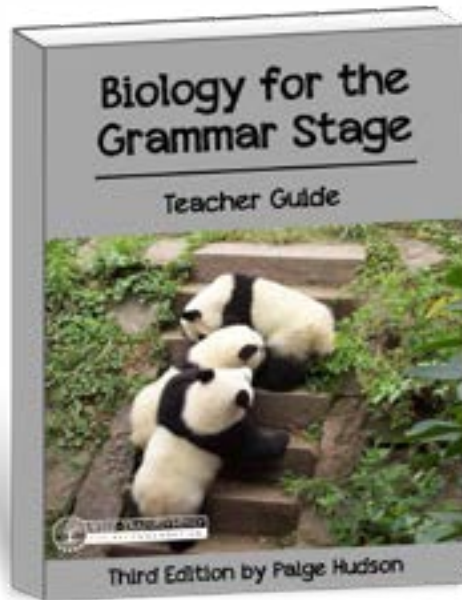
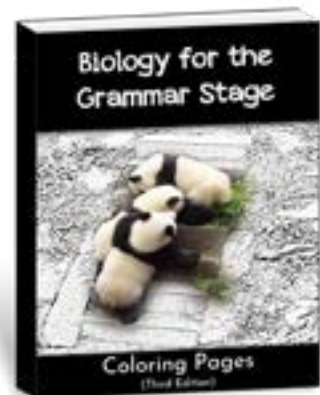
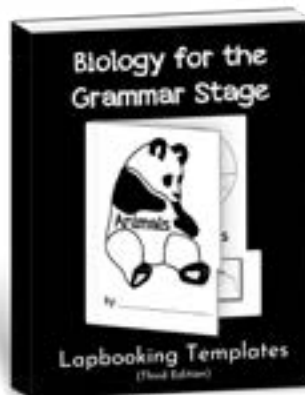
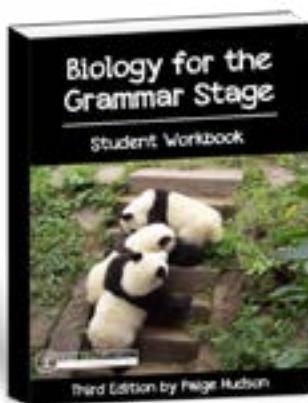


Biology for the Grammar Stage Sample Packet



The following sample packet includes the first two weeks of the *Biology for the Grammar Stage Teacher Guide* (beginning on p. 7), plus the three student options:

- ✓ The Student Workbook (*beginning on pg. 31*)
- ✓ The Lapbooking Templates (*beginning on pg. 49*)
- ✓ The Coloring Pages (*beginning on pg. 58*)



You do not need all of these to successfully complete this program. You can get more information and make your purchase here:

🔗 <https://elementalscience.com/collections/biology-for-the-grammar-stage>

THESE PRODUCTS ARE INTENDED FOR HOME USE ONLY

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6 A Peek Inside the Grammar Stage Teacher Guide

The teacher guide is your go-to resource for creating memorable science lessons!

1. Weekly Topic

Focus on one main idea, with several subtopics, throughout the week. You will learn about these ideas by doing scientific demonstrations, by reading from visually appealing encyclopedias, by recording what the students learned, and by adding other optional activities.

2. Two Scheduling Options

Know what to do when with the two grid-style scheduling options. There are a 2-day-a-week and a 5-day-a-week schedules. These schedules break down the essential work and the optional activities into manageable chunks so that you can proceed with confidence.

3. Reading Assignments

Find two reading options—one for younger students, one for older students—plus discussion questions and optional library books.

4. Memory work

Boost your students' memory of what they have studied with a hallmark of classical education—memory work. These catchy poems share the key facts to remember about the unit's topics.

5. Additional Resources

See options for adding in more information about the weekly topic through children's encyclopedias and library books.

6. Related Scientific Demonstrations

Know what you will need to do a weekly hands-on science activity that coordinates

1

2-Days-a-Week Schedule	
Day 1	Day 2
Read <input type="checkbox"/> Read "Fungi" <input type="checkbox"/> (Wait on memorizing the Madisson poem)	<input type="checkbox"/> Read "Mold" <input type="checkbox"/> (Choose one or more of the additional resources to read from this week)
Do <input type="checkbox"/> Start the Scientific Demonstrations Spore Print	<input type="checkbox"/> Finish the Scientific Demonstrations Spore Print (Make Spore Print Art or Make a Nature Walk)
Write <input type="checkbox"/> Add information about fungus to the students' notebook or lapbook <input type="checkbox"/> Define fungus and spore	<input type="checkbox"/> Add information about mold to the students' notebook or lapbook <input type="checkbox"/> Complete the demonstration sheet <input type="checkbox"/> (Wait on the Living World Weekly Review Sheet 3)

2

Day 1	Day 2	Day 3	Day 4	Day 5
Read <input type="checkbox"/> (Wait on memorizing the Madisson poem)	<input type="checkbox"/> (Choose one or more of the additional resources to read from this week)	<input type="checkbox"/> Read "Fungi"	<input type="checkbox"/> Read "Mold"	<input type="checkbox"/> (Choose one or more of the additional resources to read from this week)
Do <input type="checkbox"/> Start the Scientific Demonstrations Spore Print	<input type="checkbox"/> Finish the Scientific Demonstrations Spore Print	<input type="checkbox"/> (Make Spore Print Art)	<input type="checkbox"/> (Wait on Mold Fables)	<input type="checkbox"/> (Take a Nature Walk)
Write <input type="checkbox"/> Define fungus and mold	<input type="checkbox"/> Complete the demonstration sheet	<input type="checkbox"/> Add information about fungi to the students' notebook or lapbook	<input type="checkbox"/> Add information about molds to the students' notebook or lapbook	<input type="checkbox"/> (Wait on the Living World Weekly Review Sheet 3)

Biology for the Grammar Stage Teacher Guide - Living World Unit Week 3

Read - Information Gathering

3

4

5

6

Reading Assignments <input type="checkbox"/> <i>Reader's Source: Biology</i> p. 28 "Fungi" ? What did you find interesting about fungus? ? Do you remember where you can find fungus? <input type="checkbox"/> "Mold" article p. ... of this guide ? What are molds? ? Do you remember how molds grow?
4 Memory Work This week, begin working on memorizing the "The Madisson" poem. (SW p. ...)
Optional/ Additional Resources Encyclopedias <input type="checkbox"/> <i>Children's Encyclopedia</i> p. 98 "Fungi" <input type="checkbox"/> <i>DK Children's Encyclopedia</i> "The Madisson" Library Books <input type="checkbox"/> <i>Fungi (Kid's Guide to Living Things)</i> by Elaine Pease, Janet Powell and Dwight Kahn <input type="checkbox"/> <i>A Little Book of Worms: Everything That Crawls from Killer Worms to Living Mail by Clint Tison</i> <input type="checkbox"/> <i>Nature Clean-Up - Worms, Mold and Fungi</i> by Elaine Pease
Do - Demonstration and Activities Demonstration - Spore Print You will need the following: ✓ Gloves ✓ Madisson Cap ✓ Paper ✓ Glass Bowl ✓ Water Demonstration Instructions 1. (Teacher-only) Get the madisson cap ready for the students. You can use a button madisson from your fridge by simply removing the madisson stem, or you can harvest a cap from outside. If you choose to harvest an outdoor madisson cap, put on the gloves and head outside to cut off your selected madisson cap. You can wrap it up in a flipped inside-out glove until the students are ready to do the demonstration.

Biology for the Grammar Stage Teacher Guide - Living World Unit Week 3

2. Read the following introduction to the students.

Last week, we learned about single-celled organisms. This week we are going to move onto another group of living things: fungi and mold! This group of living things don't make their own food, so they feed on things that were once living. To reproduce and spread, many fungi create spores called spores. These are released into the wind by the body of the fungus. In today's demonstration, we are going to make a fruiting body, also known as a mushroom, release its spores!

3. Have the students set a piece of paper in a dark place where it won't be disturbed for the next 24 hours.

4. Then, have them put on gloves and choose a mushroom cap. Have them observe the cap, noting the smooth side on top and the underside with the gills.

5. Next, have the students place the cap, gill side down, on the center of the piece of paper. Sprinkle the cap with a bit of warm, not too much, to moisten it a bit. Then, cover the cap with an inverted glass bowl.

6. **(Next Day!)** Remove the bowl, put the gloves back on, and gently peel back the mushroom cap to observe the spore prints that was made.

7. Have the student cut out their spore prints and tape or glue it on the demonstration sheet on SW p. ... before completing the sheet. **Note:** You can use tape to cover the glue print so it won't smear or you can use hairspray to fix it into place!

8. Read the demonstration explanation to the students.

Demonstration Explanation

The purpose of this demonstration was for the students to see that there are spores inside of the mushroom cap. When they are done with their observations, read the following to the students:

How cool was that! The mushroom left a unique spore print behind on the paper. We created the right conditions, damp and a bit warm, for the fruiting body of the fungus to release copies of itself. Normally, these tiny spores would be picked up by the wind and carried to another location, where the fungus could grow once more, repeating its life cycle.

Optional! Take the Demonstration Further

Have the students repeat the demonstration with different shapes and types of mushrooms.

Optional! Unit Project

Life Cottage - Have the students add pictures of different types of fungus (e.g., mushrooms, molds, yeasts) to the "Living Things" side of unit project sheet on SW pg. ...

Optional! Projects for This Week

Spore Print Art - Have the students make a piece of artwork from their spore prints.

Biology for the Grammar Stage Teacher Guide ~ Living World Unit Week 3

with the topic. This section includes the supplies you will need, along with scripted introductions. The easy-to-follow steps and scripted explanations make it a snap to complete the scientific demonstration. And if your kiddos want more, we have you covered with a related idea to take the science-learning fun even further.

7. Coordinated Unit Projects

Add in a bit of fun with these optional project ideas for the whole unit.

8. Optional STEAM Ideas

Get ideas for additional STEAM activities that relate to the week's topic.

