

## **Young Scientists Overview**

The format for this class is very "hands-on". The material covered will be an overview focusing heavily on nature study. We will have 30 classes beginning in August and we will "jump" around a little to get an introduction to various kinds of science. My main goal will be to teach them how to look at science from a biblical worldview and to LOVE science. I think they will end up surprising you with how much they do learn! Moms are always welcome to stay but if you have other children who are not enrolled in the class you will need to care for them in a different area of the church due to the nature of the class. Even though I hope to make this lots of fun, it will be a "real" class and I won't be set up to take care of any more students than the ones who are enrolled. For example, it would be hard for little ones not to want to take part in some of our hands-on activities. The children will get to use my microscopes at least for one session if not more. I try to do at least one hands-on activity each class. Each week, they will complete homework which is just a few pages of reading that they can read themselves or have you read to them. Then there are a few simple questions to be answered in the form of a little worksheet. The homework is extremely lightweight and meant to be fun but it does help moms know what we are learning about and gets the student used to "turning something in" in preparation for the older classes. Depending on their reading or writing level, you can help them as much as you want . . . it shouldn't take more than 20-30 minutes per week.

Your child will need to be prepared for class with the following:

### **A Nature Journal**

(this is a blank sketchbook--no lines on pages) These can be purchased at an art supply store, Barnes and Nobles, Books A Million etc. Barnes and Nobles sell nice ones for around \$10 and you can get your home educators 20% discount. You can use a blank journal but please get one with a plain cover. 9-12 inches in length is good (don't get a tiny one or a huge easel size sketch book). **Put their name and phone # on the inside cover.** Have them bring this and a pencil / colored pencils **every week** as we will try to spend a little time drawing in them every class.

### **Pencil /small package of colored pencils**

We will be carrying this stuff around with us so a package of the little short ones would be best.

### **Two Fun Paper Notebooks with 2 Pockets**

This will be what they will use to turn in their homework. Get the ones that are really cheap during the back to school sales...the ones with pockets and animals, flowers, etc on the outside. You may want several as they get "dog-eared". **Write Young Scientists and their name on the front cover.** Also, write your phone # and e-mail address please.

### **3-Ring Binder**

They will keep this at home. It is for their activity papers to stay nice and organized. You will need to hole-punch their homework as it is graded and returned. By the end of the year, they will have a nice notebook documenting all the units they studied.

### **A White T-shirt:**

This is for an experiment we will be doing at the second class. I recommend a package of plain Hanes or Fruit of the Loom from Walmart or a similar store.... the kind they carry in the boy's department. If there is more than one Young Scientist in your family, they come in packs of three, or maybe one package would work for several families. If you already have a white shirt, that's fine as well. The shirts

need to be washed if they are new from the package...no Downy or fabric softener sheets. We will be running a lab demo on them which will leave some permanent art work behind (really cool looking artwork!).

### **A Really Great Attitude**

These are the years that students begin to form their attitudes toward learning itself. We want to promote learning as a valuable and FUN lifelong process!

### **OPTIONAL**

Pocket size field guides (birds, trees, flowers, insects, reptiles etc.) They may be inspired to use these at home although we won't use them much together in class.

At the end of the year, each student will make a presentation on the subject (nature /science) of their choice. They may choose something we have already talked about that they were especially interested in or pick something totally new. It can be as simple or elaborate as you want...whatever works best for mom and student. Some ideas would include a chart or poster...even a show board. They may bring things to pass around, a handout sheet, whatever. I really want the kids to learn a little about information gathering when it comes to nature study and science. They can get books from the library or get help getting info off the web. There is no grade...just A for the effort of actually doing the project. In past years, most of them seemed to have gotten over any "shyness" and were more than eager to share but moms are welcome to help out any shy students or I can help them out. In our class last year, some students ran a little experiment or demonstration. Something 5-8 minutes long would be great. If they can finalize their topic before Christmas that will give them plenty of time to work a little on their subject here and there.

Moms . . . you are always welcome to visit class. Please contact me with questions or concerns at [tellthetruthinisci@gmail.com](mailto:tellthetruthinisci@gmail.com)

You are ultimately your child's teacher and sometimes adjustments have to be made to suit individual students. . . this is not a problem! My goal is to help them not only LOVE science but to love learning; remembering that each student has unique learning styles, strengths and weaknesses.

Below is a rough outline of some of the things we will be studying. Sometimes I change things around a little.

Week 1: Scientific Method / What is Science / What it is not  
Week 2: Atoms: the smallest stable unit of matter  
Week 3: Classification  
Week 4: Cells: the smallest unit of life  
Week 5: Bacteria: Good Guys / Bad Guys  
Week 6: Weather  
Week 7: Weather / Clouds  
Week 8: Insects—Oh so many!  
Week 9: Observation and Collection (Insects Continued)  
Week 10: Identification and Sharing (Students will have made a bug collection)  
Week 11: Frogs  
Week 12: Frogs  
Week 13: Earthworms  
Week 14: Bats  
Week 15: Fish  
Week 16: Birds  
Week 17: Feathers  
Week 18: Owls  
Week 19: Human Body (senses)  
Week 20: Human Body ( Organs and Organ Systems)  
Week 21: Astronomy  
Week 22: Geology  
Week 23: Archaeology  
Week 24: Paleontology  
Week 25: Fossils  
Week 26: Plants / Flowers / Seeds  
Week 27: Students Presentations  
Week 28: Student Presentations  
Week 29: Students Presentations  
Week 30: Class Party and Scavenger Hunt