

Scientist Name: _____

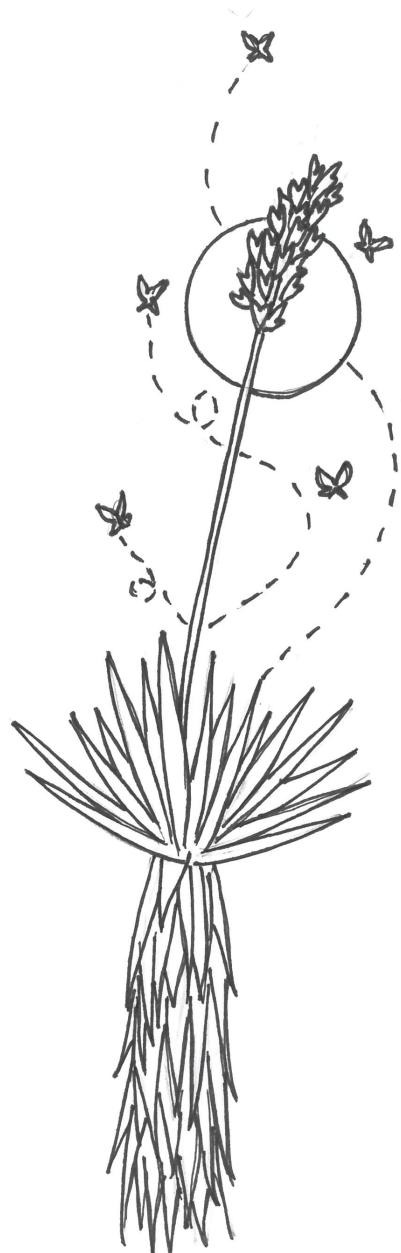
Desert Stories

Field Journal



Asombro Institute
FOR SCIENCE EDUCATION

Asombro Institute for Science Education
Las Cruces, New Mexico
www.asombro.org
“Science Education for Eager Minds”



5

4

3

2

1

3 | 4

1 | 2

1 | 4

What Is It?

What are some **adjectives** you can use to describe your object? Write them below:

Mass of my object: _____ grams

Length of my object: _____ inches

Quick Sketch:



Verb and Noun Scavenger Hunt

Underline the **verbs**. Circle the **nouns**.