9. Notebooking Assignments

Record what your students have learned with either the student workbook or the optional lapbook. The directions for these options are included for your convenience in the guide. Plus, see which coloring pages coordinate with the week's lesson in this section.

10. Relevant Vocabulary

Build your students' science vocabulary with words relevant to the weekly topic.

11. Review Sheets

See which review sheet to assign—these are found at the back of the student workbook—along with the answers. These sheets can be used as review or as quizzes.

8

You will read the spore print from the demonstration, hairspray, and a frame. Simply spray the paper with the spore print with the hairspray. Let it dry before framing the print. If the students want, you can add several more spore prints from different mushrooms before you seal the artwork.

Stature Walk - Have the students take a walk in your local woods to look for examples of fungi and molds. **Note:** Be sure to check fallen logs for signs of these living things! You can have them observe the fruiting body with and without a magnifying glass. If you know that the fungus or mold is non-toxic, you can have them touch and smell it. NEVER touch a fungus that you are not familiar with.

Hold Video - Have the students watch the following video of a slice of watermelon growing mold. **Note:** The people who created this video also have several others of sleeping giant when you are ready or mold in action.
<https://www.youtube.com/watch?v=512zGzUChk>

Write - Notebooking

9

Writing Assignments

Student Workbook - Have the students dictate, copy, or write several sentences on fungi and molds on SW p. 85.

Optional! Lapbooking Templates - Have the students complete the Fungi and Mold wheel book on LF pg. ... Have them cut out the pages and color the pictures. Have the students tell you what they have learned about fungi and molds and write their favorite piece of information next to the spaces on the wheel. Let the students decorate the cover before assembling the wheel. Once they are done, assemble the wheel book with a brad fastener and glue it into the lapbook.

Optional! Coloring Pages - Have the students color the following pages: Mushroom CP p. ... Molds CP p. ...

Vocabulary

10

Have the students look up and copy the definition for the following words:

Fungus - A living thing that absorbs food from living or dead matter. (SW p. ...)

Spore - A microscopic package of cells produced by a fungus or plant that can grow into a new individual. (SW p. ...)

Optional! Weekly Review Sheet

11

1. True
 2. Spores
 3. An
 4. Answers will vary

Biology for the Grammar Stage Teacher Guide ~ Living World Unit Week 3

8 A Peek Inside the Grammar Stage Student Materials

The Student Workbook

Harness the benefits of notebooking with the student workbook.

1. Weekly Notebooking Pages

Record what your students found interesting about the weekly subtopics using a hallmark of classical education—narration. Each of these customized notebooking pages has spaces to write and simple black-line illustrations for the students to color.

2. Simple Demonstration Sheets

Document the hands-on scientific demonstrations you do with simple lab sheets. These include sections for your materials, a simple procedure, your outcome, and the students' insights from the demonstration.

3. Glossary of Terms

Find a student glossary of terms following the weekly sheets. The terms are listed alphabetically with pictures to help your students remember their vocabulary.

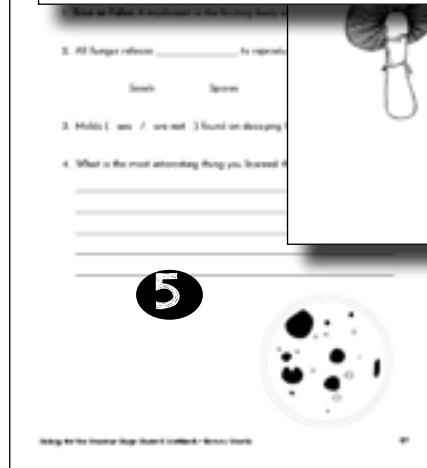
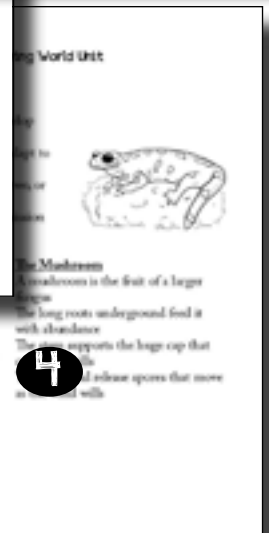
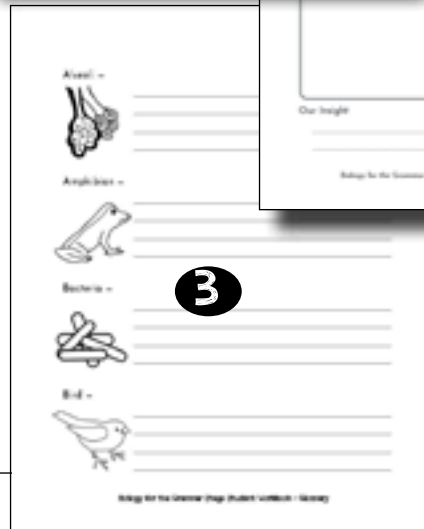
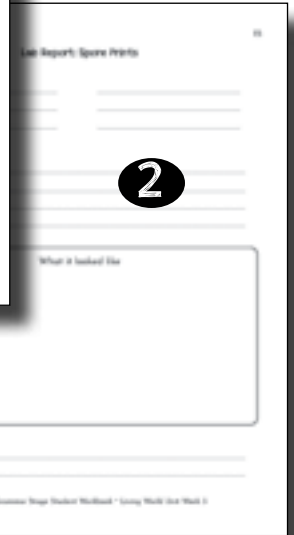
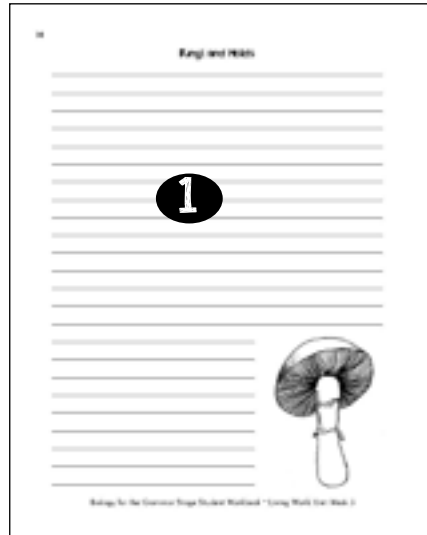
4. Memory Work Posters

Help the students work on their memory work with these poster-style sheets. Each poem is in a large, readable font with illustrations related to the information in the poem.

5. Review Sheets

Review what the students have learned with the review sheets found at the back of the student workbook. These can be used as review or quizzes.

Add in the optional lapbooking templates and coloring pages for more fun!



The Lapbooking Templates

Use the lapbooking templates to review the concepts learned, or you can have the student create each one in lieu of completing the student workbook.

5. Lapbook Overview Sheets

Know where to place the mini-books in the lapbook with these overview sheets. You will also find overall directions for completing the lapbook. The specific directions for completing each mini-book are found in the teacher guide.

6. Lapbook Cover

Find a unique cover for each of the suggested lapbooks.

7. Mini-book Templates

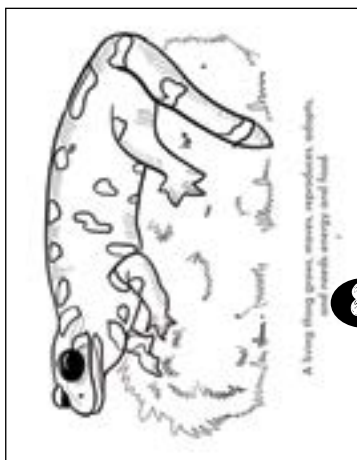
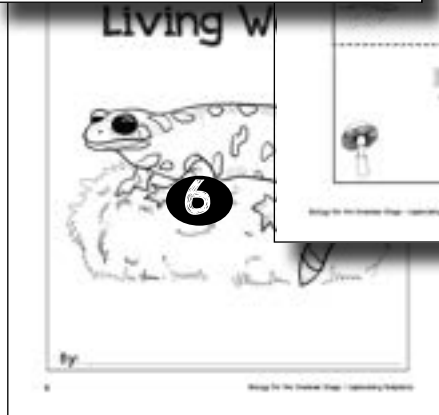
Get all the mini-books you will need to complete the suggested lapbooks, along with an exact placement guide. The templates include black-line illustrations and space for narrations.

The Coloring Pages

Use the coloring pages to add a bit of art to your science plans or to engage younger students.

8. Simple Coloring Pages

Color your way through learning about science with these coloring pages. Each page has a large, black-line illustration along with a key fact sentence for the students to learn about the topic. The specific directions for when to use these coloring pages are found in the teacher guide.



Biology for the Grammar Stage

Teacher Guide



WELL-TRAINED MIND[®]
TOP RECOMMENDATION

Third Edition by Paige Hudson

In a Nutshell

Students will learn about animals, the human body, and plants in the following ways:

- ✓ Listening to (or reading) **scientific information** from visually appealing encyclopedias.
- ✓ Watching (and doing) **hands-on science** through demonstrations and activities.
- ✓ Dictating (or writing down) what they have learned and seen using **notebooking**.

See p. 10 for a list of the topics explored in this program.

What You Need

In addition to this guide, you will need the following:

1. **The student materials** - You can purchase either the *Biology for the Grammar Stage Student Workbook* or the *Biology for the Grammar Stage Lapbooking Templates*. (Get a glimpse of these options on pp. 8-9.)
2. **The three spines:**
 - 📖 *My First Encyclopedia of Animals (Kingfisher, 2021 Edition)*
 - 📖 *First Human Body Encyclopedia (DK, 2018 Edition)*
 - 📖 *Basher Science: Biology - Life as we know it! (Kingfisher, 2008 Edition)*

You can also purchase the *Gregor Mendel: The Friar Who Grew Peas* for the scientist biography report in the last week of the Plants Unit, or check a biography out from your local library. Get links to these books here:

🔗 <https://elementalscience.com/blogs/resources/bgs>

3. **The demonstration supplies** - See a full list starting on p. 16 or save yourself the time and purchase the *Biology for the Grammar Stage Experiment Kit*.

