

# Your Science Notebook

**The skills of science** can be taught to very young children as well as to older, more mature students. In addition, the processes of science and scientific thinking can be taught to anyone, but especially to the young, developing scientist. Even pre-readers can do science. Use this book as a launching pad for teaching your young students the skills of science as well as scientific thinking.

## **The goals of this book:**

1. To help teach the student some skills of science which are rarely taught in a text.
2. To give the student a place to keep the records of the hands-on science he or she is doing.
3. To give the student and the teacher a written record of the year's activities in science experimentation.
4. To give the teacher some different approaches to the year's science.

**When to begin:** Some of the skills young children can use successfully are: measurement, building, guessing. Your 2nd to 4th grade students should be proficient in: measurement, observation, drawing, predicting, guessing, graphing, building, and explaining. Begin to teach these skills to your pre-readers in order to make learning easier.



## **Values for the young scientist:**

Useful ideas for the young scientist to value are: the value of farming, the value of building (engineers), the value of order, and the need for explanations of the complexities of the universe around them.

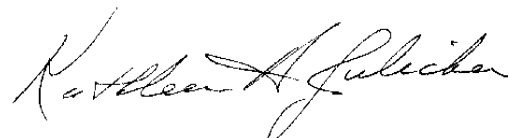
**Using this notebook:** This notebook is for the younger scientist who is just starting his or her study of the world around them. The student may need help to read the directions, but generally the experiments are easy to understand and do. They require no fancy equipment, just a thinking cap.

**How to use this book:**

1. You may use this book as your child's workbook, allowing the student to write in the book.
2. You may copy the pages of this book, punch the copies, and place them in a notebook which the student may use for recordkeeping.
3. You may use this book as your child's workbook and copy the required pages to expand it. You can ask a printing shop to insert the extra pages into the spiral binding.

**This book is for the student,** not the teacher, so let your students handle this book and use it as their journal through the year. If you have several children in your family, feel free to make copies so that each child may have his or her own notebook. Please do not make copies for your friends or homeschool group.

Not only must a science teacher nurture creativity, curiosity, critical thinking, and factual recall, but the teacher must be able to help the student develop skills like drawing, accuracy in measurement, and chart reading. These are all science skills. This notebook can help.



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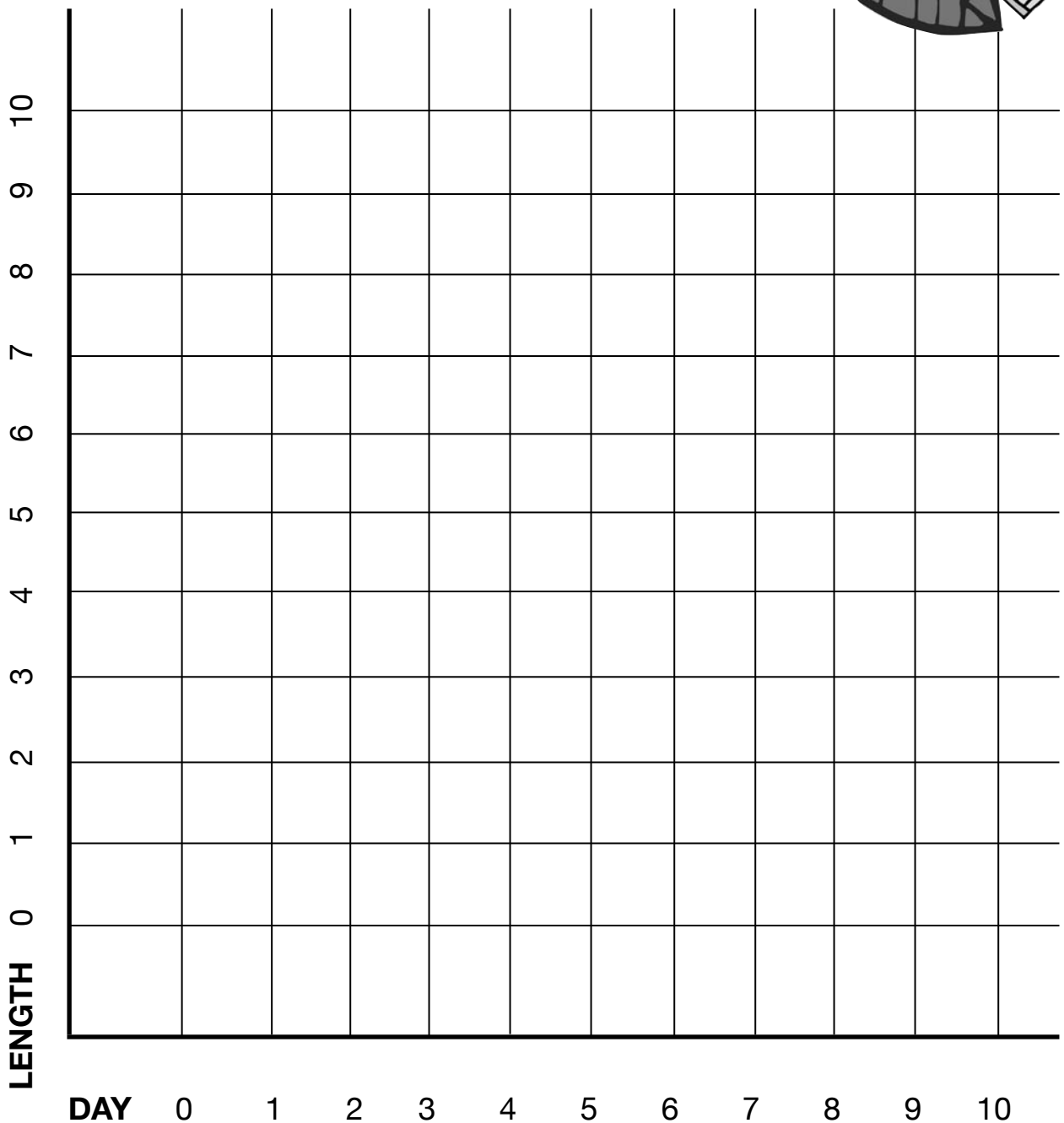