Verb: an action word

Noun: a person, place, or thing

1. Moths dig into the ground.
2. The leaves bring water to the roots.

Yucca Life Cycle

Death	Birth
Reproduction	Growth

Yucca Seed Pod Insect Hole Experiment

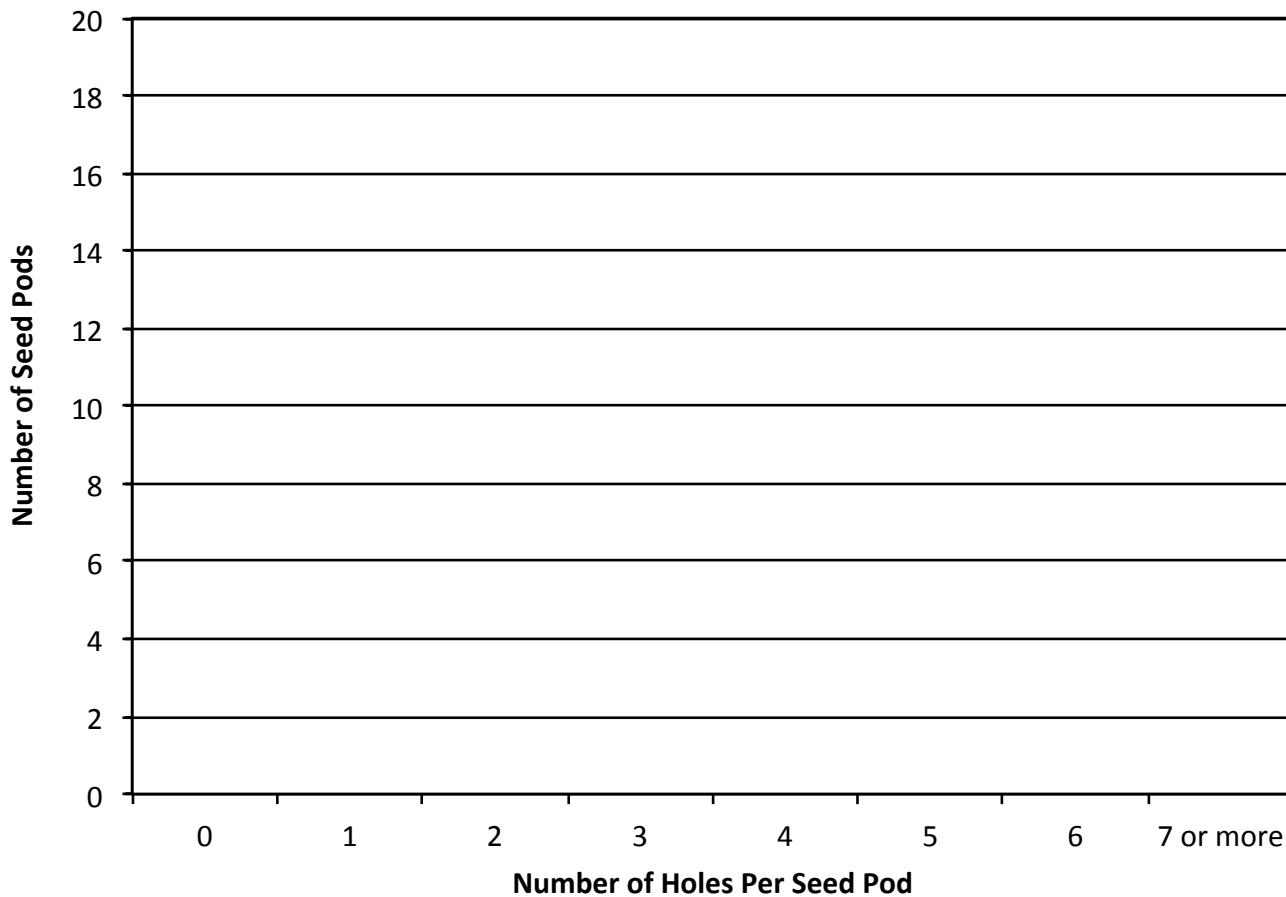
Question of Interest: What is the most common number of insect holes in one yucca seed pod?

Hypothesis: _____



Holes Per Seed Pod	0	1	2	3	4	5	6	7 or more
Number of Seed Pods								

Class Total of Seed Pods By Insect Hole Number



Results

1) Which bin had the most seed pods? _____

2) How many seed pods were in that bin? _____



3) Which bin had the fewest seed pods? _____

4) How many seed pods were in that bin? _____

6) How many more seed pods are in the bin with most seed pods than are in the bin with the fewest seed pods?

Conclusions

Question of Interest: What is the most common number of insect holes in one yucca seed pod?

Answer: The most common number of insect holes in one yucca seed pod is _____.

My hypothesis was: correct incorrect

Does your hypothesis have to be correct for you to be a good scientist? yes no

My favorite part of doing this scientific study was _____

Bonus Activity: Choose a word from the glossary. Create your own complete sentence using that word. Challenge yourself by making sure it has at least one noun, one verb, and two adjectives.

At Home Fun: Find the fruit of a different plant at or near your home. What does it look like? Describe it with some adjectives and draw it.

Yucca Moth Life Cycle: Parts of Speech Scavenger Hunt

Part of Speech	Purpose
Verb	an action word
Noun	a person, place, or thing
Adjective	describes a noun

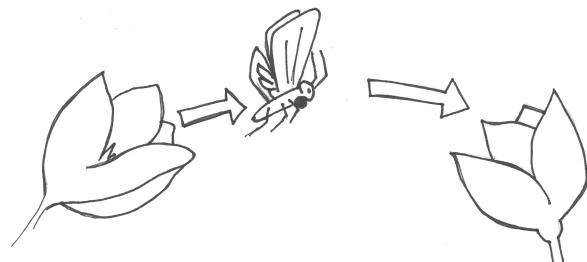
- 1) The moth climbs into a flower. She takes pollen from the flower and makes it into a ball.

