4-H Cloverbud Activity Book B



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My 4-H Club
Image: Window Structure Image: Window Structure
My Name:
4-H Club Name:
4-H Leader's Name:
Phone Number:
Other Club Members:

4-H Youth Development Agent's Name:_____

Phone Number:_____

A Little Bit About Me



Name:_____

Age:_____

My Family members: _____

My favorite activities:



The four leaf clover with the letter "H" on each leaf, which stands for head, heart, hands and health.

4-H Club Colors

Green and White. Green symbolizes nature's most common color. White symbolizes purity.

4-H Motto

"TO MAKE THE BEST BETTER" This motto challenges everyone involved in 4-H to do the very best job they can.

4-H Pledge

I pledge:

My Head to Clearer Thinking (Right hand points to forehead)



My Heart to Greater Loyalty (Right hand over heart)



My Hands to Larger Service (Arms slightly bent, palms up)



And My Health to Better Living for My Club, My Community, My Country and My World (Arms at Side)





Activities and events I was part of:

Event	Date



Animal Ears

Have you ever noticed that animals have larger ears than us? Animals, such as dogs, have much better hearing than we do. What do you think it would be like if you had animal ears?_____

Do you think you would be able to hear better or worse? Why do you think so?_____

Let's make animal ears!

- Materials: Paper or Styrofoam Cups Scissors
- Procedure:
 - 1. Using the scissors, cut the bottoms out of 2 cups.
 - 2. Hold the smaller end of the cups up to your ears.
 - 3. Have someone whisper, make a loud noise, talk and sing while using your "animal ears."
 - 4. Try placing your ears in different directions to see how the sound changes.

Did the sound change as the direction of the ears changed? _____ How did the sound change? Did it get louder or quieter? Could you hear better with the cups on?



Feathered Friends

Birds are our feathered friends. We can see different birds outside all year round. Different birds eat different things like, seeds, insects, worms, fruits and nectar.

Can you name any birds you have seen before?

Let's make a bird feeder!

Materials:



Bagel, cut in half so there are two circles Peanut Butter Bird Seed String Plastic Knife Newspaper Paper Plate

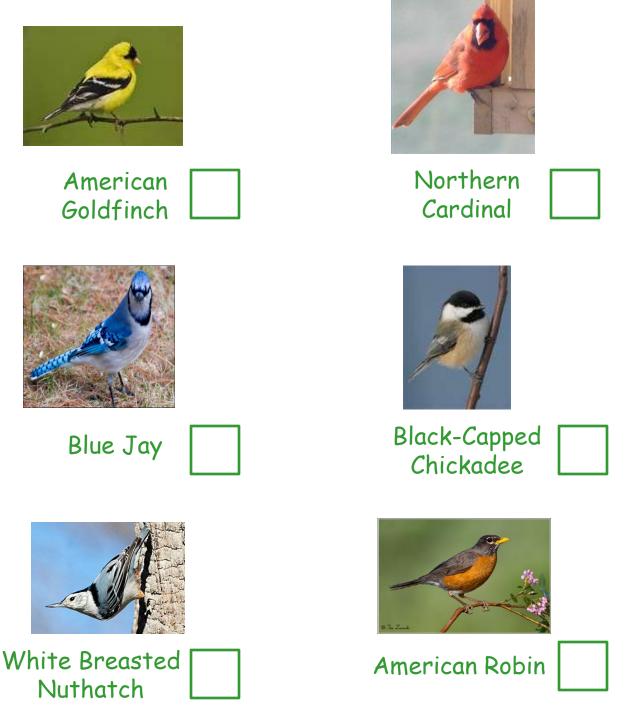
- 1. Spread newspaper over your table and place some bird seed on the paper plate.
- 2. Tie a string to your bagel so it can be hung outside.
- 3. Using the plastic knife, cover the bagel with peanut butter.
- 4. Dip the bagel in the bird seed making sure all of the peanut butter is covered.
- 5. Find a good tree branch outside to hang your bird feeder on.
- 6. Watch for birds!



Animal Sciences Animal Life

Which Birds Have You Seen?

Watch your bird feeder and go for a nature hike and check any birds you see!



