# Teacher Supplement



**DESIGN®** 

#### **Teacher Introduction**

Welcome to God's Design Science for Beginners! God's Design for Life includes *Plants, Animals,* and *Human Body*. Each set includes a student textbook and a teacher supplement.

The student textbook is broken up into six units of several lessons each, 35 lessons total. Each lesson includes a section to read, vocabulary words to trace, review questions, and one or more activities, which may be a pen-on-paper activity, a Scripture verse to trace, or a hands-on experiment. Each unit concludes with a vocabulary review.

The teacher supplement includes the answer keys for any puzzles, answers to the review questions, and additional activities and experiments you can do with your student. We greatly encourage you to do as many additional activities and experiments as possible, since children learn more and retain more when they are actively engaged with the material.

The supply list for each lesson is on the back cover of this teacher supplement. Be sure to consult this and gather the supplies you'll need in advance.

There is no set timeline for completing each book. You can decide how many days each week you want to do science. We suggest that you review previous lessons often to help your student retain the information they've learned.

We hope that you have a wonderful time of discovery as you explore the wide variety of plants that God created!

## Unit 1-Introduction to Life Science

#### Lesson 1—Is It Alive?



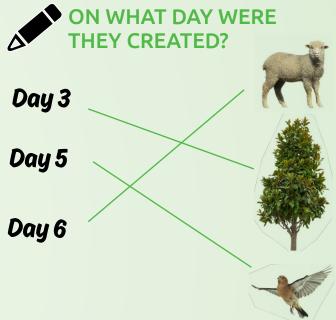
#### **ANSWER KEY**

How can you tell if something is a living thing? Living things are born, grow, and eventually die.

**Is a cat alive? Is a couch alive?** A cat is alive. A couch is not alive.

Is God alive? God is alive, even though he does not fit this definition. God is eternal and immutable, so he was not born, he does not grow, and he will not die. But he is alive!

## Lesson 2—Plant or Animal



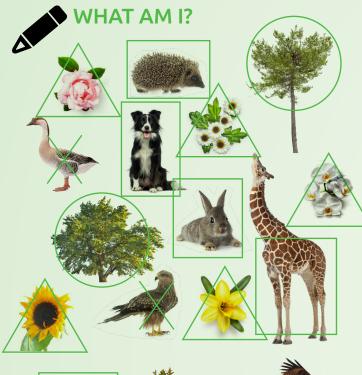
#### **ANSWER KEY**

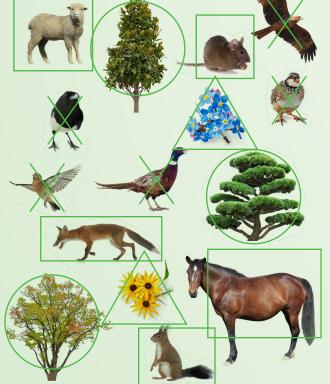
What do plants need in order to make their food? Sunlight. They also need water and carbon dioxide for photosynthesis to occur.

Can plants move like people? No, a plant cannot walk around.

Name one important difference between plants and animals. Plants make their own food, animals eat other things for food. Plants cannot move around as animals can.

## Lesson 3—Classifying Plants and Animals





#### **ANSWER KEY**

How are dogs and cats alike? Dogs and cats have fur, four legs, etc.

How are dogs and birds different? Birds have beaks and feathers, can fly, etc.

Who was the first human to classify, or name, the animals? Adam.

### Lesson 4—Plant and Animal Cells

MAKE A CELL MODEL

You can make models of animal and plant cells by doing the following:

Mix yellow gelatin according to the box directions and place in the refrigerator for about 1 hour or until it is slightly thickened. Fill a zipper bag about <sup>3</sup>/<sub>4</sub> full with the thickened gelatin. The bag represents the cell membrane and the gelatin is the cytoplasm. Insert a red grape for the nucleus. You now have a basic animal cell. Squish the gelatin around to see how the cell moves. To make a plant cell, add several green grapes inside the cell. These are the parts that help the plant turn sunlight into food.

#### **ANSWER KEY**

What shape are most animal cells? Round.

What shape are most plant cells? Square or rectangular.

Can you name the parts of an animal cell? What about a plant cell? Nucleus, membrane, cytoplasm. Plant cells also have a rigid cell wall and chloroplasts.

What is the special machine called that helps us see tiny things? *Microscope*.