

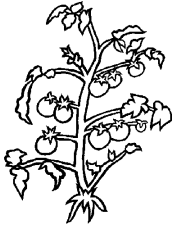
# Module Questions in the LiFE Curriculum

## MODULE 1 - FOOD PRODUCTION

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***How does nature provide us with food?***

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## MODULE 2 - FROM FARM TO STORE



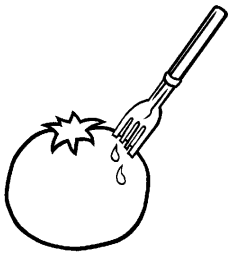
***What is the system that gets food from farm to store and how does this system affect the environment?***

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## MODULE 3 - FOOD AND HEALTH: NOURISHING THE BODY

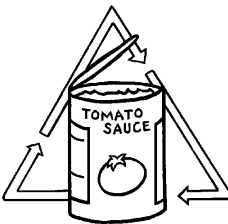


***How does food provide our body with what it needs?***

R

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## MODULE 4 - HANDLING FOOD RELATED WASTE & POLLUTION



***How do waste and pollution from our food practices affect the earth and future generations?***

## MODULE 5 - FOOD CHOICES: THINKING ABOUT FOOD IN A NEW WAY

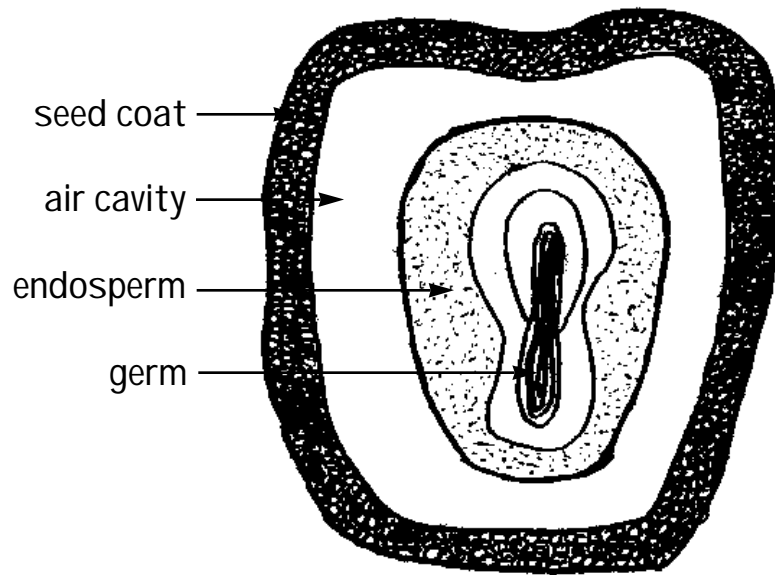


***How do my food choices affect my health and the natural environment?***

Name\_\_\_\_\_

Date\_\_\_\_\_

## Corn Kernel



Write some things you learned about corn:

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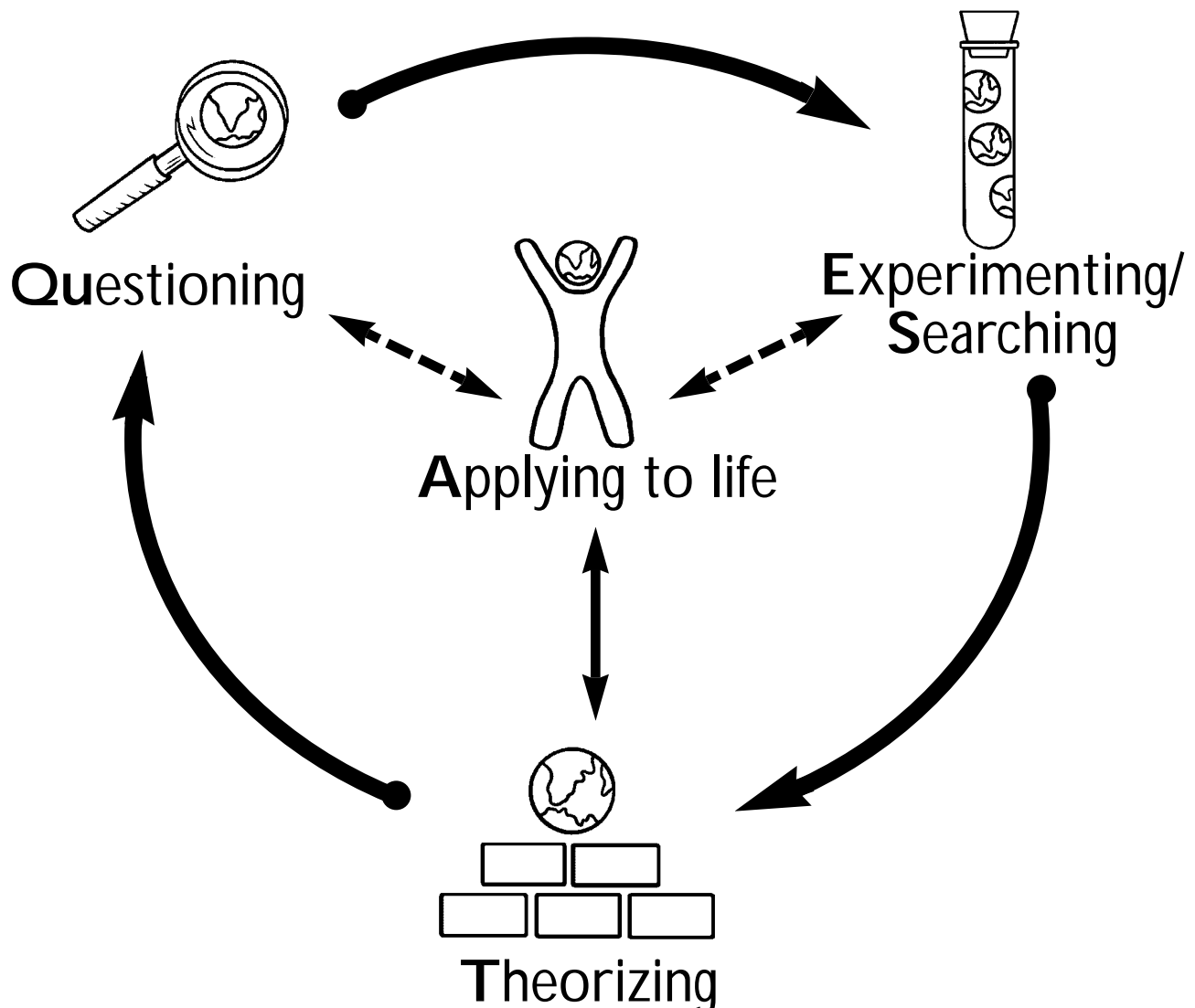
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## YEAR 2: READING FOR LIFE PACKET

The LiFE Learning Cycle: Learning is A QuEST!

You have been learning since you were born. Have you ever thought about HOW you learn? You will in the LiFE program!

As you learn in LiFE, you will go through a cycle or a QuEST. When you begin to study a topic, first you will **Question** what you already know and what you would like to learn. Second, you will learn more about the subject by doing **Experiments** and using books and other resources to **Search** for more information. Next you will put together what you learn by making new **Theories**, or explanations of how things work. And of course you will have the most fun using what you learned in your everyday life! This is called **Application** or "**Applying to life**."



# More about how each part of Learning is A QuEST:



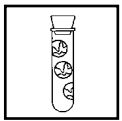
- **Questioning** -- in this first phase of the quest you will think about what you already know about the topic and what questions you have. The questioning phase is a time for exploration. Good learners always ask good questions! Here are some examples:

What do we already know about the topic?

What don't we know about the topic but would like to learn?

What are we curious about?

How should we investigate this topic?



- **Experimenting/Searching** -- Here is where you start to answer your questions. In this part you will explore the topic you are studying by doing experiments and research.

Experiments are tests done in controlled conditions that will help you discover something new about the topic. There are six steps in an experiment:

**Step 1: Develop an experiment question**--the question your experiment is trying to answer.

*Ask yourself:* What questions do we have about the topic that can be answered by conducting an experiment?

**Step 2: Decide on a hypothesis**--a hypothesis is a prediction, or a guess, about what might be the results of the experiment.