Animal Sciences Animal Life

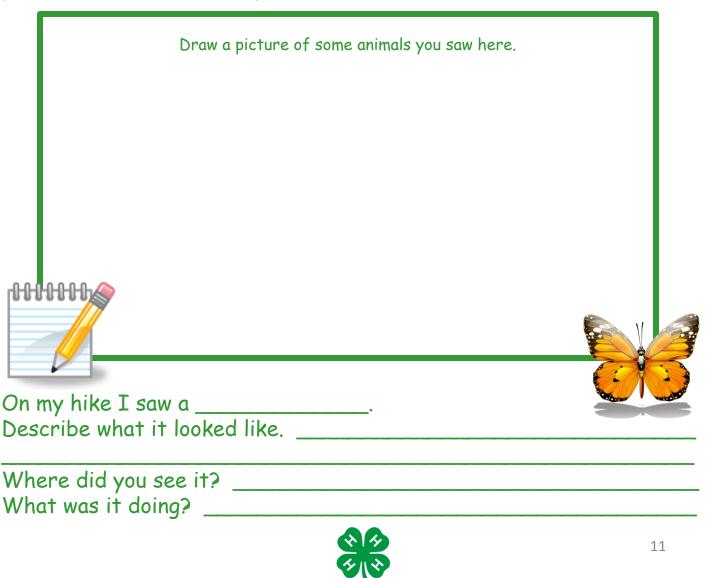
Time to Explore on a Nature Hike

Let's explore nature by searching for animals!



With some friends and an adult, go on a nature hike and see how many animals you can find. Watch the animals and see what they are doing. Are they eating or sleeping?

Make sure to bring a camera to take pictures or a pencil and paper so you can draw the animals you see!





It's time for some detective work!

The mission today is to write a secret message and then reveal it.

Materials:

1 teaspoon Baking Soda 1 teaspoon Water Grape Juice Concentrate Cotton Swab Cotton Ball Bowl Paper or Plastic Cups Paper Paper Towel



Procedure:

- 1. In a cup, mix 1 teaspoon baking soda with 1 teaspoon water. This is the invisible ink.
- 2. On a sheet of white paper, draw a picture using the invisible ink and a cotton swab by dipping the cotton swab into the ink.
- 3. Let the paper dry completely (this will take around ten minutes.)
- 4. Time to reveal the secret message! Place some grape juice concentrate into a cup. Dip the cotton ball into the grape juice concentrate making sure to squeeze out the extra juice. Gently pat the cotton ball over the paper.

What happened to the message when it dried? ______ Did your message appear? ______ What color is the message? ______ Try using other liquids such as cranberry juice, colored water and apple juice to decipher your secret message! Did any of these liquids work? ______¹²

Adapted from: Operation Espionage. PBS Kids Zoom Sci http://pbskids.org/zoom/activities/sci/

Music Time!

Let's gather a band and make some music!

Shaker

Materials: Empty Plastic Bottle with Lid Beads, Pebbles or Uncooked Rice

Procedure:

- 1. Place the beads, pebbles or uncooked rice into the plastic bottle and screw the lid on.
- 2. Try using different sized bottles and different items inside to see if the sound changes!

Finger Plinker

Materials: Shoebox with Lid Scissors Different Sized Rubber Bands

Procedure:

- 1. Cut a circle out of the middle of the shoe box lid using the scissors.
- 2. Place the lid on the shoe box and place the rubber bands around it so they cover the hole in the lid.
- 3. Play by plucking or strumming the rubber bands. Do the different sized rubber bands make different sounds?

Paper Plate Maraca

Materials: Paper Plates Staples or Glue Dried Beans or Small Rocks Paints or Markers

- 1. Place some beans or small rocks between two paper plates.
- 2. Secure the paper plates by gluing or stapling around the edges.
- 3. Decorate and shake! Do dried beans sound different than rocks? 13









Let's create a masterpiece!

Materials: A Rimmed Baking Sheet Aluminum Foil White Paper Tempera Paint or Watercolor Paint A Cup of Water Plastic Straw



- 1. Line the baking sheet with aluminum foil and place the white paper on the sheet.
- 2. Pour tiny puddles of paint in a couple spots on the paper. Add a few drops of water to the paint to help it spread a little easier.
- 3. Take the straw and blow through it on the different puddles. Try blowing hard, soft and in different directions to see what happens.
- 4. Lay the painting flat and allow to dry.











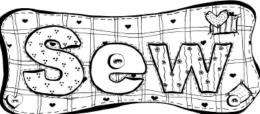
Quilts tell art and family stories. Most guilts are made from pieces of fabric or material that is cut into shapes. These shapes are sewn together to make quilt blocks. The blocks are then sewn together to make a guilt.

Let's make our initials in a quilt square!