Circle the nouns



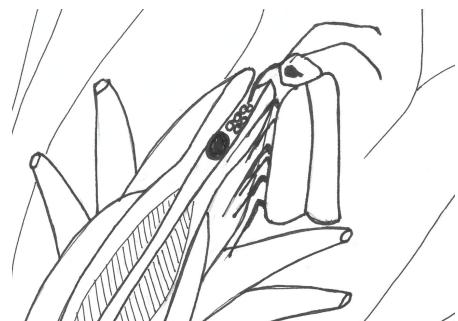
- 2) She carries the pollen to another white flower and stuffs it into the stigma of the flower.

Underline the verbs



- 3) The careful moth lays her little eggs in the flower near the pollen.

Draw a box around the adjectives



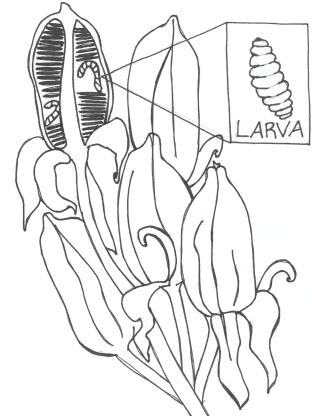
This is a picture of a female moth carrying a ball of pollen.



Part of Speech Scavenger Hunt

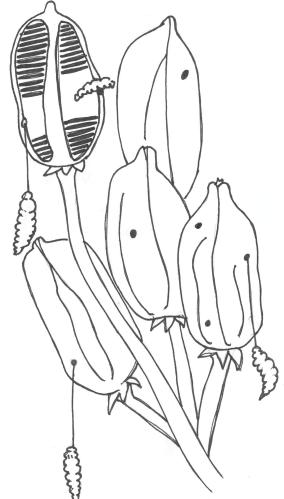
4) The pollinated flower grows into a fruit. The little eggs inside the fruit hatch into larvae.

Circle the nouns



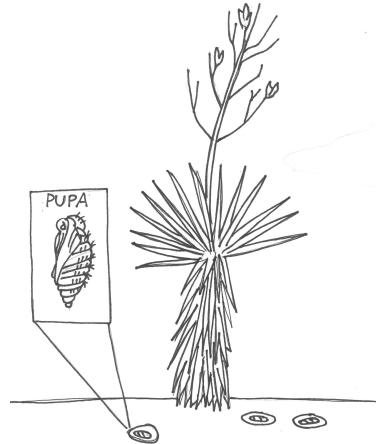
5) The hungry larvae eat their way out of the green fruit. Next, the larvae drop to the ground on a silk strings.

Draw a box around the adjectives



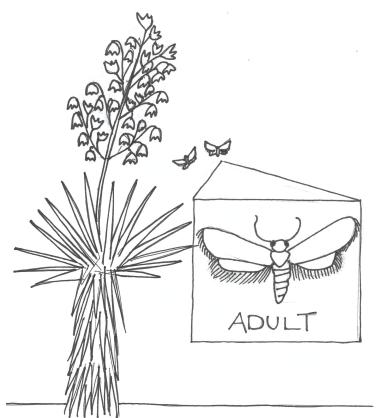
6) The larvae dig under the soil and make a cocoon around their bodies. The pupae wait through winter, or sometimes for many years.

Underline the verbs



7) When the weather is right, the moths break out of their cocoons and climb out from under the ground. They fly with new wings.