# Drawing of a Dog

A large rectangular box with a double-line border, intended for drawing a dog. On the right side of the box, there are 18 horizontal lines for labeling, arranged in a repeating pattern of a solid top line, a dashed middle line, and a solid bottom line.

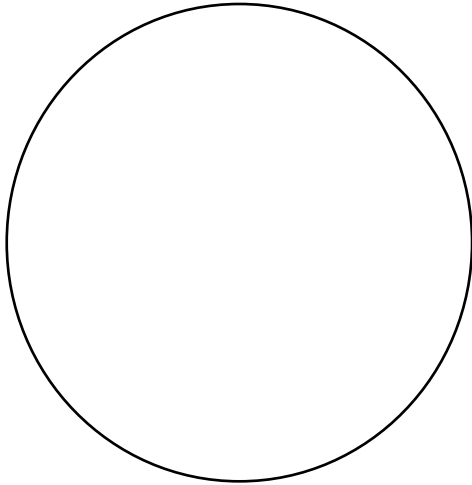
Label the parts: Body, Head, Teeth, Nose, Eye, Ear, Collar, Claws, Leg, Tail.

# Make a Graph Showing the Growth of Your Leaf

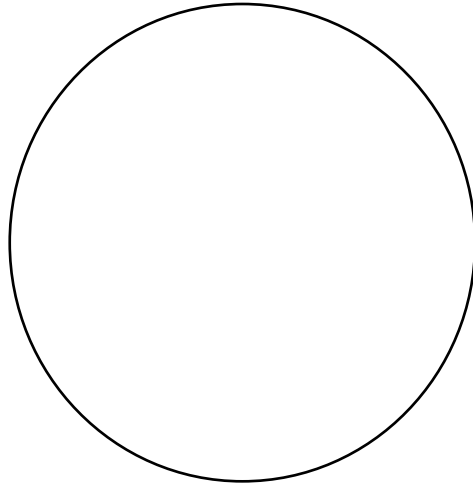


# Plant Growth

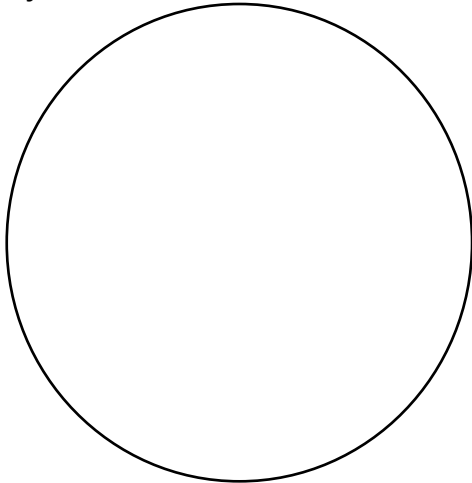
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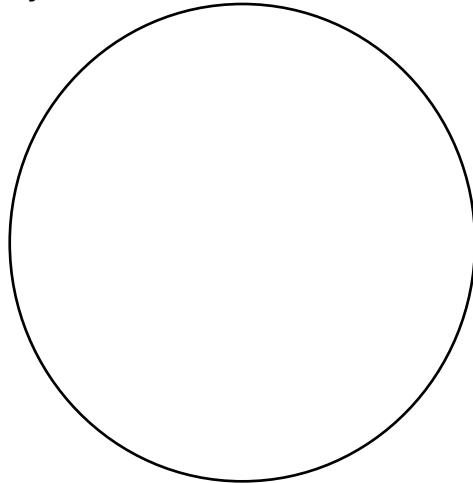
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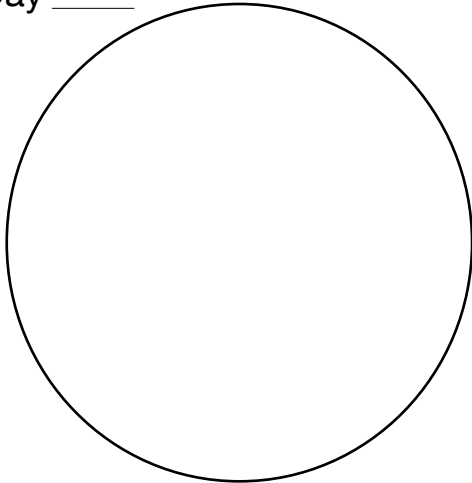
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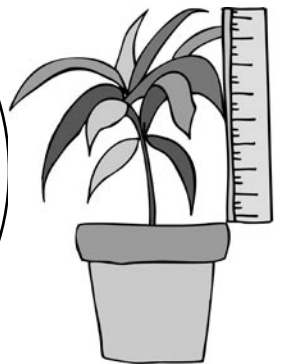
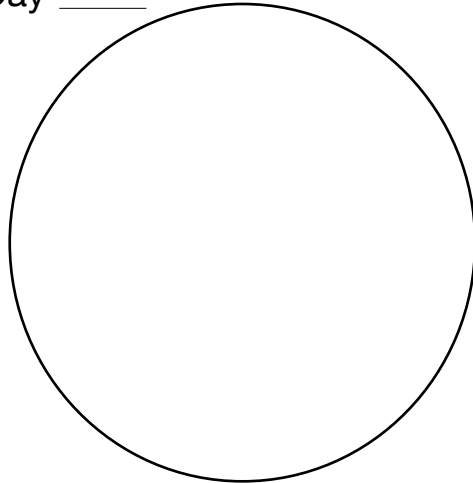
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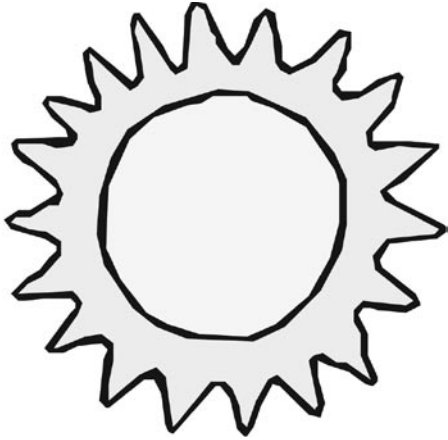


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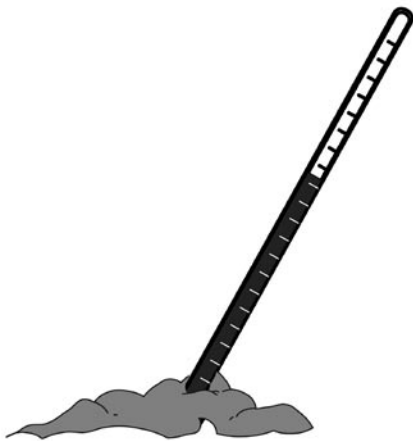
**Directions:** Start a seed. After it comes out of the soil, measure its height from the ground. Draw the plant on these circles. Do this for several days. The days do not have to be consecutive.

# How Much Cooler Is It In the Shade?



**You will need:**

- a thermometer
- a place outside that is sunny
- a place outside in the shade



**Directions:**

1. Put the thermometer in the dirt in the area where it is sunny. Leave it there for ten minutes.
2. Write the temperature down in the "sun" above.
3. Put the thermometer in the dirt in the area where it is shady, and leave it there for ten minutes.
4. Write the temperature down in the "shady" block at right.

# How Cool Is Your Ice Cream?

**You need:**

- a thermometer
- a bowl of ice cream



**Directions:**

1. Place the thermometer in the ice cream for ten minutes.
2. Write down the temperature in the space below.

My ice cream is \_\_\_\_\_ degrees.

Is the ice cream colder than tap water? Find out how much colder by finding the difference between the two and write it below.

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Is the ice cream colder than ice water? How much colder?

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