How It Works

Each week you and your early elementary student will do the following

- 🌀 **Read** the assigned pages with your students and use the included questions to discuss what was read.
- 🌀 **Do** the weekly demonstration with the students using the scripted introduction, directions, and scripted explanation found in this guide.
- 🌀 **Write** down what the students have learned and seen in a way that is appropriate for their skills.

You can also add in the optional memory work, library books, and STEAM activities if you want to dig deeper into a topic. For a more detailed explanation of the components in each lesson, we highly recommend checking out the peek inside this program on pp. 6-7 and reading the introduction starting on p. 11. Otherwise, the first lesson begins on p. 22.

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List of Topics Covered in This Program

Living World Unit

- ✓ Living versus Non-living
- ✓ Single-celled Organisms
- ✓ Fungi
- ✓ Molds
- ✓ Habitat
- ✓ Migration
- ✓ Food Webs

Animals Unit (See the unit for specific animals.)

- ✓ Vertebrates
- ✓ Mammals
- ✓ Defense
- ✓ Birds
- ✓ Animal Communication
- ✓ Baby Animals
- ✓ Reptiles
- ✓ Camouflage
- ✓ Amphibians
- ✓ Life Cycles
- ✓ Fish
- ✓ Reproduction
- ✓ Invertebrates
- ✓ Worms
- ✓ Mollusks
- ✓ Marine Invertebrates
- ✓ Shellfish
- ✓ Spiders
- ✓ Insects
- ✓ Metamorphosis

Human Body Unit

- ✓ DNA
- ✓ Cells
- ✓ Body Organization
- ✓ (Optional) Human Reproduction
- ✓ Skin, Hair, Nails
- ✓ Skeletal System
- ✓ Muscular System
- ✓ Nervous System
- ✓ The Five Senses
- ✓ Circulatory System
- ✓ Respiratory System
- ✓ Digestive System
- ✓ Urinary System
- ✓ Immune System

Plants Unit

- ✓ Seedless Plants
- ✓ Conifers
- ✓ Flowering Plants
- ✓ Plant Cells
- ✓ Leaves
- ✓ Photosynthesis
- ✓ Stems
- ✓ Roots
- ✓ Flowers
- ✓ Pollen
- ✓ Fruit
- ✓ Seeds
- ✓ Gregor Mendel

Quick Links

The following page contains quick access to the activity links suggested in this guide along with several helpful downloads:

✓ <https://elementalscience.com/blogs/resources/bgs>

Introduction to the Third Edition

It has been more than 14 years since the first edition of *Biology for the Grammar Stage* was released. With each edition, the format has been refined, but the method has always been based on the same three keys to teaching science:

1. Read about science.
2. Do, or rather play with, science.
3. Write about science.

If you want to learn more about these keys, check out this free conference session:

🔗 *The 3 Keys to Teaching Science* - <https://elementalscience.com/blogs/news/3-keys>

In this guide are the tools you need to teach science using the Classic Method found in *Success in Science: A Manual for Excellence in Science Education*. This method is loosely based on the ideas for classical science education that are laid out in *The Well-Trained Mind: A Guide to Classical Education at Home* by Jessie Wise and Susan Wise Bauer.

In *Success in Science*, the elementary student is compared to an empty bucket that is waiting to be filled with meaningful information. As such, the goal of this program is to give your elementary student exposure to age-appropriate topics of within the fields of biology, building a knowledge base for future studies. The tools you are going to use are weekly scientific demonstrations, reading suggestions, notebooking assignments, additional activities, and more.

Let's take a closer look at what you will find in this guide.

Unit Overview Sheets

Each unit will begin with an overview sheet that shows the resources you will need for the unit, the list of topics, the supplies you will need, the memory work you can use, and the vocabulary you will cover. These are meant to give you a snapshot of the unit. Please feel free to swap the units around, but do keep the weeks within the unit in order as you work through this program.

Weekly Lesson Schedules

Each week's lesson will begin with a breakdown of what your week could look like. There are two potential schedules for you to give an idea of how you could schedule each week—one that breaks the assignments over 2 days, and one that breaks these assignments over 5 days. Each of these schedules has three sections to reflect the three keys to teaching science—read, do, and write (more about these in a moment). Optional assignments are in italics so you can easily see what is required and what can be used as gravy on the week's science meal.


You can choose to use these schedules as your guide or create your own using the two schedule templates on pp. 205-206 of the appendix of this guide. You could also create a list schedule or mark the lesson plans with a checkmark or date when you do the assignment.


In other words, you, the teacher, have complete freedom in what you would like to use to present and explore the concepts each week. Please treat the schedules and information in this guide as tools to teach science, not as weekly task masters.


Read - Information Gathering

Reading Assignments

The first things you will see in the “Read” section are the reading assignments. These come from the following three encyclopedias:

 *My First Encyclopedia of Animals (Kingfisher, 2021 Edition)*

 *First Human Body Encyclopedia (DK, 2018 Edition)*

 *Basher Science: Biology - Life as we know it! (Kingfisher, 2008 Edition)*

These resources are essential for completing this program. You can often use older editions because they are virtually the same on the inside. (**Note -** *At this point, the idea is that you read the assigned pages to your students. Here is a helpful podcast to determine if your students can handle reading science on their own: Should I read science aloud or not? <https://elementalscience.com/blogs/podcast/79>*)

After the assigned pages, you will find questions to ask your students after you have finished the reading selections. Here is an example:

? What is the point of these questions?

The point is to get your students to think about the information that was read to them. This seems like an extra, unnecessary step, but please don't skip these questions as they are designed to help your students get ready for the writing portion. Here is another helpful podcast about discussion times:

 Don't skip that science discussion time: <https://elementalscience.com/blogs/podcast/53>

{Optional} Memory Work

Next up in the “Read” section is the unit's optional memory work. An elementary student is capable of memorizing information and you can use this spongelike ability to have the students memorize basics facts related to biology through simple poems. Remember that these poems are included as a resource for you to augment students' learning experiences and are not required to use this program successfully.

{Optional} Additional Resources

The final item in the “Read” section is a list of optional additional resources. First are several alternative encyclopedias, in case your student has a hard time (or an easy time) with the one from the reading assignments. Here is a list of all of the *optional* encyclopedias that are scheduled:

 *Usborne Children's Encyclopedia*

 *DK Children's Encyclopedia*

You *do not* need to purchase these encyclopedias to complete this program. They are there as options to explore the topics deeper or to use as alternatives.

Finally, you will see a list of potential library books. These books are meant to be checked out from the library in case you decide that you would like to dig a little deeper into the topics. They are not necessary to the success of this program. Because every library is different, the books listed may not be available in your area. If that is the case, simply look up the topic in your local library's system. A complete list of all the suggested books can be found in the appendix pp. 212-218.

Do - Demonstration and Activities

Scientific Demonstrations

The bulk of the items in the “Do” section have to relate to the week’s scientific demonstration. These generally use easy-to-find materials and tie into what is being studied. At this age, you will be the driving force behind these demonstrations, meaning that you will be the one in control, and the students will be watching and participating when necessary. **(Note - If you want to read more about the differences between demonstrations and experiments, check out the following article: <https://elementalscience.com/blogs/news/89905795-scientific-demonstrations-or-experiments>)**

You will find several sections for the scientific demonstration:

- The Demonstration Title and Supplies
- The Instructions (*including a scripted introduction and detailed instructions*)
- The Explanation (*including the expected results and a scripted explanation*)

All scripted text, introductions, and explanations will be in this font.

- Ideas to Take the Demonstration Further

These demonstrations are designed to provide a beginner’s look at the scientific method and how scientific tests work. Even so, it is not necessary to ask the students to predict the outcome of the demonstration because they have no knowledge base to determine what the answer should be. However, if your students enjoy predicting or they are able to tell you what will happen, please feel free to let them do so.

{Optional} Unit Projects and Weekly Activities

The final two items in the “Do” section are packed with STEAM activities that coordinate with each lesson. These are definitely optional, but they can be used to add in fun and deepen understanding. Here is a podcast to help you decide if you should use these activities:

- 🔊 Do you need to bother with the “extras” for science? <https://elementalscience.com/blogs/podcast/22>

The pages and pictures needed for the unit projects are included in the student workbook, whereas the directions for creating the projects are found in this guide. The weekly activities include crafts and other activities that can enhance the students’ learning time. There are no sheets to record these additional activities in the student workbook. However, I have included a project record sheet template on p. 204 of the appendix of this guide.

Write - Notebooking

Writing Assignments

In the first part of the “Write” section, you will be asking the students to narrate and record what they have learned from the reading assignments in a student workbook. **(Note - We have put together a complete workbook for your students to record what they did—the Biology for the Grammar Stage**

Student Workbook, which you can peek inside on p. 8 of this guide. It contains all the pages you will need to complete the narrations, demonstration reports, and multi-week projects, along with memory work posters, alphabetical sheets for the student glossary, and review sheets. The student workbook gives the students the ability to create a lasting memory of their first journey through biology.)

For younger students, you can have them dictate what they have learned to you, and then you write this into the student workbook. You can also have the students copy their narration into the workbook. You should expect only one to two sentences from a 1st- or 2nd-grade student. Here is a sample of what the students could write for week one of the Living World unit:

*Living things are alive.
They can grow, move, and need to eat and breathe.*

OR

*Living things need air and food. They can grow and they can move.
Living things can make new living things.
Biology is the study of living things.*

When you are done writing, you can have the students color the provided picture on the narration page.

Here are a podcast and a video that will help you understand a bit more about how this process works:

- 🔗 How do we narrate and what to expect - <https://elementalscience.com/blogs/podcast/78>
- 🔗 Writing in Science: The Elementary Years - <https://youtu.be/BrunFyeHh1Q>

We also offer two other consumable options for the students—lapbooking templates and coloring pages. These are optional, but they can be used as review or in place of the student workbook.

- 🔗 *Biology for the Grammar Stage Lapbooking Templates*
- 🔗 *Biology for the Grammar Stage Coloring Pages*

Both of these are also scheduled in under the “Writing Assignments” section. You can peek inside these two resources on p. 9 of this guide.

Demonstration Sheets

The demonstration sheets are assigned in the “Do” section, but because they include writing, the explanation for how to use them is here. Each one of the scientific demonstrations has a corresponding sheet in the student workbook.

