stable internal environment
3. adaptation	c. how something works is related to its structure
4. biological system	d. study organisms interact continuously with its environment
5. reproduction	e. a combination of parts can form a more complex organization
6. energy	f. involves asking questions about nature and testing if it needed for organisms to grow, develop and re
7. interaction with environment	g. changes in genes lead to inherited traits that he
8. regulation	organisms survive and reproduce

Name _____ Date _____

Quiz: The Science of Biology

Matching

1. form and function	a. ability of organisms to make offspring
2. scientific inquiry	b. maintenance of a stable internal environment
3. adaptation	c. how something works is related to its structure
4. biological system	d. study organisms interact continuously with its environment
5. reproduction	e. a combination of parts can form a more complex organization
6. energy	f. involves asking questions about nature and testing if it needed for organisms to grow, develop and re
7. interaction with environment	g. changes in genes lead to inherited traits that he
8. regulation	organisms survive and reproduce

Name _____ Date _____

CHAPTER TEST: SCIENCE OF BIOLOGY

Multiple Choice

Choose the answer that best completes each statement.

1. The theme that reflects the idea that there is a relationship between form and function is _____.
a. energy
b. scientific inquiry
c. adaptation
d. biological system
2. Biology that links the parts and concepts about biology is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
3. Using things _____.
a. anatomy
b. physiology
c. ecology
d. systematics
4. The part of biology that is concerned with the study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
5. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
6. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
7. Using things _____.
a. anatomy
b. physiology
c. ecology
d. systematics
8. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
9. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
10. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
11. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
12. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
13. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
14. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
15. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
16. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
17. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
18. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
19. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics
20. The study of life is _____.
a. anatomy
b. physiology
c. ecology
d. systematics

Fill-in-the-blank

Complete each statement with the correct vocabulary term.

21. _____ is used to make small details of an object visible for a scientist.
22. _____ is used to make small details of an object visible for a scientist.
23. _____ is used to make small details of an object visible for a scientist.
24. _____ is used to make small details of an object visible for a scientist.
25. _____ is used to make small details of an object visible for a scientist.

EDITABLE CHAPTER TEST INCLUDES MULTIPLE CHOICE, FILL IN THE BLANK, INTERPRETING DIAGRAM, & SHORT ANSWERS QUESTIONS

ANSWER KEY INCLUDED — IMAGES ARE BLURRED FOR COPYRIGHT REASONS

Terms of Use:



Thank you for sharing NGS Magnified with your students!

Terms of Use

Copyright © NGS Magnified, LLC (formerly Nitty Gritty Science, LLC.) All rights reserved by author Dr. Erica Colón. This product is to be used by the original downloader only. Copying for more than one teacher, classroom, department, school, or school system is prohibited. This product may not be distributed or displayed digitally for public view. Failure to comply is a copyright infringement and a violation of the Digital Millennium Copyright Act (DMCA). Clipart and elements found in this PDF are copyrighted and cannot be extracted and used outside of this file without permission or license. Intended for classroom and personal use ONLY.

Contact Information:

Email: admin@nittygrittyscience.com

Website: www.NGSmagnified.com

TPT: <https://www.teacherspayteachers.com/Store/Nitty-Gritty-Science>

