

A Grade Ahead's rigorous, 16-week science enrichment program is designed to challenge your child to a higher academic standard. Our monthly curriculum includes science concepts that your child will see in school. Your child will learn and apply science concepts to real-world situations through experiments and develop strong critical thinking and analytical skills.

Each week will have an in-depth **lesson** (which we call Examples), **homework**, and **answers**. In these next pages, we offer a closer look at what our examples, homework, and answers offer as well as a specific sample of each.

Examples – Science: Grade 4	
A series of the	ers. Science gives us
B. The Scientific Method The scientific method is the process scientists use to explore the question The scientific method consists of 6 steps: 1) Ask a question. 2) Create a hypothesis. 3) Design an experiment. 4) Perform the experiment. 5) Evoluties the data and make a conclusion. 6) Report the results.	
Ask a Question + Create a Hypothesis + Design an Experiment + Perform Experiment Report Report Re	ant Conclus
experiment is to find a question for	

Key Terms

Key Terms are available so that your child can easily find the important concepts of the week.



Lesson pages are titled "Examples – Science: Grade 4," answer pages are titled "Answers – Science: Grade 4," and homework pages are simply titled "Science: Grade 4."



Experiment

The first day of homework will always include a science experiment so that your child can apply concepts from the lesson to everyday life.

	Science: Grade 4
	Experiment 1 Score:
	EXPERIMENT 1: KITCHEN SCIENCE (Mandatory for all students)
scientific m taste. You w	ion: In this experiment, you will follow the steps of the wethod to determine the relation between your senses of smell and ill use the scientific method to design an experiment to compare of smells of netstore and apple.
	ded per Student:
l apple l potato	1 blunt knife 1 vegetable peeler (optional)
on your sens	hypothesis: Do you think that your sense of smell has an effect e of taste?
2-5. Experimo oy answering Parents: Make	e of taste? mat Design: Design an experiment that will test your hypothesis the questions below. You may use only the materials provided. sure each atduct has an appropriate design that allows thes to state
2-5. Experim by answering Parents: Make with and with	e of taste? met Design: Design an experiment that will test your hypothesis the questions below. You may use only the materials provided.
-5. Experin y answering arents: Make with and with 2. What are	e of taste? met Design: Design an experiment that will test your hypothesis the generiment below. You may use only the materials provided sure such student has an appropriate design that allows them to taste out smelling.

Supplies

We provide a list of supplies so that your child can conduct the experiment. Parent or teacher supervision is always recommended.



Each day's homework usually takes about 30 minutes to complete.

Start Time: End Time: Pre-lab Score: PRE-LAB QUESTIONS (Mandatory for all Students) the following questions prior to starting either experim 2-5. Match the following words with the appropriate definitions. Research Science Scientific Method Variable 2. An organized process that scientists use to answer questions. ng in your experiment that changes. _ process of collecting facts about a certain subject.

Science: Grade 4

The process of discovering the world around us and the knowledge gained from these discoveries.

6-9. Asher is trying to figure out what type of cup (Styroform, paper, or plastic) will be better to keep low from malting. He thinks that the Styroform cup will work the best because that is what is coolars are made out of, Be tests this out by placing three ice cubes in each cup. After twenty minutes he records the mount of wetter that is sitting in each cup. What is Asher's hypothesis?

re the variable(s) in Asher's experiment?

Homework

The rest of the homework works on your child's understanding of the specific topics that week. This will be through comprehension, critical thinking questions, and vocabulary exercises.

Answers – Science: Grade 4

A hypothesis is an Scientific Method ed guess that answer: 3) Variable

- Day 1

- Scientific Withod 1) Variable () Research diversion on the second science of the second science of the second have science of the second science of the second science of the second have will have which one phenese ice of the mainting the least by leaking for the have the least assess of science in the cope after twenty minutes. Maneware any very slightly: I billow that thyroids and lines have the have the have the least assess of the science of the science of the science of the have the least assessed of the science of the science of the have the science of the science of the science of the science of the lines at a science of the science of
- rs may vary. An example is given. I think that my sense of smell have of taste.
- were may very. An assample is given. I think that my sense of small has no effect on in stating to see if for yearse of email lifetion the wy which my task. I would be a small. Con the apple and protes each into two piezes. A value h is of one pointer pieze Describe the way it tasks on the observation alsot. They grow rams with me hand, b to high the chart hand, take a bits of the second program with the hand h. The bright the chart hand, take a bits of the second program of the observation alsot. They grow rams with the hand has been also been also been also been also described and the second been also been also been also been also makes.
- interval in here. We use store pottop paces so baserine the way it taxtes on the store of the control of the store of the store of the store of the store of the control of my superimet is that there is a strong relationship between my sense all and my sense of taxtes.
- I an egg float in fresh water, salt water, or both? rers may vary slightly. Examples are given. I think that the egg will float
- east start only. The variable in this appriment is water type. In Nume 7 days of 12 keV and 12 keV
- aults were that the egg did not float in plain w
 - s, an object floats because +=++ other objects by rep

Answers

Answers are provided to check your child's homework and note which areas may need more work.