These demonstration sheets include four sections:

1. The “Our Tools” section is for the materials that were used during the demonstration.
2. The “Our Method” section is for a brief description of what was done during the scientific demonstration. This should be in the students’ words.
3. The “Our Outcome” section is for what the students observed during the demonstration.
4. The “Our Insight” section is for what the students learned from the scientific demonstration.

Any time you see a box for a picture on the demonstrations sheet, you can have the students draw what happened, or you can take a picture of the demonstration and glue it in the box. For younger students, you can do the writing for them on the demonstration sheets.

Vocabulary

Next in the “Write” section, you will find the week’s vocabulary. You can go over these words orally or have the students copy the definitions into the glossary at the rear of the student workbook. If you want to have the students practice looking up the definitions, you can use the included glossary of the terms on pp. 208-210 of this guide.

{Optional} Review Sheets

The last part of the “Write” section assigns a weekly review sheet. These sheets are found at the back of the student workbook. Although these review sheets are not essential, they are helpful in assessing how much the students are retaining. You can also use these review sheets as quizzes. The correct answers for the review sheets are found at the end of the lesson’s materials.

Final Thoughts

Our goal at Elemental Science is to provide you with the information you need to be successful in your quest to educate your students in the sciences at home, which is why I encourage you to contact us with any questions or problems that you might have concerning this program at support@elementalscience.com. I, or a member of our team, will be more than happy to answer them as soon as we are able. I hope that you enjoy this year with *Biology for the Grammar Stage!*

- Paige Hudson

Supplies Needed by Week

Living World Unit

Week	Supplies needed
1	At least 8 objects, some of which are living, some of which are not
2	Several friends, Several different colors of glitter, Tape
3	Gloves, Mushroom Cap, Paper, Glass Bowl, Water
4	Shoe box, Construction paper, Glue, Markers

Animals Unit

Week	Supplies needed
1	2 Toilet paper tubes, Foil, 2 Rubber bands, Construction paper, Flashlight
2	Magnifying glass
3	2 Glass jars, Cotton balls, Box (2 inches wider and taller than the jars), 2 Thermometers
4	1 Large plastic bag, Rubber band, Plastic glove, Shortening, Tub of ice water, Stopwatch
5	String, Toilet paper tube, Peanut butter, Bird seed, Plate
6	Owl Pellet Dissection Kit
7	(Optional) Binoculars
8	Egg, White Vinegar, Jar with lid
9	Newspaper, Plain paper, Black and green construction paper
10	2 Thermometers
11	Old Barbie or pony doll with hair, Tub of water
12	Small, unglazed terracotta pot, Small rock or piece of mulch
13	Tweezers, Toothpick, Cotton Swab, Gummy Worm, Marshmallow, Lettuce Leaf
14	String (about 5 feet long)
15	Butterfly Life Cycle Pictures (Appendix p. 195)
16	Piece of fruit, Honey or syrup, Plate

Human Body Unit

Week	Supplies needed
1	2 Different colors of LEGO bricks with 6 studs (at least 6 bricks of each color), 2 Different colors of LEGO bricks with 4 studs (at least 6 bricks of each color)
2	Magnifying glass, Stamp ink
3	Mini marshmallows, Toothpicks
4	Items of various weights, such as a paper clip, toothbrush, glass, a can, a book
5	A large book or something else that will make a loud noise, Cotton balls, A see-through barrier
6	Six types of food, Paper plates, Blindfold
7	Stethoscope or paper towel tube
8	Large plastic box, 2 Feet of aquarium tubing, 1 2-Liter plastic bottle, Water, Ruler
9	Large Ziploc bag, Bread, Soda (Cola works best)
10	Red and gold glitter, 1 Mini marshmallow, Corn Syrup, Yellow food coloring, Water, Large bowl, Large jar, Coffee filter, Colander

Plants Unit

Week	Supplies needed
1	Pinecone (tightly closed), Magnifying glass
2	Leaf, Rubbing alcohol, Coffee filter, Jar, Pencil, Tape
3	Celery (or a carnation), Cup, Food coloring
4	3 Large paper flowers, 3 Differently colored powders, Cotton balls
5	Bean seed (soaked), Paper towel, Plastic baggie, Water, Tape or a magnet
6	<i>No supplies needed.</i>



Biology for the Grammar Stage

Living World Unit



Living World Unit Overview

(4 weeks)

Books Scheduled





-  *Basher Science: Biology*
-  *Kingfisher My First Encyclopedia of Animals*

{Optional Encyclopedias}

-  *Usborne Children's Encyclopedia*
-  *DK Children's Encyclopedia*



Sequence for Study

-  **Week 1:** Living or Nonliving
-  **Week 2:** Single-cell Organisms
-  **Week 3:** Fungi and Molds
-  **Week 4:** Plants and Animals

Poems to Memorize

Living Things

A living thing must develop and grow.
 It must reproduce and adapt to know.
 A living thing has one, two, or more cells.
 Info around it sets off alarm bells.

The Mushroom

A mushroom is the fruit of a larger fungus.
 The long roots underground feed it with abundance.
 The stem supports the huge cap that covers the gills,
 Which hold and release spores that move as the wind wills.

Supplies Needed for the Unit

Week	Supplies Needed
1	At least 8 objects, some of which are living, some of which are not
2	Several friends, Several different colors of glitter, Tape
3	Gloves, Mushroom Cap, Paper, Glass Bowl, Water
4	Shoe box, Construction paper, Glue, Markers

Unit Vocabulary

1. **Living** - Something that eats, breathes, and moves, like you.
2. **Nonliving** - Something that is not alive.
3. **Bacteria** - Single-celled organisms that live almost everywhere.
4. **Protist** - A living thing whose body is made from a single cell.
5. **Fungus** - A living thing that absorbs food from living or dead matter.
6. **Spore** - A microscopic package of cells produced by a fungus or plant that can grow into a new individual.
7. **Herbivore** - An animal that feeds on plants.
8. **Carnivore** - An animal that feeds on other animals.
9. **Omnivore** - An animal that feeds both on plants and animals.

Week 1: Living or Nonliving Lesson Plans

2-Days-a-week Schedule		
	Day 1	Day 2
Read	<input type="checkbox"/> Read “Is It Living or Nonliving?” <input type="checkbox"/> {Work on memorizing the <i>Living Things poem</i> }	<input type="checkbox"/> Read “Life” <input type="checkbox"/> {Choose one or more of the additional resources to read from this week}
Do	<input type="checkbox"/> Do the Scientific Demonstration: Is It Alive	<input type="checkbox"/> {Work on the <i>Life Collage Project</i> or Play the <i>Living or Nonliving Game</i> }
Write	<input type="checkbox"/> Add information about living and nonliving things to the students’ notebook or lapbook <input type="checkbox"/> Complete the demonstration sheet	<input type="checkbox"/> Add information about living things to the students’ notebook <input type="checkbox"/> Define living and nonliving <input type="checkbox"/> {Work on the <i>Living World Weekly Review Sheet 1</i> }

5-Days-a-week Schedule					
	Day 1	Day 2	Day 3	Day 4	Day 5
Read	<input type="checkbox"/> Read “Is It Living or Nonliving?”	<input type="checkbox"/> {Work on memorizing the <i>Living Things poem</i> }	<input type="checkbox"/> Read “Life”	<input type="checkbox"/> {Choose one or more of the additional resources to read from this week}	<input type="checkbox"/> {Choose one or more of the additional resources to read from this week}
Do	<input type="checkbox"/> {Play the <i>Living or Nonliving Game</i> }	<input type="checkbox"/> Do the Scientific Demonstration: Is It Alive	<input type="checkbox"/> {Watch the <i>Living or Nonliving Things Video</i> }	<input type="checkbox"/> {Work on the <i>Life Collage Project</i> }	
Write	<input type="checkbox"/> Add information about living and nonliving things to the students’ notebook or lapbook	<input type="checkbox"/> Complete the demonstration sheet	<input type="checkbox"/> Add information about living things to the students’ notebook	<input type="checkbox"/> Define living and nonliving	<input type="checkbox"/> {Work on the <i>Living World Weekly Review Sheet 1</i> }

{These assignments are optional.}

Read - Information Gathering

Reading Assignments

- “Is It Living or Nonliving?” article p. 26 of this guide
 - ? What does it mean to be living?
 - ? Do you remember what biology is?
- *Basher Science: Biology* p. 20 “Life”
 - ? Do you remember what the different types of life are?

{Optional} Memory Work

- 🔊 This week, begin working on memorizing the “Living Things” poem. (SW p. 110)

{Optional} Additional Resources

Encyclopedias

- 📖 *Usborne Children’s Encyclopedia* pp. 54-55 “Living Things”
- 📖 *DK Children’s Encyclopedia* p. 38 “Biology”

Library Books

- 📖 *Living Things and Nonliving Things: A Compare and Contrast Book* by Kevin Kurtz
- 📖 *What Is a Living Thing? (The Science of Living Things)* by Bobbie Kalman
- 📖 *What Do Living Things Need? (Science Readers)* by Elizabeth Austen

Do - Demonstration and Activities

Demonstration - Is It Alive

You will need the following:

- ✓ At least eight objects, some of which are living, some of which are not (*if you cannot have actual living things, use pictures from books and magazines*)

Demonstration Instructions

1. Read the following introduction to the students.

Biology is the study of life, which includes animals, bacteria, fungi, plants, and protists. This week we are going to begin with the basics of biology, determining whether something is alive. All living things have the characteristics of life. They grow, develop, and change. They reproduce and need food to give them energy. Living things are also able to move as they respond and adapt to their environments. In today’s demonstration, we are going to observe several objects to determine if they are alive or not!

2. Have the students examine each object as you help them answer the following questions with yes or no:
 - ? Does it change, develop, or grow?

- ? Does it reproduce?
 - ? Does it need food?
 - ? Does it move?
 - ? Does it adapt or respond to what is around it?
3. Have the students write the object name and the answers to the questions on the living or nonliving chart on the demonstration sheet on SW p. 11.
 4. Read the demonstration explanation to the students.

