## **Knowledge Answer - Foundational**

Many natural things change (Examples: The sky can have clouds; the sky can be clear of clouds. Water can be liquid and water can be frozen. It can be the day-time; it can be the night-time. Plants are smaller when they are newer; plants get bigger as they grow older, plants get smaller again when they are very old. The earth breathes, the earth chokes.)

A rock can be all one piece; that rock can be broken. Rocks sometimes stay the same; rocks change. Some rocks are above ground; most rock is below ground Rocks stay in one place; Rocks move. All rocks are all made of elements(?); particular rocks are made of particular elements. A rock is one rock; rock is \_\_\_\_.

## **Knowledge Question (Foundational)**

#### Check the sentences that are true:

Plants get smaller as they grow older.

The sky can have clouds.

The sky can have clear parts and cloudy parts.

Rocks can not be broken.

The sky can be clear of clouds.

Rocks never change over time.

Water can be liquid.

Day sometimes follows day with no night in between.

The sky is never partly cloudy and partly sunny.

Water can be frozen and liquid at the same time.

Water can be frozen.

A rock can be in one piece.

A rock can be broken up.

#### **ALPL Examples of Questions Generated from Foundational Concepts**

Day follows night.

Night follows day.

## **Knowledge Answer**

Many natural things change over time in predictable ways.

## **Knowledge Question (grade 4)**

## Which cycle is correct?

A morning → sunrise → afternoon → sunset

B summer → fall → winter → spring

C seed → mature plant → fruit → seedling

D baby → teenager → child → adult

GRADE FOUR SCIENCE PRACTICE TEST
NEW YORK STATE EDUCATION DEPARTMENT 2003

## **Knowledge Question (Grade 4)**

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### What Could Annie Know?

There were times when Annie's ship travelled from spring to summer to spring with no fall or spring in between. How could this be possible?

Standard Question (from GENlinks)							
Which of the above cycles are astronomical cycles?							
A C and D							
B A and B							
C A and D							
D B and C							
Standard Question (from GENlinks)							
A natural cycle is: unripe → ripe → over-ripe → rotten.							
In what natural cycle does this occur?							
A the water cycle							
B harvested fruit							
C the birth of a star							
D the seasons							
Standard Question (from GENlinks)							
In the study of natural phenomena, what is most likely meant by the phrase "the birth of a star?"							
A Stars are living things.							
B A birth is a beginning.							
C Stars shine.							

ALPL Examples of Questions Generated from Foundational Concepts							
D All things are born.							
Standard Question (from GENlinks) - short answers  1) What are the natural things described below in poetic terms?  2) Why do you think that the people who made up these terms chose these words?							
The Milky Way							
bedrock							
the birth of stars							
What Could Annie Know? Could a plant be grown on a whaling ship?							
A yes, as long as the basic conditions the plant needed were met							
B yes, as long as there was enough ocean water to water them							
C no, because the boat would be moving too fast							
D no, because there would not be any soil							

As much as she loathed hardtack on shipboard, she would still sometimes make a gruel with it and boiling water and sugar as a treat for her grandchildren. (Boiling water had a dual purpose of softening the hardened flour and making sure that any vermin who had drilled their way in would exit their burrows and be killed so that they could be sieved out.)

#### What Could Annie Know?

Hard Tack is a cracker made from only flour and water. These are combined and then packed into a mold so tightly that almost all of the water is pushed out. The cracker becomes very dense and very dry. These crackers were one of the staple foods on whaling ships.

## What is a staple food?

	Α	a food that is al	ble to provide	basic nourishm	nent in many	conditions /
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- B a food that people enjoy every day
- C the food that is the most delicious of all the foods available
- D the food that is connected

#### What Could Annie Know?

## Why were the crackers made to be so dense and dry?

A so that air would circulate through them to keep them fresh

B so that bugs would have almost no place to live or drink

C so that bugs would enjoy them

D so that water could not be mixed with them

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