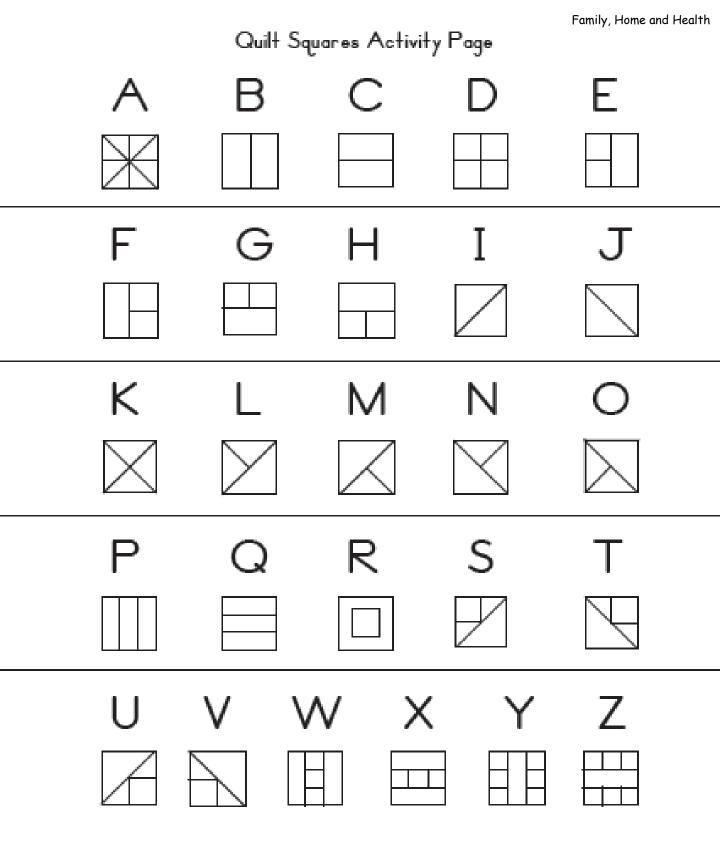
Materials:

2 - 6"x6" Pieces of White Poster Board Several Colors of Construction Paper or Craft Foam Square Shape Patterns Triangle Shape Patterns

Glue Stick Scissors Pencil Hole Punch Yarn

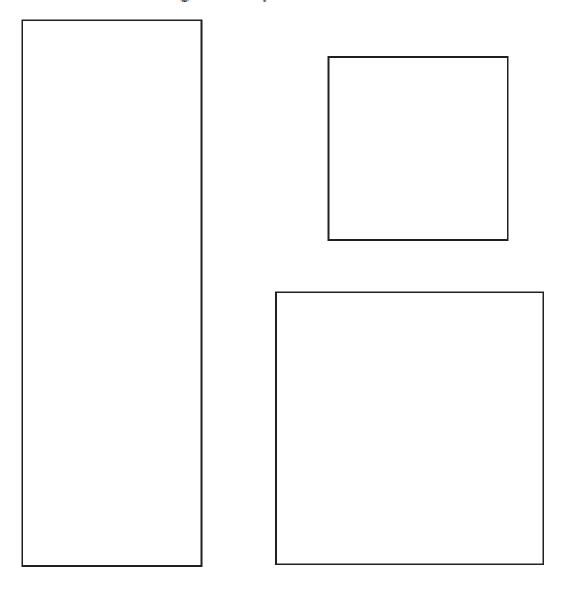


- 1. Find the guilt square on the Quilt Squares Activity Page that matches the first letter of your first name. Choose the shapes from patterns that are in this guilt square.
- 2. Use the scissors to cut out the shape patterns that you need to make your first quilt square.
- 3. Trace the shape patterns onto any color of construction paper or craft foam.
- 4. Use the scissors to cut out the shapes you traced.
- 5. Glue the shapes onto one of the pieces of poster board. Be sure to make your guilt square look the same as the guilt square for the first letter of your name. Set this guilt square aside.
- 6. Repeat these steps for the first letter of your last name.
- 7. Using the hole punch, punch 3 holes in the bottom of your first guilt square and 3 holes in the top of your second square (first letter of last name.)
- 8. Use yarn to tie the two squares together by tying a loop through each set of holes.
- 9. Punch 2 holes in the top of your first quilt square.
- 10.Use yarn to make a hanger for your guilt square initials.