Demonstration Explanation

The results of this demonstration will vary based on the objects you chose for the students to examine. When they are done with their observations, read the following to them:

Like a scientist, you used a set of questions to observe and determine if objects were living or nonliving. As scientists, it's important for us to look, observe, research, and record what we have learned. And that is exactly what we will be practicing this year!

{Optional} Take the Demonstration Further

Go on a walk to find eight more objects. Have the students determine if those objects are living or nonliving using the same criteria as before.

{Optional} Unit Project

✂ **Life Collage** = Have the students make a collage showing pictures of living and nonliving things. Use the unit project sheet on SW pp. 8-9, or have the students fold a piece of posterboard in half and write "Living Things" at the top of the poster and "Nonliving Things" near the bottom of the poster. Then, have the students cut out magazines pictures or draw their own pictures of nonliving things under that heading. (**Note** = *The students will be adding pictures of living things in the coming weeks.*)

{Optional} Projects for This Week

✂ **Living and Nonliving Game** = Have the students play a game of Living and Nonliving. This is a simple game that is perfect for review. It can be downloaded for free from the You've Got This Math blog at the bottom of this post:

🔗 <https://youvegotthismath.com/2016/08/16/livingvsnonlivingunit/>

✂ **Living or Nonliving Things Video** = Have the students watch the following video from FreeSchool:

🔗 <https://www.youtube.com/watch?v=bWBrusrCmX4>

Write - Notebooking

Writing Assignments

- ☐ **Student Workbook** = Have the students dictate, copy, or write one to four sentences on

- living and nonliving things on *Biology for the Grammar Stage Student Workbook* (SW) p. 10.
- ☐ **{Optional} Lapbooking Templates** – Have the students complete the Living or Nonliving fold-book on p. 9 of *Biology for the Grammar Stage Lapbooking Templates* (LT). Have them cut out the pages and color the cover. Next, have the students tell you what they have learned about and label the pictures as living or nonliving. Then, have them fold the mini-book, glue on the cover, and add it to the lapbook.
 - ☐ **{Optional} Lapbooking Templates** – Have the students complete the *Is It Living?* flip-book. Have them cut out and color the mini-book found on LT p. 10. Then, have them finish the questions on the inside of the mini-book. Once they are done, have them glue the sheet into the lapbook.
 - ☐ **{Optional} Coloring Pages** – Have the students color the following pages from *Biology for the Grammar Stage Coloring Pages* (CP): Living Things CP p. 7, Nonliving Things CP p. 8.

Vocabulary

Have the students look up and copy the definitions for the following words:

- 📖 **Living** – Something that eats, breathes, and moves, like you. (SW p. 103)
- 📖 **Nonliving** – Something that is not alive. (SW p. 104)

{Optional} Weekly Review Sheet

- 📌 “Living World Weekly Review Sheet 1” on SW p. 125.

Answers:

1. All the optoins should be circled.
2. False (*A rock is nonliving, and a fern is living.*)
3. Students should have circled: Giraffe, Human Being, Flower
4. Answers will vary

Is It Living or Nonliving?

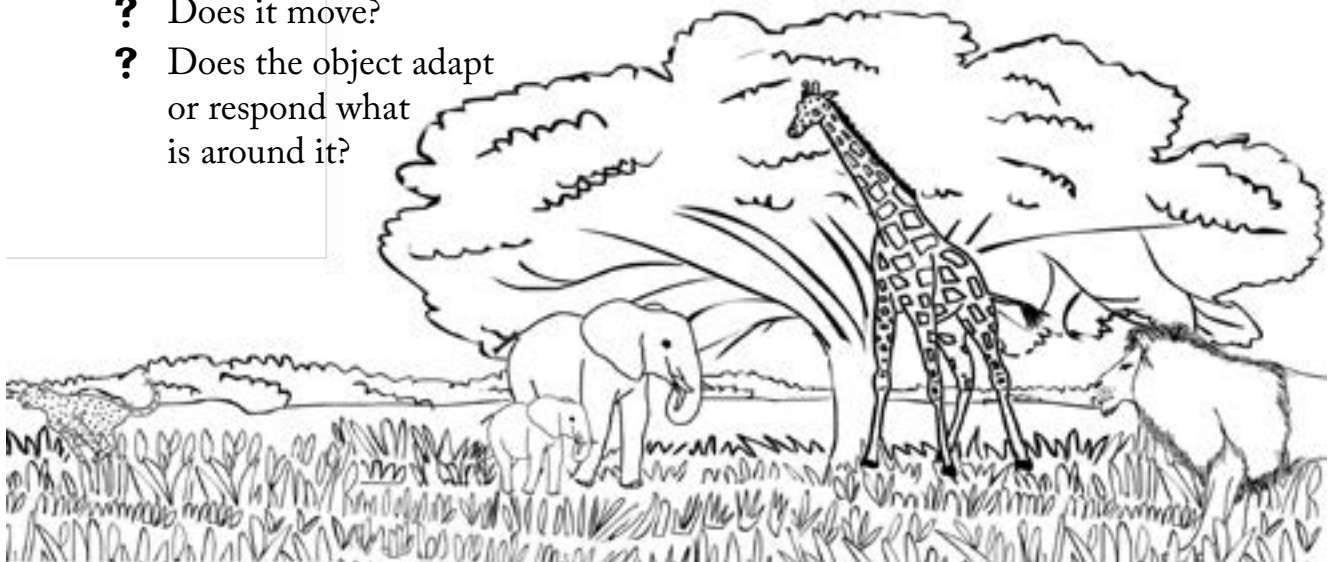
All around us we can find both living and nonliving things. Biology is often called the science of life because it studies or looks at living things.

A living thing has the characteristics of life. This means that it develops, changes, and grows. All living things reproduce to make exact copies of themselves or offspring that are similar. Living things have cells, which are the tiny building blocks of life. These cells use energy to do tasks, and they need food to give them energy. Living things are also able to move as they respond and adapt to their environments. You are a living thing!

In contrast, nonliving things do not show the characteristics of life. They may appear to show one or more of the same characteristics, but they do not show them all. Icicles appear to grow and change, but they are not living. Icicles don't adapt, and they don't use energy. If it gets too hot, icicles disappear! Icicles are nonliving.

We can ask the following questions as we observe an object to know if it is living or not:

- ? Does the object change, develop, or grow?
- ? Does the object reproduce?
- ? Does the object need food?
- ? Does it move?
- ? Does the object adapt or respond what is around it?



Week 2: Single-celled Organisms Lesson Plans

2-Days-a-week Schedule		
	Day 1	Day 2
Read	<input type="checkbox"/> Read "Virus" <input type="checkbox"/> {Work on memorizing the Living Things poem}	<input type="checkbox"/> Read "Bacteria" and "Protists" <input type="checkbox"/> {Choose one or more of the additional resources to read from this week}
Do	<input type="checkbox"/> Do the Scientific Demonstration: Spreading Organisms	<input type="checkbox"/> {Work on the Life Collage Project or Do the Virus Models Project}
Write	<input type="checkbox"/> Add information about single-celled organisms to the students' notebook or lapbook <input type="checkbox"/> Complete the demonstration sheet	<input type="checkbox"/> Add information about bacteria and protists to the students' notebook or lapbook <input type="checkbox"/> Define bacteria and protists <input type="checkbox"/> {Work on the Living World Weekly Review Sheet 2}

5-Days-a-week Schedule					
	Day 1	Day 2	Day 3	Day 4	Day 5
Read	<input type="checkbox"/> Read "Virus"	<input type="checkbox"/> {Work on memorizing the Living Things poem}	<input type="checkbox"/> Read "Bacteria"	<input type="checkbox"/> Read "Protists"	<input type="checkbox"/> {Choose one or more of the additional resources to read from this week}
Do	<input type="checkbox"/> {Do the Virus Models Project}	<input type="checkbox"/> Do the Scientific Demonstration: Spreading Organisms	<input type="checkbox"/> {Work on the Life Collage Project}	<input type="checkbox"/> {Do the Pond Organisms Project}	
Write	<input type="checkbox"/> Add information about viruses to the students' notebook or lapbook	<input type="checkbox"/> Complete the demonstration sheet <input type="checkbox"/> Define bacteria and protists	<input type="checkbox"/> Add information about bacteria to the students' notebook or lapbook	<input type="checkbox"/> Add information about protists to the students' notebook or lapbook	<input type="checkbox"/> {Work on the Living World Weekly Review Sheet 2}

Read - Information Gathering

Reading Assignments

- ❑ *Basher Science: Biology* p. 22 “Virus”
 - ? What did you find interesting about viruses?
 - ? Do you remember what viruses do?
- ❑ *Basher Science: Biology* p. 24 “Bacteria”
 - ? Can you tell me one or two things about bacteria?
- ❑ *Basher Science: Biology* p. 26 “Protists”
 - ? What are some types of protists?

{Optional} Memory Work

- 👂 This week, finish memorizing the “Living Things” poem. (SW p. 110)

{Optional} Additional Resources

Encyclopedias

- 📖 *Usborne Children’s Encyclopedia* p. 57 “Single-celled Creatures”
- 📖 *DK Children’s Encyclopedia* p. 165 “Microscopic Life”

Library Books

- 📖 *You Wouldn’t Want to Live Without Bacteria!* by Roger Canavan
- 📖 *Protists: Algae, Amoebas, Plankton, and Other Protists* by Rona Arato
- 📖 *Bacteria: Staph, Strep, Clostridium, and Other Bacteria* by Judy Wearing

Do - Demonstration and Activities

Demonstration - Spreading Organisms

You will need the following:

- ✓ Several friends
- ✓ Several different colors of glitter
- ✓ Clear tape

Demonstration Instructions

1. Read the following introduction to the students.

Last week, we learned about the difference between living things and nonliving things. Now we are going to start learning about different groups of living things. This week, we focus on some of the smallest living organisms—single-celled beings, such as bacteria, viruses, yeast, and protists. Many of these tiny creatures are microscopic, which means that we can’t see them with our naked eyes. Thanks to their size, these living things need to get a bit creative about how they move from place to place. Single-celled organisms can use their

tails, called flagella, and hairs, called cilia, to move through water. They can also float in the air around us. In today's demonstration, we are going to use glitter to stand-in for single-celled organisms so that we can see another way these microscopic living things move from place to place!

