

Fall



Winter



The Four Seasons

Spring



Summer



**Wandering in the Wonders of Science
Saturday, October 17, 2009
Koinonia Nature Preserve**



**Trail Guide for the Seasons
Taught By:
Miss Fike and Miss Kipfer**

For More Activities after the event on Seasons check out these WebQuests:

Miss Fike's <http://users.manchester.edu/Student/cmfike/MyWebQuest/index.htm>
Miss Kipfer <http://users.manchester.edu/Student/sokipfer/MyWebQuest/index.htm>

Welcome to Koinonia

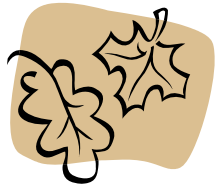


These are the three stops that we will make during our adventure today. Follow along to help us find our way.

An Introduction to the Seasons: Some fun facts

Why do the seasons change?

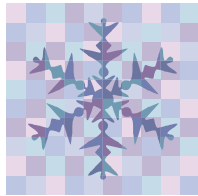
Because of the way the earth moves around the sun. The amount of sunshine changes as the earth travels around the sun. It takes one year for the earth to make one trip around the sun.



Fall

- * The days are shorter and the air is cooler
- * Leaves change colors and fall off the trees
- * Animals begin to store food for the winter.

Winter



- * Days are short, nights are long
- * Many animals hibernate to protect themselves from the cold temperatures.