*Ask yourself:* What do we think the results of our experiment will be?

**Step 3: Write down the steps you will take during the experiment**--this is called your "methods". Also include a list of the supplies you will need for your experiment.

*Ask yourself:* How do we conduct our experiment? What are all the steps we must take to conduct our experiment? What materials do we need?

**Step 4: Do the experiment following your methods.**

*Ask yourself:* Are we following our methods? Are our methods written clearly enough that someone could copy our experiment exactly? Are our methods working or not working? How can we change our methods to make them better?

**Step 5: Write your results on a table, chart or in a log.**

*Ask yourself:* What is the best way to show our results? Should we use a chart, a graph, or a table? Are we recording everything we are learning from our experiment? What are we missing?

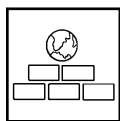
## SIX STEPS TO FOLLOW FOR AN EXPERIMENT, CONTINUED

**Step 6: Examine your results and think about what you have learned.** Use your answers to this question to make your "conclusions."

Ask yourself: What do our results say about our hypothesis? Are our results different from what we thought would happen or the same? If so, why? Do we think our results happened because of something we did in our experiment or did our results happen because of something that went wrong?

Searching is looking for information to find out about the topic you are studying. You can use many creative methods to gather information in your searches, such as: books, videos, computers, and interviews with people.

Ask yourself: What do we want to know that we can't answer through doing experiments? How can we find this out?



- **Theorizing** -- in this step you will think about what you have learned and use it to create new ideas about the topic. These new ideas are called "theories". When you theorize, you will use the information you learned from questioning, experimenting and searching in the first two phases to:

- 1) discuss new ideas you have about the topic--these new ideas are your theories;
- 2) give evidence to back up your theories, this means you will explain how you came up with your theory; and
- 3) participate in scientific discussions, debates and arguments with your classmates. You will explain your theories to your classmates, listen to what they have to say about your theory, then answer their questions about your theories. You will also listen to your classmates' theories and give them advice to help them improve their thinking about what they have learned.

Ask yourself: From what I have learned, what new theories do I have about the topic? What proof do I have to back up my theories? Can I change and improve my theories based on what my classmates said? Can I give advice to my classmates that will help them change and improve their theories?



- **Applying to life** -- use what you have learned each day as you think and do things. Also, as you use what you learn you will make up new questions for future experiments!

Ask yourself: How can I use what I have learned? How can I remember to think about what I have learned as I do my day-to-day activities? What can I teach my family? What new questions do I have about the topic now that I am using my new knowledge in the real world?

## Introductory Lesson 2: Learning about Grapes



### Quest Learning Cycle Phase 1:



#### Questioning



1. What do you already know about grapes?

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2. Look at the grapes very closely, (you can break it open if you want to) and record some new things you discover about grapes:

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3. From what you have just learned from your observations of grapes, write down some ideas about how you think grapes are turned into grape juice.

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**Quest Learning Cycle  
Phase 2:**



**Experimenting/  
Searching**



**Research Question: How can we make grape juice from grapes?**

Methods: (what steps would you take to develop an experiment to answer this research question?)  
Describe the steps in as much detail as you can! To make grape juice from grapes, first I would:

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Materials: (list everything you will need to PERFORM your experiment in the columns below).

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Hypothesis: (What do you think the results of your experiment will be? Make a prediction!)

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## Class experiment: How can we make grape juice from grapes?



Methods: HOW WE WILL DO IT?

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Materials: WHAT DO WE NEED? (list in the columns below).

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Hypothesis: WHEN WE DO OUR EXPERIMENT, WHAT RESULTS DO WE PREDICT WE WILL GET?

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## Class experiment: How can we make grape juice from grapes?



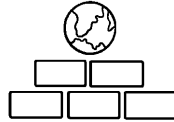
Results: WHAT ACTUALLY HAPPENED?

Compare your results with your hypothesis and discuss what you learned from doing this experiment?



### Quest Learning Cycle

#### Phase 3:



#### Theorizing



Think about what you learned in your experiment. How do you think the grape juice you buy in the store is made?

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### Quest Learning Cycle

#### Phase 4:



#### Applying to life

How will you apply what you learned about grapes in the future?

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