

SUMMER SCIENCE!

Our first unit in 7th grade Science will be on scientific classification, and each student will be required to complete an insect collection or wildflower collection, due September 25th. You should start your collection during the summer, so you can watch for specimens when you are travelling, camping, and hanging out at the lake. You may choose either insects or wildflowers, and I am enclosing directions for both. More information can be found on Mrs. M's Science page on the St. Matt's website.

If you have questions during the summer, or just want to send me a picture of a cool flower or insect, my # is 406 261 0153.

Enjoy the rest of your summer- see you in September!

- Mrs. Matulevich



Tips for success:

1. Read the directions
2. Take photos of wildflowers before you pick them
3. Pin insects in a timely manner. If you wait too long they will be too fragile.

Insects

Each collection must contain 20 species. Extra specimens (identified) will earn extra credit.

All species must be identified with the following information:

- Common name
- Scientific name (also known as the Latin name)
- Place collected
- Date collected

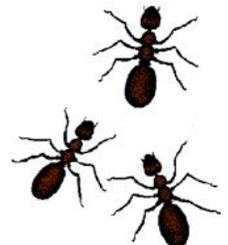
If you can't find the Latin name for each specimen don't sweat it- we will work on those in class this September, **BUT PLEASE WRITE DOWN PLACE AND DATE COLLECTED! DON'T TRY TO REMEMBER THIS LATER! Get Common name** if you can.

These collections are due September 25. This gives you plenty of time to work on them- however keep in mind that as fall and cold weather approaches many of the insects and flowers will begin to disappear, so it is important that you begin as soon as possible.

Insect Collection Materials:

You will need a box with a lid for your collection. A large shoebox will do- even better are the large flat boxes with lids that attach on one side, like a pizza box. Decorate the lid- be sure to include your name and "7th Grade Science". Cut a piece of foam to fit the bottom- Styrofoam, foam board or the blue foam builders use will all work. This is to pin the insects to. You will also need:

- A few small jars with screw on lids for killing jars. Plastic containers will also work, like margarine tubs, etc. as long as they have tight fitting lids. 2 or 3 will be plenty.
- Cotton balls
- Non-acetone nail polish remover- this will provide the chemical fumes that kill the bug.
- long pins- quilting pins will work, get some as thin as you can find. Entomology pins are better- you can purchase them from Charlie in the school office for \$1.00 a pack of 25.



Procedure: First catch an insect. (Insects have 6 legs- spiders are NOT insects!) Catch mature insects only- not larvae (no caterpillars!) Put the insect in one of the jars, with a cotton ball soaked with finger nail polish remover. Close the lid tightly. Leave the jar for several hours to overnight, until the insect is dead. Another method for killing the insect is to place the killing jar in the freezer for at least 24 hours.

Note where and what date the insect was collected.

When the insect is dead, remove it from the jar, and carefully put a pin through the THORAX - (the section behind the head) just barely to the right of the midline. Try to do this soon after the insect is dead- if you wait days or weeks the insect may dry out too much, and be too brittle to pin. If this happens, refer to the relaxer method, used for spreading butterfly wings, below.

For more information check the 7th grade page on Mrs. M's Science page on the St. Matt's webpage. (www.stmattsaints.org- click on Students, then on Mrs. M's Science Page

Make a label on a small piece of paper and label the insect's common name if you know it, and where and what date it was collected. If you are able to identify the insect, put the scientific name on the tag. If not, we will work on identifying the insects in class this September. Pin the tag directly below the insect in the box. Pin a moth ball in the box to keep other bugs from eating your collection. If your insects are large, it is ok to use 2 boxes.



Moths and Butterflies need to have their wings spread- after you pin the body, use strips of paper to hold the wings in a spread-out position. Leave for 24 hours, when dried they will stay. Sometimes an insect gets too dried out to pin or spread without damaging the specimen. If this happens, turn one of your killing jars into a relaxing jar by putting a slightly damp (with water) cotton ball in the jar instead of the nail polish remover. Place the (dead) insect in the jar, and let it sit for about 24 hours (not longer or it could mold). Remove from jar and pin or spread wings.

Please don't wait until school starts to work on this, or you will have a hard time finding 20 specimens.

For more information check Mrs. M's Science page on the St. Matt's page. (www.stmattsaints.org- click on Students, then on Mrs M's Science Page). Or call me at (406) 261-0153 or email tech@stmattsaints.org

Insect Collection Rubric

Box Decoration	Creative, includes name and 7 th grade Science	20 pts
20 insects	Must be 20 different species, additional species worth extra credit (up to 12 pts)	20 pts + 2 each additional insect
Correctly Pinned	Pin through thorax, wings spread if appropriate	20 pts
Identification	Tags have all information	20 pts
Neatness, Organization	Tags readable, insects organized	20 pts

Wildflowers

Each collection must contain 20 species. Extra specimens (identified) will earn extra credit.



All species must be identified with the following information:

- Common name
- Scientific name (also known as the Latin name)
- Place collected
- Date collected



If you can't find the Latin name for each specimen don't sweat it- we will work on those in class this September, BUT PLEASE WRITE DOWN PLACE AND DATE COLLECTED! DON'T TRY TO REMEMBER THIS LATER! Get Common name if you can.

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Wildflower collection:

You will need a scrapbook style notebook for your wildflower collection. Not a fancy one, just a cheap scrapbook with plain paper pages, sheet protectors are nice. A 3-ring binder will work, with heavy paper. Decorate the front cover - be sure to include your name, and "7th Grade Science"

You will also need :

- A large book- like a phonebook or catalog to press the specimens
- a flower press is optional
- clean white typing paper
- Clear Packing tape to attach dried sample to scrapbook page.

Procedure: IMPORTANT!- TAKE A PHOTO OF THE FLOWER BEFORE YOU COLLECT IT! Collect flower and its leaves. Specimen must be from a Montana Wildflower- not roses and tulips from your backyard.

Fold a clean white piece of typing paper in half, (or use two sheets if your specimen is large) and flatten the flower and leaves as much as possible inside.

Write the date of collection, and location, and common name if you know it on the piece of paper. Insert in a book (it is a good idea to use a phonebook or catalog, NOT a priceless book- there could be some staining or damage to the pages) Then place other books on top of the pressing book, to add weight.

It is important to press each specimen until they are dry- this will probably take several days. When completely dry, carefully mount in your scrapbook, cover with

the clear packing tape. You just need to cover the specimen, not the whole page. Several pieces of tape may be needed. Make sure you add the date and location of collection, and common name to the page.

If you don't know the scientific name, leave it blank and we will be working on that in class.

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Wildflower Collection Rubric

Cover Decoration	Creative, includes name and 7 th grade Science	20 pts
20 wildflowers	Must be 20 different species, additional species worth extra credit (up to 12 pts)	20 pts + 2 each additional species
Correctly pressed, mounted	Pressed and dry, Mounted neatly one species per page	20 pts
Identification	Identified with all information	20 pts
Neatness, Organization	Identification readable, pages organized	20 pts