2. Have each student (or participating person) choose a different color of glitter.
3. Next, have them each rub some of the chosen glitter on their hands.
4. Then, have everyone go around shaking each other's hands.
5. After everyone has shaken each person's hands, have the students look at their hands and observe what has happened.
6. Use a piece of clear tape to remove a sample of the glitter left on their hands, and stick the tape in the box on the demonstration sheet on SW p. 13 before finishing the sheet.
7. Read the demonstration explanation to the students.

Demonstration Explanation

The purpose of this demonstration was for the students to how microscopic particles, like bacteria and viruses, can be transferred from person to person. The students should see their hands have every color of glitter. Read the following to the students:

Microscopic single-celled organisms are floating the air all around us. Some of these will land on our hands or on surfaces we touch. Then, we transfer them to another person or place when we touch another person or surface. This is one way that microscopic living beings like bacteria and viruses can move great distances. And it's also the way that single-celled organisms that can make us sick spread so easily. That's why it's so important for you to wash your hands because you can't see what is trying to hitch a ride!

{Optional} Take the Demonstration Further

Have the students choose a color of glitter to rub on their hands and then pretend sneeze, blowing hard at the same time. What happened to the glitter this time? (*The students should see that the glitter was dispersed through the air when they sneezed.*)

{Optional} Unit Project

✂ **Life Collage** – Have the students add pictures of single-celled organisms (e.g., amoebas, bacteria, protists, viruses) to the “Living Things” side of unit project sheet on SW pp. 8-9.

{Optional} Projects for This Week

✂ **Virus Models** – Have the students make a model of several different types of viruses. You can find the directions for this project here:

🔗 **Virus Models** = <https://www.science-sparks.com/easy-virus-models/>

✂ **Pond Organisms** – Have the students look at single-celled organisms found in pond water. You can do this virtually at the following website:

🔗 **Virtual Pond Dip** = <http://www.microscopy-uk.org.uk/ponddip/index.html>

Write - Notebooking

Writing Assignments

- ☐ **Student Workbook** = Have the students dictate, copy, or write one to four sentences on single-celled organisms on SW p. 12.
- ☐ **{Optional} Lapbooking Templates** = Have the students do the Single-celled Organisms flap-book on LT p. 11. Have them cut out the pages and color the pictures. Have them add information about bacteria, viruses, and protists on the respective pages. Then, have the students assemble the flap-book, staple the pages together, and add it to the lapbook.
- ☐ **{Optional} Coloring Pages** = Have the students color the following pages: Single-celled Organisms CP p. 9.

Vocabulary

Have the students look up and copy the definitions for the following words:

- 📖 **Bacteria** = Single-celled organisms that live almost everywhere. (SW p. 97)
- 📖 **Protist** = A living thing whose body is made from a single cell. (SW p. 106)

{Optional} Weekly Review Sheet

- ✦ “Living World Weekly Review Sheet 2” on SW p. 126.

Answers:

1. Virus
2. False (*Bacteria can cause disease.*)
3. Algae, protozoans, amoebas
4. Answers will vary

Biology for the Grammar Stage

Student Workbook



WELL-TRAINED MIND®
TOP RECOMMENDATION

Third Edition by Paige Hudson

Classical SCIENCE

A Quick Welcome from the Author

Dear Student,

Welcome to biology! This workbook will serve as a scrapbook of sorts for you to share what you learned about the living world. You will be learning about animals, the human body, plants, and so much more.

Each week you and your teacher will do the following:

- 🔗 **Read** the assigned pages together. Your teacher will then ask you a few questions as you discuss what was read. Be sure to share what you found interesting.
- 🔗 **Do** the weekly demonstration with your teacher. This is the super fun part of science, plus you get to exercise your observation muscles. Be sure to pay close attention and help out when your teachers ask you to do so.
- 🔗 **Write** down what you have learned and seen. Your teacher may help you with the actual writing, but be sure to record the facts that you want to remember.

Your teacher has the tools to add in more each week, things like memory work, library books, and extra activities. Be sure to let them know if you want to dig deeper into a topic.

And, if you have a question or want to share your work with me, please have your teacher send us an email (support@elementalscience.com) or by tagging us (@elementalscience) in a photo you share online. I would love to see what you have learned this year!

I hope that you enjoy learning about biology this year!

Paige Hudson

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Biology for the Grammar Stage

Living World Unit

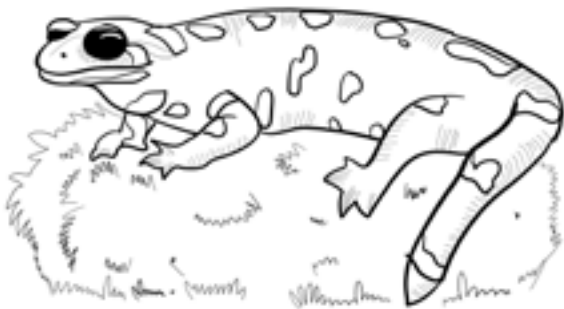
Living Things



Nonliving Things



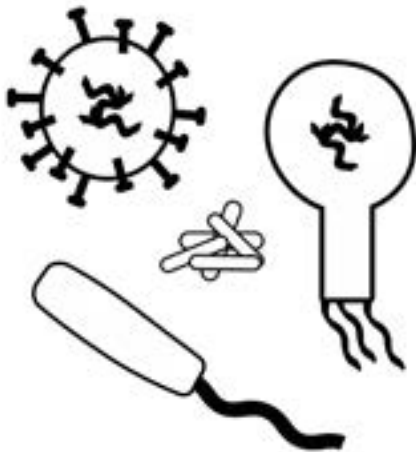
Living or Nonliving



Lab Report: Is it Alive

Object Name	Does the object change, develop, or grow?	Does the object reproduce?	Does the object need food?	Does it move?	Does the object adapt or respond what is around it?	Living or Nonliving

Single-celled Organisms



Lab Report: Spreading Organisms

Our Tools

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Our Method

What it looked like

Our Outcome

Our Insight



Biology for the Grammar Stage

Glossary

Alveoli –



Amphibian –



Bacteria –



Bird –



Biology for the Grammar Stage

Memory Work

Living World Unit

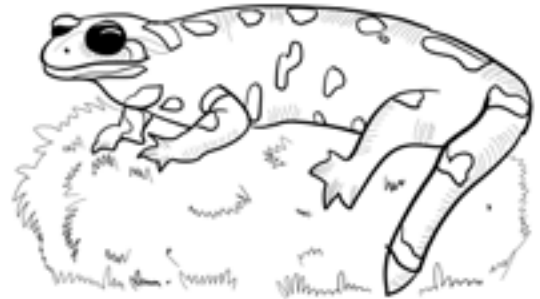
Living Things

A living thing must develop and grow.

It must reproduce and adapt to know.

A living thing has one, two, or more cells.

Info around it sets off alarm bells.



The Mushroom

A mushroom is the fruit of a larger fungus.

The long roots underground feed it with abundance.

The stem supports the huge cap that covers the gills,

Which hold and release spores that move as the wind wills.

Biology for the Grammar Stage

Review Sheets

Living World Weekly Review Sheet 1

1. Circle the characteristics of life.

Breathing

Moving

Growing

Changing

Eating

Using energy

Having cells

Reproducing

2. **True or False:** A rock is living, and a fern is nonliving.

3. Circle the living things:

Airplane

Giraffe

Human Being

Snowflake

Flower

4. What is the most interesting thing you learned this week?



Living World Weekly Review Sheet 2

1. Which living thing is one of the smallest things alive?

Mouse

Virus

Elephant

2. **True or False:** Bacteria do not cause disease.

3. Circle the protists:

Algae

Cats

Protozoans

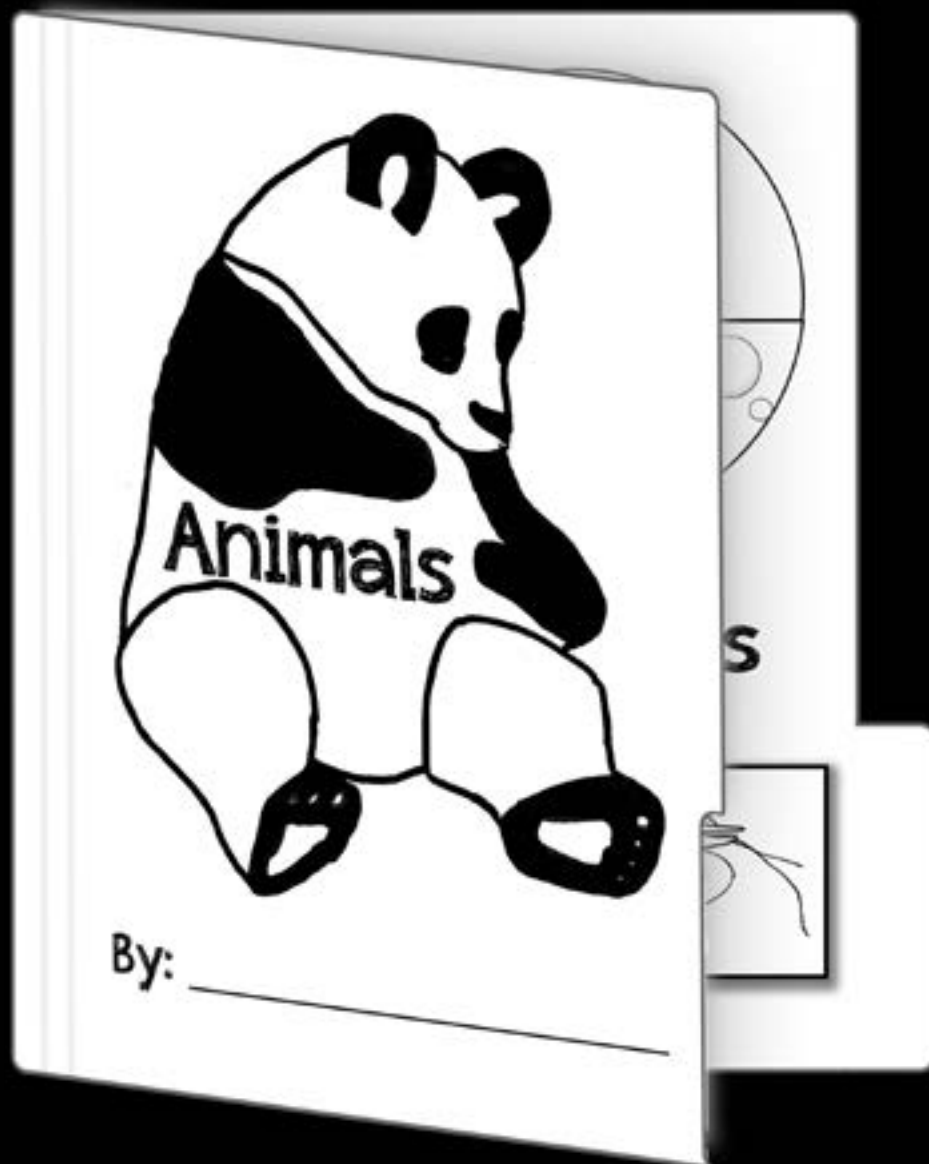
Amoebas

Bacteria

4. What is the most interesting thing you learned this week?



Biology for the Grammar Stage



Lapbooking Templates
(Third Edition)