Spring



- * Air is warmer
- * Days get longer
- * Farmer's plant and animals are born

Summer



- * Plants grow
- * Long days and short nights
- * The sun is the closest to the earth, protect with sunglasses and sunscreen

What is your favorite season?



~Temperature Facts~



What is meant by temperature?

- Temperature is a degree of hotness or coldness that can be measured using a *thermometer*.
 - *Thermometers* measure the level of heat.

Average temperatures for Indiana (these facts are from the year 2007):

- Fall 52 °F
- Winter 32 °F
- Spring 54 °F
- Summer 75 °F

Safety tips:

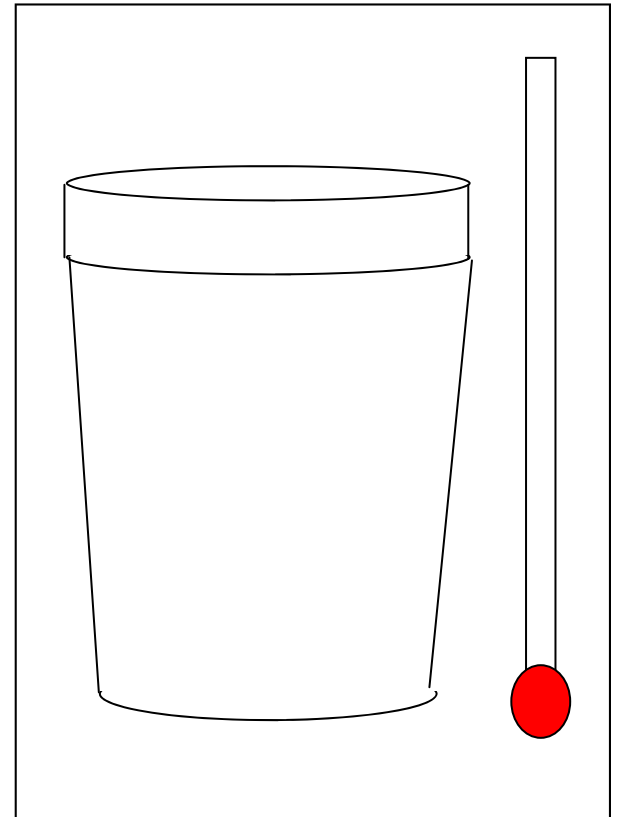
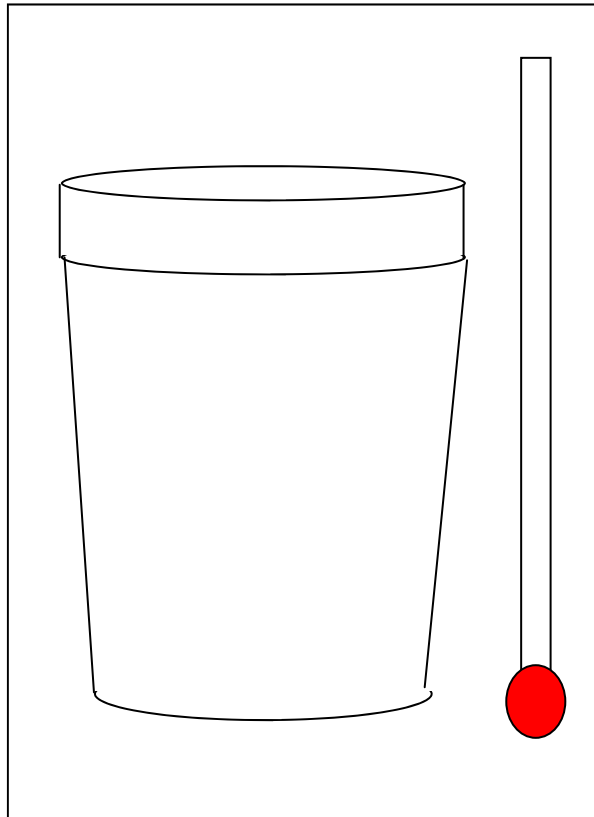
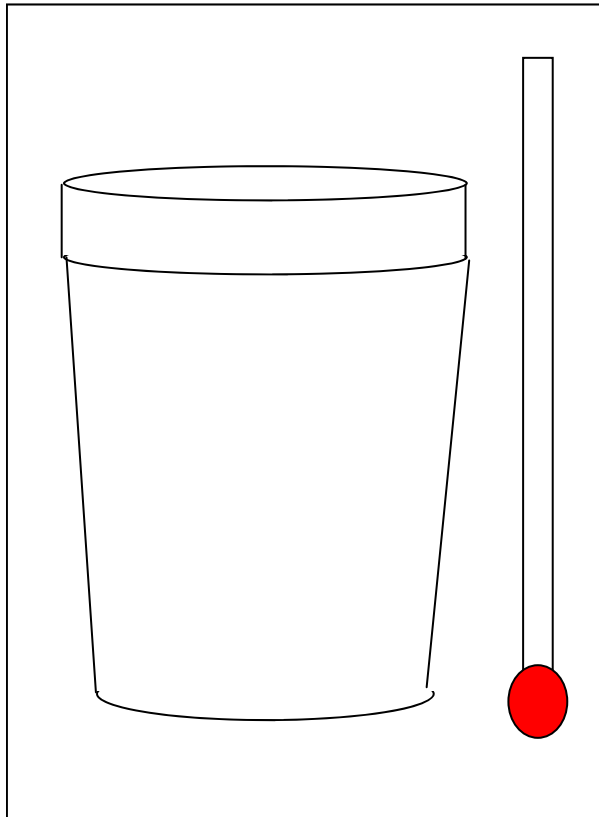
- During the summer time:
 - Extremely hot weather is likely and it can harm the human body. In fact, about 175 deaths in the United States are caused by severe summer heat. So remember to put plenty of sunscreen on and drink lots of water.
- In the winter:
 - Dress in layers. These extra layers will help protect you if you fall off a sled. They will also keep you warm and allow you to stay outside longer, but if your clothes (under your coat) start to feel wet, go inside right away!