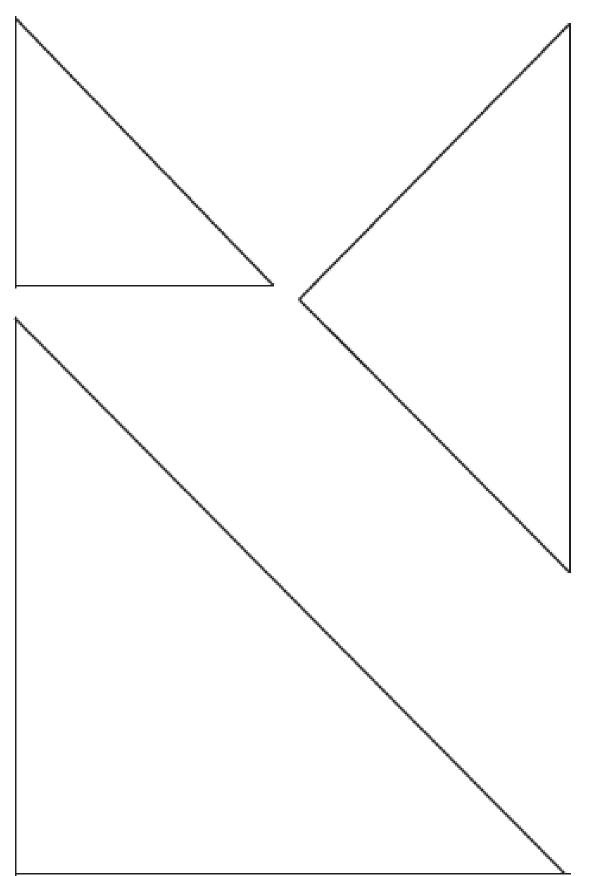
Mini 4-H Before You Sew. Purdue University Cooperative Extension Service.

Square Shape Patterns



Adapted from: Mini 4-H Before You Sew. By: Roylene Laswell. Purdue University Extension Service.

Triangle Shape Patterns





Let's make a delicious and nutritious snack! Make sure to ask an adult for help!

Ingredients: 2 Cups Skim or Low-Fat Milk

1 Cup Diced Fruit such as Apples, Pears, Strawberries, Bananas, Peaches, Berries or Melon

Dash of Ground Cinnamon

Equipment: Blender Liquid Measuring Cups Dry Measuring Cups Measuring Spoons Cups



Procedure:

1. Wash your hands with warm water and soap.

- 2. In a blender, combine milk and fruit.
- 3. Blend until smooth.

4. Pour into cups and top with a dash of ground cinnamon

5.Enjoy!

Can you think of any other fruits you could add to your smoothie?

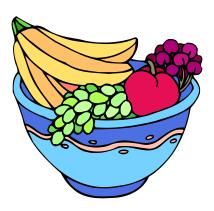




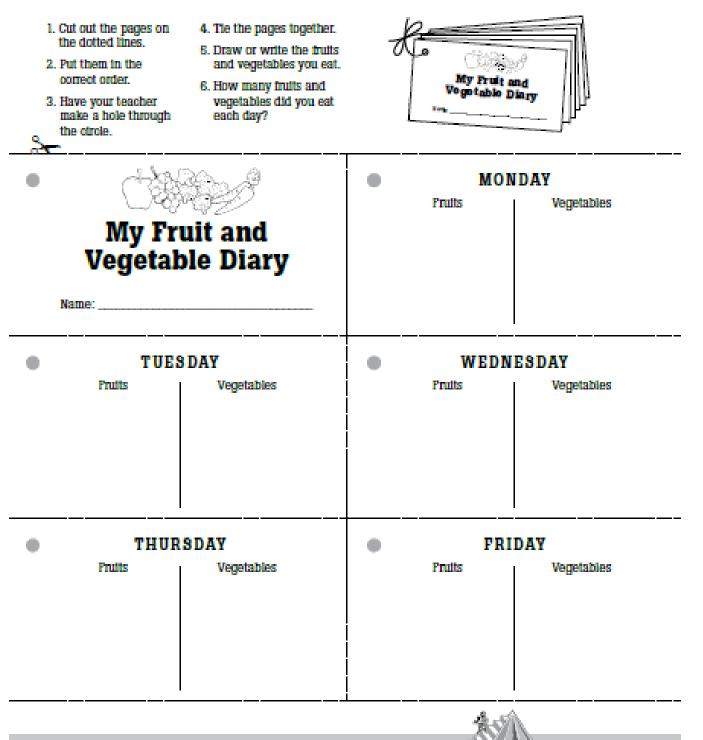
- It is important to get 3 servings of vegetables and 2 servings of fruit every day.
- Complete the My Fruit and Vegetable Diary to see if you can get five servings of fruits and vegetables a day!
- What types of fruits could you try? _____

What types of vegetables could you try? _____

How many serving of fruits and vegetables do you need every day?