Circle the nouns

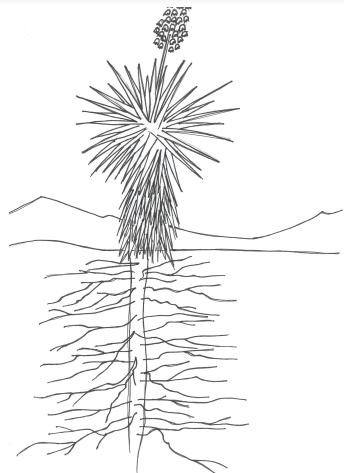


Yucca Root Experiment

Question of Interest:

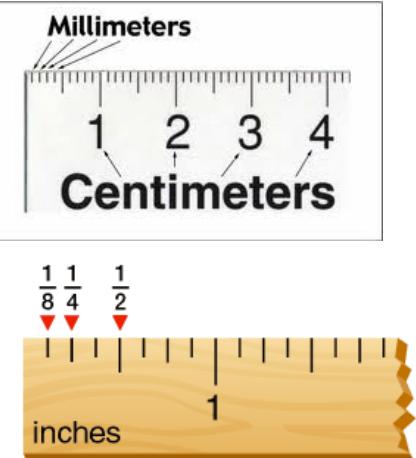
Are most yucca roots long or short?

1) Hypothesis: long short



Short Roots: 110 inches or shorter

Long Roots: 111 inches or longer



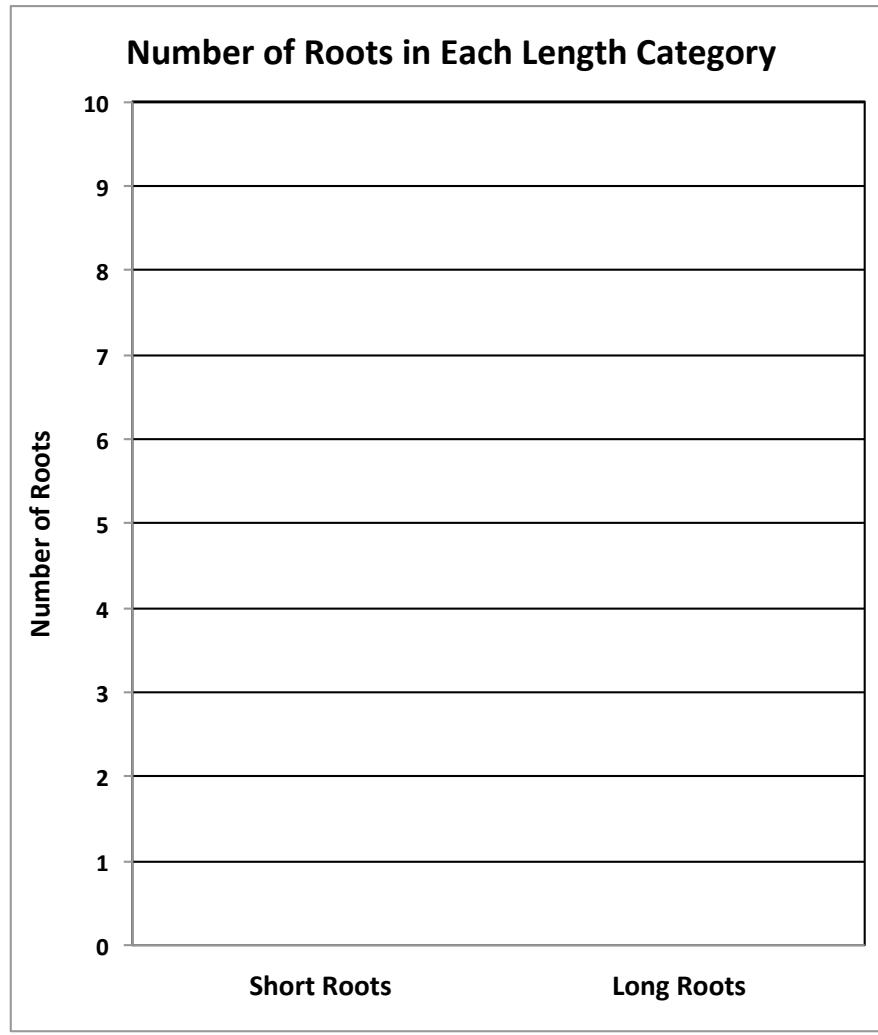
2) My Root Number: _____

Root Number	Root Length (total inches)	Short or Long?	
1		Short	Long
2		Short	Long
3		Short	Long
4		Short	Long
5		Short	Long
6		Short	Long
7		Short	Long
8		Short	Long
9		Short	Long
10		Short	Long