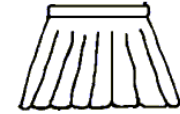
Temperature Observations

Directions:

- Step 1: Take the temperature of one cup sitting on the table and write that measurement under one of the cups on this worksheet.
- Step 2: Write the season (summer, fall, winter, spring) you think it relates to above the cup.
- Step 3: Write three to five adjectives (describing words) for the season you chose.
- Step 4: Repeat steps one, two, and three for the other two cups.



Clothing

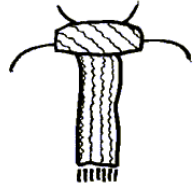


Why do we need to wear protective clothing?
So that our body can maintain a consistent temperature

What would you wear in particular seasons.

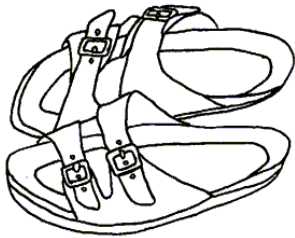
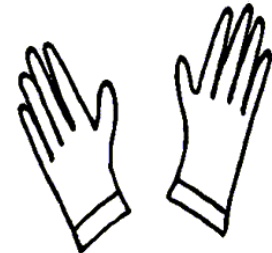
Fall –

- ~ light coat
- ~ closed toed shoes
- ~ long sleeves / sweatshirt
- ~ pants



Winter –

- ~ winter coat
- ~ hat
- ~ gloves
- ~ scarf
- ~ boots

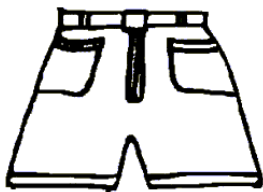


Spring –

- ~ raincoat
- ~ rain boots
- ~ umbrella

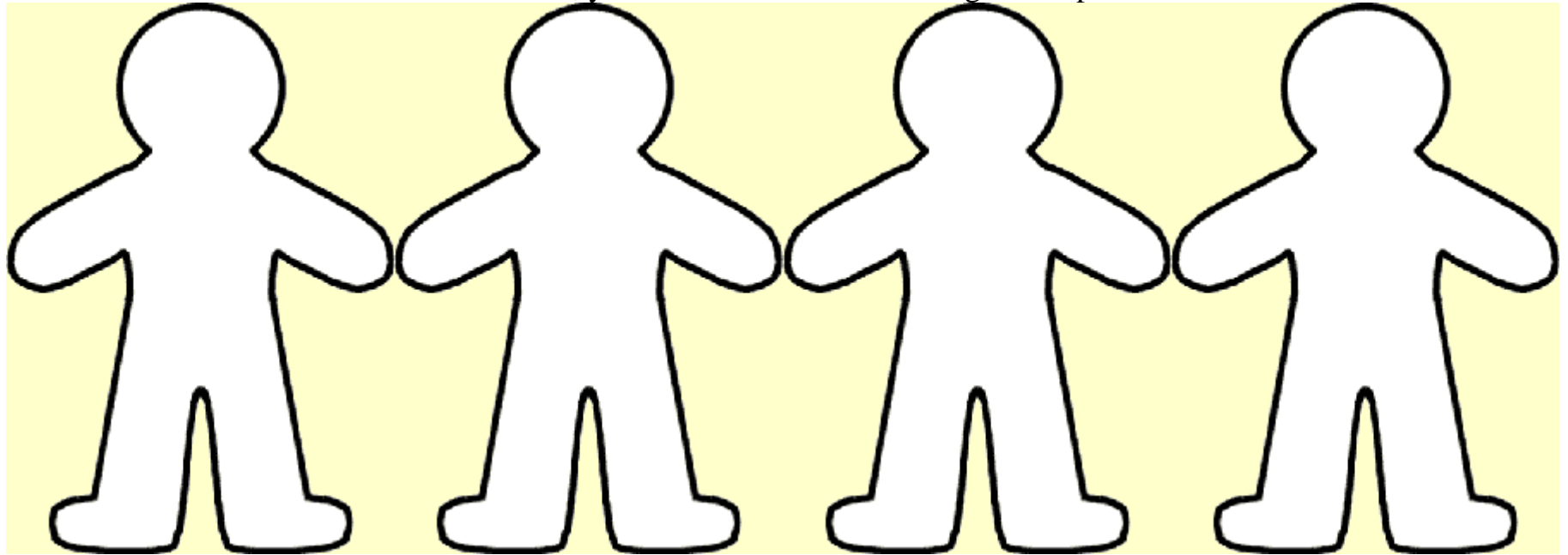
Summer –

- ~ sandals
- ~ sunglasses
- ~ sunscreen
- ~ shorts
- ~ tank tops



Dressing for the Weather!!

Directions: Make a list of the items that you added to your person for each season.
If time allows, you can also draw the clothing on the person.



FALL

WINTER

SPRING

SUMMER



~Shelter Facts~



What to do when building a shelter:

- Step 1: Look at the land around you.
 - Try and find rocks and trees that are nearby.
 - Trees can supply branches for the shelter, as well as protect from rain and snowfall.
 - Do not choose a building spot by a creek, river, pond, or lake. Flooding could occur when it rains.
- Step 2: Finding materials to build
 - Look for any of the following:
 - Tree branches
 - Leaves (can help protect from the wind)
- Step 3: Begin building!
 - There are many different ways to build a shelter:
 - Look at the 4 corners of this paper- these are ALL different types of protection

Remember to:

- Keep it small, so that it does NOT take long to build and you can stay warmer longer.
- Make a door!
 - It will help you stay warm and dry.



Credits

Opening Book

- [Amelia's Road](#) by: Linda Jacobs Altman

Pictures of Seasons

- <http://images.google.com/imghp?hl=en>

Seasons Research

- [Seasons](#) by: Peggy Gavan

Temperature Research

- <http://www.weatherwizkids.com/weather-temperature.htm>
- <http://74.125.93.132/search?q=cache:238G7vTXv9MJ:hms.pnl.gov/seamean.htm+average+seasonal+temperatures&cd=6&hl=en&ct=clnk&gl=us>

Temperature worksheet

- <http://www.k5geosource.org/activities/invest/weather/invest2/q1/print.html>

Temperature Pictures

- <http://www.terraworld.net/lions/news/ClipArt-ColdThermometer.gif>
- <http://www.thebuttercompartment.com/wp-content/uploads/2009/04/hot-sun-thermometer.jpg>

Clothing Research

- List created by: C. Fike

Clothing Pictures

- <http://images.google.com/imghp?hl=en>

Shelter Research

- http://www.ehow.com/how_2384326_build-fast-shelter-wilderness.html

Shelter Pictures

- <http://www.barkingmadsurvival.co.uk/images/shelter.jpg>
- <http://survivalpreps.blogspot.com/2008/01/backyard-bushcraft-shelter-making.html>
- http://thruhikecdt.blogspot.com/2008_09_01_archive.html

Map

- Pictures taken by: C. Fike