Make a Fruit and Vegetable Diary









Construct 2 different paper airplanes to see which one travels farther!

Materials: 8 ½" x 11" sheets of paper Paper Clips Simple Airplane Template and Dart Paper Airplane Template Measuring Tape Pencil

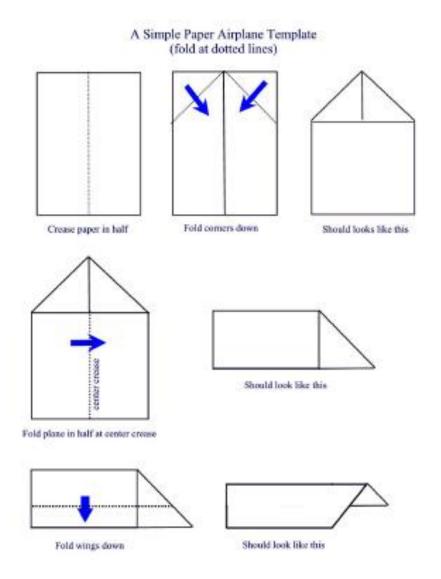
Procedure:

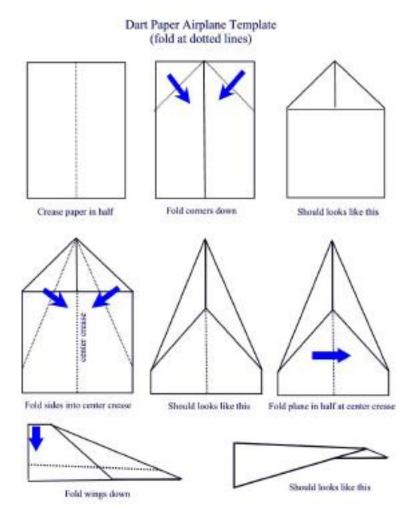
- 1. Construct one airplane using the Simple Airplane Template and one airplane using the Dart Paper Airplane Template.
- 2. Test each airplane by gliding it. Measure the distance they traveled and record them on a sheet of paper. Test each plane three times to compare the results.
- 3. Try adding a paper clip to each plane's nose.
- 4. Retest each airplane by gliding it. Measure the distance they traveled and record them on a sheet of paper.

Which paper airplane design traveled farther? _

Did adding the paper clip change the distance the plane traveled?









Construct string telephones to hear sound travel.

Sound is a vibration moving through air, water, or some other material. Our ear collects these vibrations and turns them into a signal which is sent to our brain.

Materials: 2 Plastic Cups String Paper Clips Sharpened Pencil (For Poking Holes)

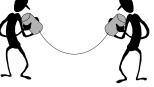


Procedure:

- 1. Carefully poke a small hole in the bottom of each cup using the pencil.
- 2. Tie the paper clip to one end of the string.
- 3. Thread the other end of the string through the hole in the inside bottom of the cup. The paperclip will keep the string from going all the way through the hole.
- 4. Then thread the string through the hole in the second cup, but do it from the outside of the cup.
- 5. Tie the second paper clip to the other end of the string. The paper clip should be inside just like the first cup.
- 6. Then, pull the cups so the string is tight and have another person hold the other cup. Talk to the person while they have the cup held to their ear.

What is the farthest distance you can get the telephone to work?

Try using soup cans or different sized cups to see if your telephones work farther apart.







Materials:

Colored 11" x 17" Paper Tape Ruler Pencil Popsicle Stick Hole Punch 6 to 10 Feet of String or Yarn Plastic Bag Cut in 1" Spiral or Streamers Crayons or Markers

- 1. Place your paper horizontally on the table with the long ends on top and bottom.
- 2. Fold in half taking the left side to the right side. Leave the paper folded.
- 3. From the folded edge at the top, measure in $\frac{1}{2}$ " and mark this spot. From the opposite end at the bottom, measure in 3" and mark this spot. Draw a line to connect these two marks.
- 4. Fold along this line from right to left and then left to right to make a crease for both wings. Pinching the first fold (the straight fold) open up both wings and place a tape along the fold to hold in place.
- 5. Turn your paper slightly to where the point is at top and the angled fold is straight up and down. Take your stick and tape across the top of the wings of the kite.
- 6. Turning the kite over, punch a hole about 1/3 of the way down from the top and about $\frac{1}{2}$ " from the fold. Secure the hole with tape or a paper reinforcement. Tie your string or yarn through the hole. You can tape the end of the string to a popsicle stick for a handle.
- 7. Lastly, cut a tape the spiraled plastic bag to create a tail for your kite. Decorate your kite and take it out to fly.