Results

5) How many yucca roots are long (111 inches or longer)? _____

6) How many yucca roots are short (110 inches or shorter)? _____



Conclusion

Question of interest: Are most of the yucca roots long or short?

7) Most of the yucca roots are: Long Short

8) My hypothesis was: Correct Incorrect

At Home Fun: Try measuring a leaf of any plant. How many centimeters long is it? How many inches long is it? How accurate can you be?

Glossary

Adaptation: A physical structure or behavior that changes an organism's chance for survival.

Adjective: A word that describes an noun, pronoun, or other adjective. It describes what kind, which one, or how many.

Chihuahuan Desert: The largest desert in North America. The Chihuahuan Desert is in southern New Mexico and stretches south into Mexico.

Cocoon: A hard casing the moth builds around its body during the pupa life stage.

Conclusion: The final explanations and future questions scientists discover after finishing an experiment. They write these down so others can learn from their experiment.

Flower: The part of a plant used for reproduction, generally surrounded by colorful petals.

Fruit: Part of the plant that contains seeds. The fruit grows from the pollinated flower.

Hypothesis: A reasonable guess that can be scientifically tested.

Insect: A six-legged animal with a hard exoskeleton. The yucca moth is an insect.

Insect Hole: A hole made by an insect. Yucca moths make holes in seed pods after they hatch into larvae in order to get out.

Larva: Yucca moth life stage. The larva hatches from the egg and looks worm-like.

Life Cycle: Describes the changes of a specific living thing during its life. Stages include birth, growth, reproduction, and death.

Mass: The amount of matter or "stuff" an object contains. Can be measured with a scale. The scientific unit of mass is grams.

Noun: A word that describes a person, place, or thing.

Pollen: Dust-like grains carried to other parts of the same flower and other flowers to help plants reproduce.

Pollination: The moving of pollen from one flower to another. When a flower is pollinated, it receives pollen and is then able to grow into a fruit.

Pronoun: A word that takes the place of a noun, or may replace a person's name.

Pupa: Yucca moth life stage where the moth changes from larva to adult insect with wings.

Results: The findings of an experiment explained in graphs and writing.

Roots: Part of the plant growing under the soil that takes up water and nutrients the plant needs to live.

Seed Pod: Another name for a fruit. The part of a plant that contains a seed.

Symbiosis: When two living things live in a close relationship with each other, and need each other to survive. Yucca and yucca moths live in symbiosis.

Stigma: The tip of the long tube in the center of the flower. This is the part of the flower that gets the pollen and eggs from the moth.

Verb: An action word.

Yucca: A group of plants with long spiny leaves arranged in a funnel pattern toward the root. They have a long stock that grows from the center with flowers and fruit. Many different species of yucca grow in the Chihuahuan Desert.

Yucca Moth: A white winged insect that lays its eggs inside the yucca flower and pollinates the flowers. The moth's eggs hatch in the yucca fruit and the young larvae eat the yucca seeds. The yucca moth lives in symbiosis with the yucca plant.



Desert Stories

An education program brought to you by the Asombro Institute for Science Education



Asombro Institute
FOR SCIENCE EDUCATION

Dear Kids and
Parents,

If you had fun with
this program, you
can keep learning
with a visit to Asombro's Chihuahuan Desert Nature
Park. We host fun events for kids and families almost
every month.

Asombro is a local nonprofit dedicated to
increasing science literacy by
fostering an understanding of the
Chihuahuan Desert.