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Introduction

The lapbooking templates provided in this eBook are meant to coordinate with *Biology for the Grammar Stage*. They are *not* designed to be used independently because you need the coordinating teacher guide to know how to complete each mini-book. See more about the features of these templates on p. 3.

What is Included

There are templates for four lapbooks contained in this eBook:

1. Living World (begins on p. 7)
2. Animals (begins on p. 15)
3. The Human Body (begins on p. 33)
4. Plants (begins on p. 46)

You can have your students create four separate lapbooks or combine them to create a larger lapbook on biology. (**Note** - *If you decide to create the larger complete lapbook, we have included a different cover page for you to use on p. 57.*)

The directions for assembling the overall lapbook are found on the overview page. However, the directions for completing each of the mini-books in this document are included in the *Biology for the Grammar Stage Teacher Guide*.

How to Use the Lapbooking Templates

You can use the lapbook templates to review the concepts learned. Alternatively, you can have the student create a lapbook for each unit in lieu of completing the *Biology for the Grammar Stage Student Workbook*.

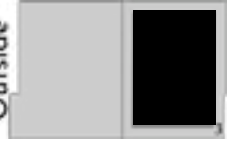
However you choose to use these lapbooking templates, please let us know if you have questions or would like to share feedback at by emailing support@elementalscience.com.

Living World Lapbook

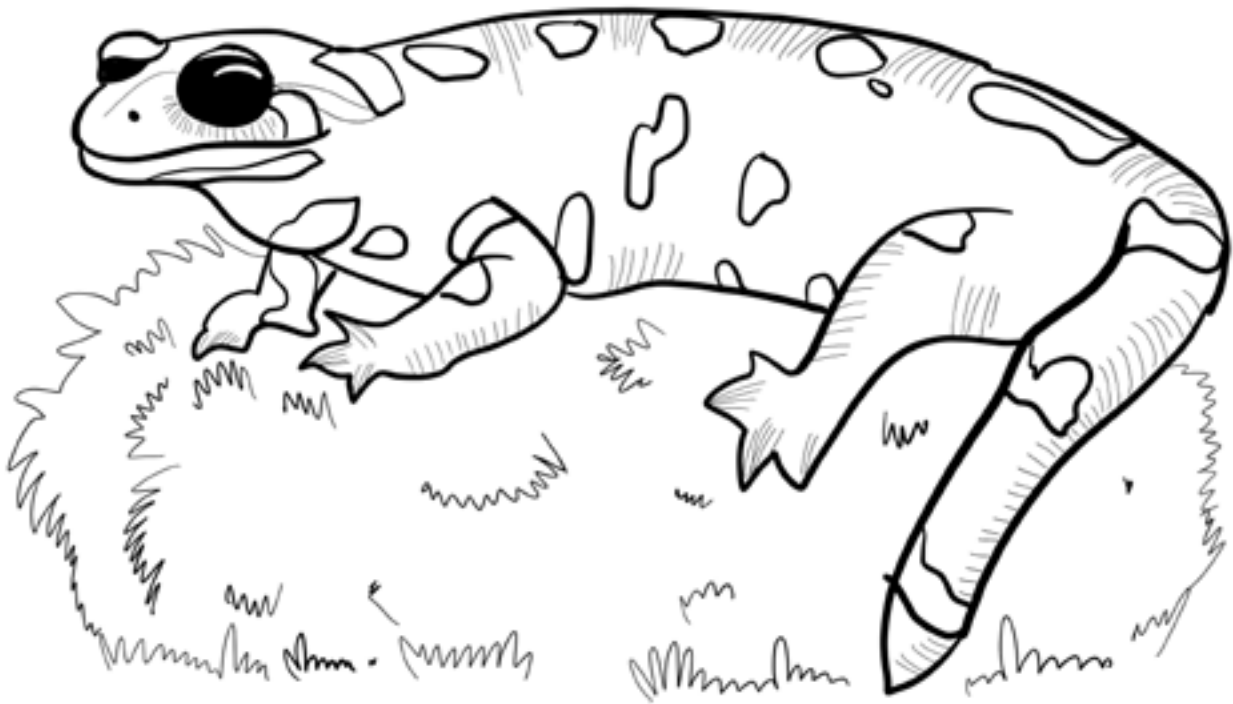
You will need two sheets of card stock or one file folder. See the complete lapbook picture below.

Inside




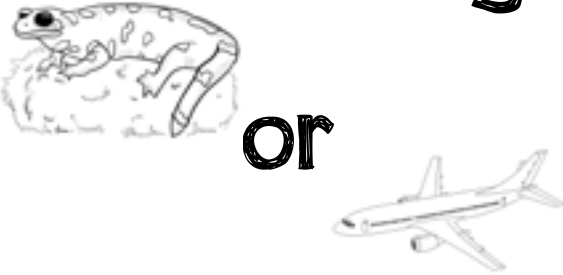


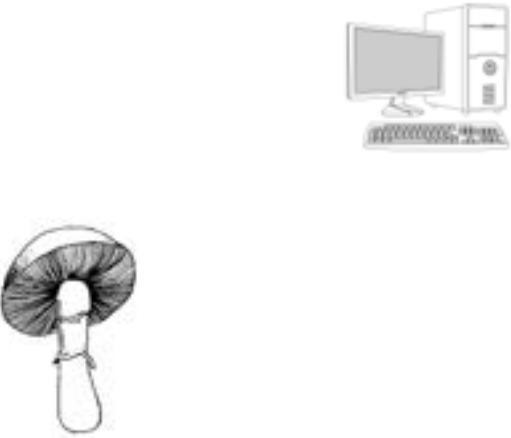



The Living World



By: _____






Living or Nonliving Fold-book

	<p>Living or Nonliving</p> 
	
	<p>Instructions: Cut out along the solid lines and fold on the dashed lines. Then, glue the cover page on the outside.</p> 

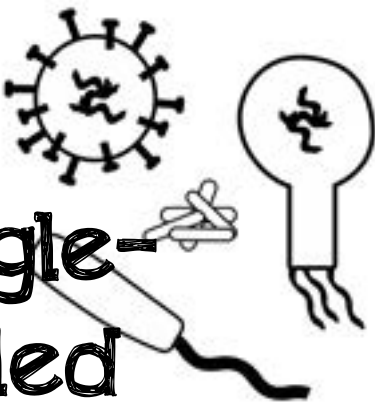



Is It Living? Flip-book

Instructions: Cut out along the solid lines and fold on the dashed lines.



Is It Living?	
	Does it...
	Does it...
	Does it...
	Does it...
	Does it...

Single-celled Organisms Flap-book

 <p>Single-Celled Organisms</p>	 <p>Bacteria</p>
 <p>Protists</p>	 <p>Viruses</p>

Instructions: Cut out along the solid lines, stack the pages so the labels are visible, and staple together on the dashed lines.

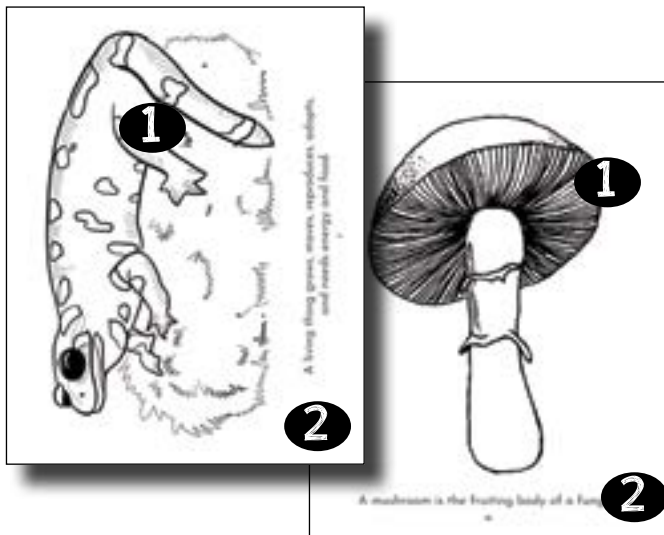


Biology for the Grammar Stage



Coloring Pages
(Third Edition)

Biology for the Grammar Stage Coloring Pages



Use the coloring pages to add a bit of art to your science plans or to engage younger students.

Simple Coloring Pages

Color your way through learning about science with these coloring pages. Each page has a large, black-line illustration (1) along with a key fact sentence (2) for the students to learn about the topic. The specific directions for when to use these coloring pages are found in the teacher guide.

Introduction

The coloring pages provided in this eBook are meant to coordinate with *Biology for the Grammar Stage*. There is one coloring page for almost every narration topic assigned in the program.