Nature Rubbings

Living things all have texture. By making nature rubbings you can see things you may not have otherwise noticed. When you make a rubbing of a leaf, the veins, stem and shape stand out. You can also compare the texture of items by making rubbings of them.

Let's observe nature!



Materials:

Newspaper Crayons (With Paper Peeled Off)

Fresh Leaves, Wild Flowers, Weeds, Grasses, Twigs or Reeds

White Paper

- 1. Go on a nature walk and collect some leaves, wild flowers, weeds, grasses, twigs or reeds.
- 2. Spread newspaper onto the work area.
- 3. Place your findings onto the newspaper.
- 4. Place the paper on top of the leaves or wildflowers you would like to make rubbings of.
- 5. Hold the crayon sideways and rub over the objects.
- 6. Watch the leaves and wildflowers appear as you rub the crayon over them.
- 7. Try making different patterns by arranging the materials in rows or circles.
- 8. Now, let's go outside with our paper and crayon and make rubbings from surfaces such as brick walls, tree trunks or anything else with texture!





Growing with Groundwater

Plants need water to grow, and it comes from precipitation and groundwater. We are going to build a miniature terrarium that will allow our plants to grow using groundwater as the source of water.

Time to plant!

Materials:



Clear Jar with Lid Gravel Potting Soil Spray Bottle Filled with Water Plant Seeds (Herbs or Vegetables Grow Quickly)

Large Spoon or Trowel



- 1. Fill the bottom of your jar with 1 to 2 inches of gravel and add about 4 inches of potting soil on top of the gravel.
- 2. Plant the seeds as stated on the package.
- 3. Water generously with a spray bottle. Watch as the water trickles down through the soil and into the gravel layer. The water you see below the surface of the soil is called groundwater and will be used by the seeds.
- 4. Secure the lid and place in a sunny window. Over the next few days watch as the sides of the jar become foggy. This is condensation or clouds. As the water on the walls of the jar becomes heavy it will fall to the ground as rain and will become groundwater again.
- 5. If your jar becomes too foggy, open the lid slightly for a day or two. If you leave the lid off too long, the soil may dry out. If this happens just spray some more water in the jar.
- 6. Watch your seeds grow!



What Do Seeds Need?

Plants just like humans need certain things to survive. The four things plants need to survive are water, sunlight, food and air.

Let's Experiment!

Let's experiment with the needs of seeds. We will try planting seeds and placing one to grow in the light and the other in a dark place.

Which plant do you think will sprout more quickly the plant in the light or the plant in the dark?

What are the 4 things plants need to survive?

Materials:

2 Plastic Cups or Pots Potting Soil Seeds Water



Procedure:

- 1. Fill the plastic cups or pots 2/3 full with potting soil.
- 2. Plant the seeds according to the directions on the package.
- 3. Water the seeds so the soil is damp.
- 4. Place one cup or pot in a well lit area and the other in a dark area without light.
- 5. Water regularly and watch them grow!

What happened to the seed that was placed in the light?

What happened to the seed that was placed in the dark? _____





- http://www.education.com/activity/
 - A great website for activity ideas.
- <u>4-H Mini Before You Sew.</u> By: Roylene Laswell. Purdue University Extension Service.
- <u>Cloverbuds Activities Packet.</u> By: Richard Moreland and Lori K. Hutchins. University of Minnesota Extension Service.
- <u>Cloverbud Program Manual</u>. Montana 4-H.

http://www.montana4h.org/#project:53.

- Science and Technology Activity Guide
- <u>Family Flyers 4-H Aerospace Lesson</u>. ACTas112. University of Wisconsin Extension.
- <u>Fruity Milkshake.</u> Kangaroo Jump 5: Power Up the Day Family Newsletter. Michigan State University Extension
- <u>Growing with Groundwater.</u> The Groundwater Foundation. http://www.groundwater.org/kc/activity4.html
- <u>Lesson 3 Vary Your Veggies and Focus on Fruits.</u> "Make a Fruit and Vegetable Diary." USDA Team Nutrition. MyPyramid.

http://teamnutrition.usda.gov/resources/mpk1_lesson3.pdf

 <u>Operation Espionage</u>. PBS Kids – Zoom Sci http://pbskids.org/zoom/activities/sci/