Each page has a large, black line illustration along a key fact sentence for the students to learn about the topic. Simply have the students color the picture as they desire using crayons, colored pencils, or watercolor paints. As they work, you can read the fact out loud several times.

You can use these pages with your younger “follow-along” students, with students who love to color, or with reluctant writers. We have scheduled these pages under the “Writing Assignments” section in the *Biology for the Grammar Stage Teacher Guide*.

Our goal at Elemental Science is to provide you with the information you need to be successful in your quest to educate your students in the sciences at home, which is why I encourage you to contact us with any questions or problems that you might have concerning this program at support@elemental-science.com. I, or a member of our team, will be more than happy to answer them as soon as we are able. I hope that you enjoy these coloring pages!

- Paige Hudson

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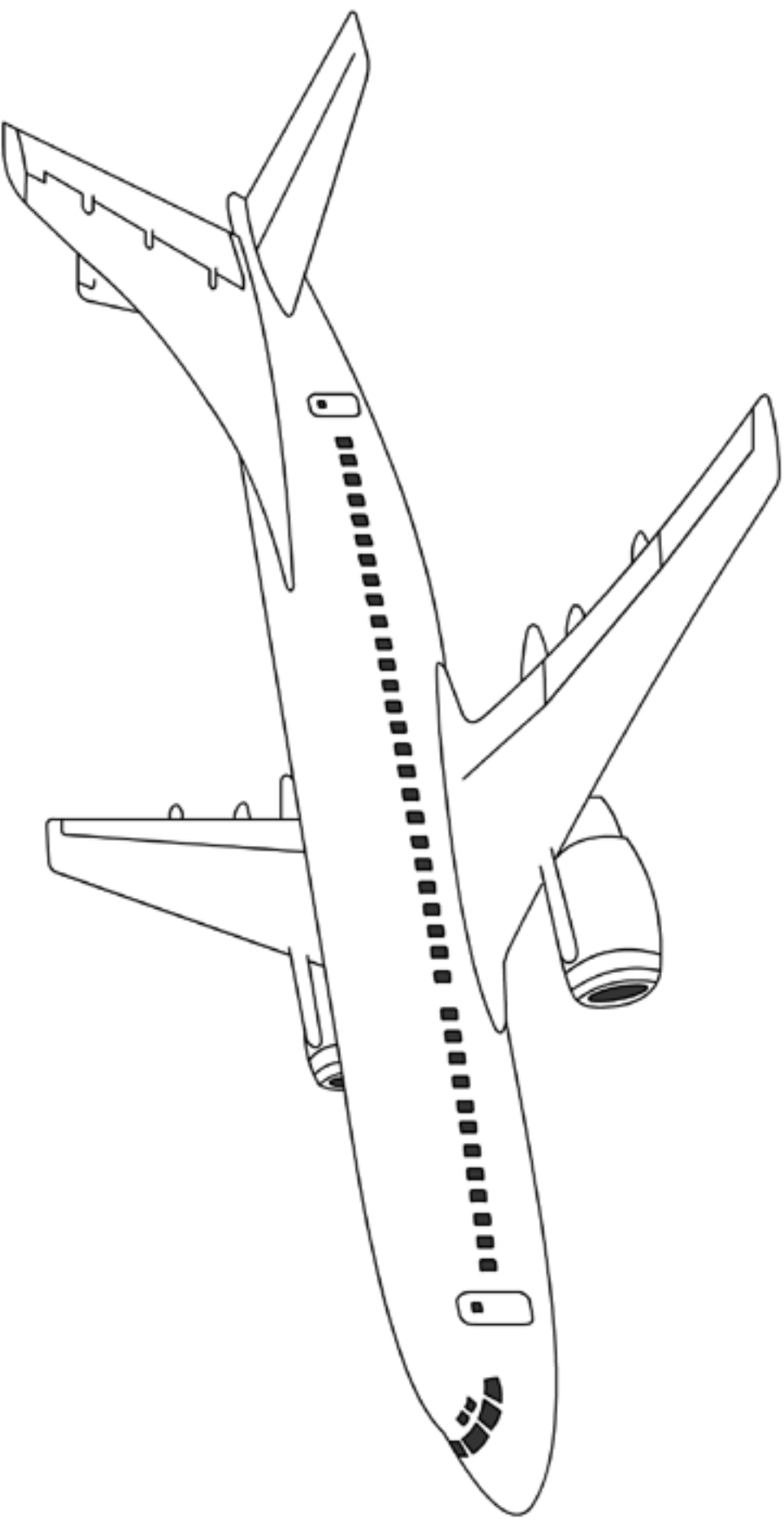
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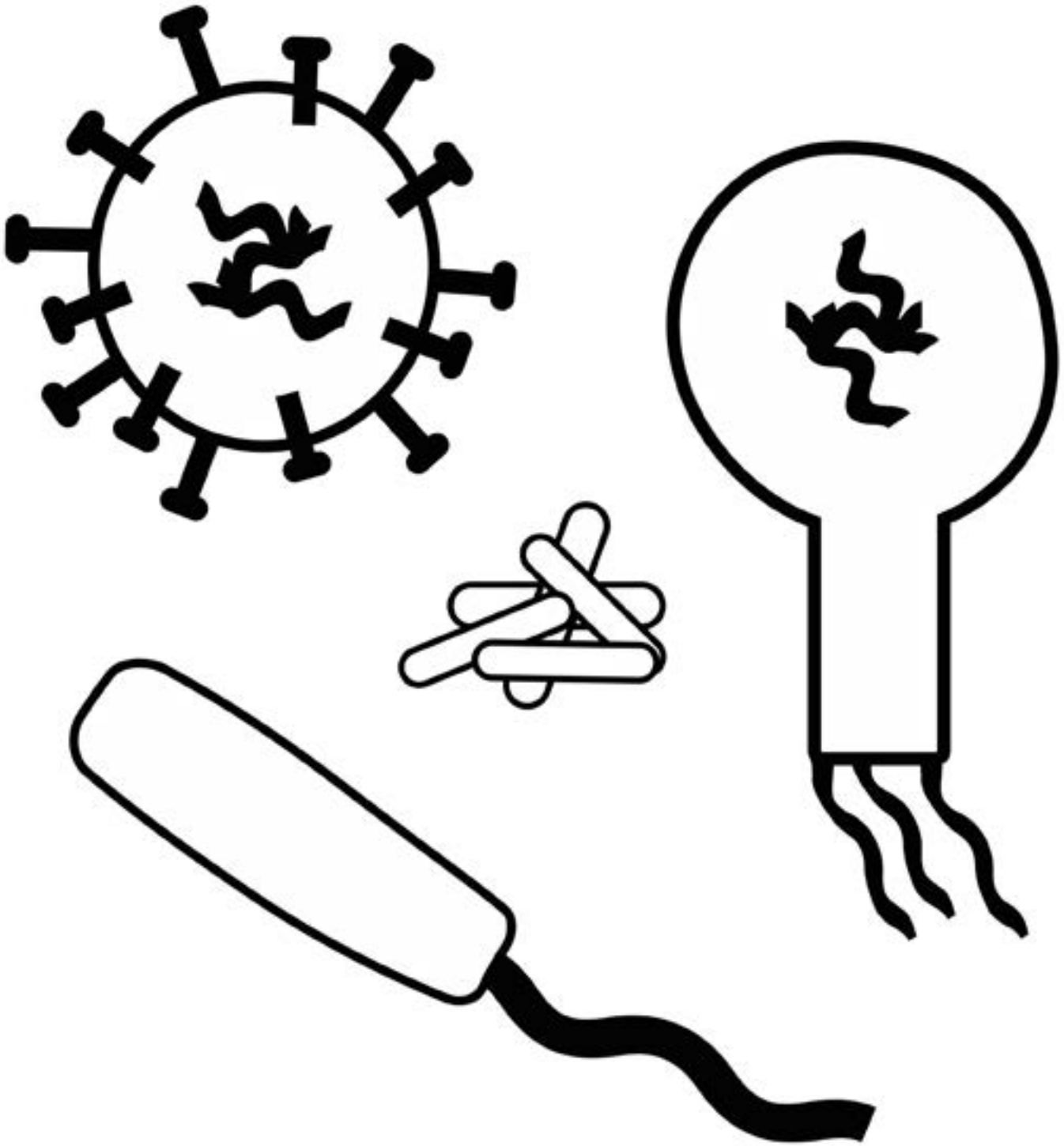
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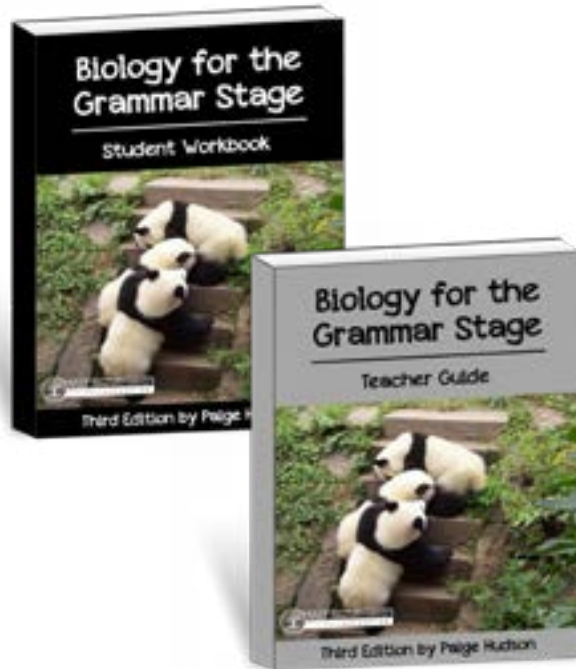
A living thing grows, moves, reproduces, adapts,
and needs energy and food.



A nonliving thing does not show all the characteristic of life.



Bacteria, viruses, and protist
are all single-celled organisms



Are you ready to start?

Learn about the living world, animals, the human body, and plants by purchasing *Biology for the Grammar Stage* here:

🔗 <https://elementalscience.com/collections/biology-for-the-grammar-stage>



elemental science

Or check out the rest of our award-winning Classical Science series here:

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