Greetings kids, parents, grandparents, guardians, friends and neighbors!

Welcome to issue 27 of Minis at Home newsletter. Each newsletter features a special theme and offers pertinent information, a craft, and recommended reading. Grownups: please work on projects together with your children. Your pARTicipation is important! We will offer hints and tips for ways to create art as a twosome or a family.

This week’s theme = Butterfly Lifecycle

Springtime is full of new life and busy workers! Flowers and trees blossom; bees pollinate plants, collect nectar and make honey; farmers plant seeds to grow the food we eat; and birds build nests in which to lay their eggs. Spring is also a time when creatures come out of hibernation, migrate north and begin their lifecycles. One of life’s beautiful creatures, the butterfly, begins its amazing lifecycle journey in the spring. The butterfly has one of the most dramatic transformations—or changes—of any creature in the world. This change is called metamorphosis. Like bees (which we talked about last week), butterflies are very important pollinators that help plants and flowers grow.

There are over 180,000 different kinds of butterflies all over the world. Butterflies are found on every continent except Antarctica.
The smallest butterfly is the **Western Pygmy Blue** and is the size of your thumbnail. The largest is called the **Queen Alexandra's Birdwing** from Papua New Guinea and is a foot long!

Butterflies are **insects** with 6 legs, 4 wings (a set of forewings and a set of hindwings), a pair of antennae, and 3 parts to their bodies. Their wings are made up of tiny **scales** and can be colorful with **symmetrical** patterns and designs. They flap their wings 5 times per second. That's pretty fast! Can you try flapping your arms 5 times really fast? Have your grown up time you, if possible, to see how fast you can do it. Butterflies taste their food with their front feet and then drink flower nectar using their tongue. Can you taste with your feet? What if you dipped them in a bowl of ice cream? (Best not to try!!)

Butterflies start out in life as tiny eggs that are laid by an adult female butterfly on leaves or stems. The female usually chooses the same leaves or stems that caterpillars love to eat, so when the baby caterpillars hatch, they can start munching right away. The eggs hatch into larvae (baby caterpillars) that eat their way out of their egg shells. These caterpillars spend several weeks eating and sleeping—just as you did when you were a baby. They feast and feast on the leaves where they were born until they are full and fat. While they are growing, their skin becomes too tight, so they **molt** (or shed) their skin. The caterpillars grow a new skin 4 or 5 times until they are fully grown. When fully grown, they spin silk, much the way a spider spins a web, and use this silk to attach themselves to a twig or stick or in the nook of tree bark. They then grow a hard protective cover called a **chrysalis** over their entire body. This cover protects the caterpillar from rain and wind because it is a hard shell. It also helps them to camouflage with their surroundings. Safe inside the chrysalis, the caterpillar **pupates** or changes into a butterfly. This usually takes about 10 to 14 days. When the
metamorphosis is complete, the chrysalis splits open and the butterfly comes out, but it can’t fly right away. Its wings first need to dry out and gain strength. The butterfly stays attached to the chrysalis and pumps a liquid called hemolymph (similar to our blood) into its wings, which helps the wings stretch out and become strong. This takes anywhere from 30 minutes to two hours. Then the butterfly can fly away! It is now ready to eat nectar and find a mate so that a brand-new generation of butterflies can begin its amazing lifecycle.

Activity: Craft

Make a Butterfly Lifecycle!

Materials:
1 Paper plate
Green paper scrap
Small white beans, tissue paper or play dough (to form butterfly eggs)
4 Green pom-poms or cotton balls painted green
2 Small googly eyes
1 White coffee filter or small piece of paper towel
1 Small piece of green or brown tissue paper
1 Small twig from outside
Aleene’s Tacky Glue
Water-based markers
Spray bottle with water
1 Pipe cleaner

Procedure:

Draw lines on the paper plate, dividing it into quarters. Count all the sections on the plate with your grownup. Have your grownup label each section with a number 1 – 4 and the corresponding name of each lifecycle phase (Eggs, Caterpillar, Chrysalis, Butterfly)

Assemble each lifecycle phase:

Cut out 2 leaf shapes from green paper (or color white paper green)

Use small white beans for the eggs, or make your own, using bits of play dough or tissue paper (This is great for fine motor development)

Glue eggs onto one leaf
Make your caterpillar by gluing the pom-poms or cotton balls together. Add googly eyes to the head. Take the other leaf and cut out a section to look as if the caterpillar has taken a bite out of it.

Take a small piece of green tissue paper, and roll it up into a chrysalis shape, twisting the ends.

Glue one end of the chrysalis onto the twig.

Color the coffee filter or paper towel with your favorite markers, leaving some white spaces. (Be sure not to use colors that will turn brown or black when mixed). Spray the filter with water so that the marker colors bleed.

Allow to dry, trim to desired butterfly shape, and tie a pipe cleaner around the center of the tissue to create butterfly wings and antennae.

Glue each life cycle onto its own section on the plate.

In addition to making your paper plate lifecycle, you can also make many larger butterflies with coffee filters. Experiment with different colors and combinations and remember to try to make your coloring symmetrical! For larger butterflies, don't trim the coffee filters. You can hang butterflies using fish line and tying it to the pipe cleaners.

**Activity: Move and Sing**

**Caterpillar** *(original source unknown)*
*(sung to* She'll Be Coming Round the Mountain*)

There's a tiny caterpillar on a leaf, wriggle, wriggle! *(wriggle your body)*
There's a tiny caterpillar on a leaf, wriggle, wriggle!
There's a tiny caterpillar, a tiny caterpillar
There's a tiny caterpillar on a leaf, wriggle, wriggle!

(repeat each verse with)
There's a hungry caterpillar on a leaf, munch, munch! *(pretend to chew and munch)*
There's a chrysalis sleeping on a leaf, shh, shh! *(finger to mouth as if shushing)*
There's a pretty butterfly flying high, flutter, flutter! *(Flutter with your arms)*
The Fuzzy Caterpillar
(Sung to *Itsy Bitsy Spider*)

The fuzzy caterpillar
Was curled up on a leaf,
She spun her little chrysalis
And then she fell asleep.
While she was sleeping
She dreamed that she could fly,
And later when she woke up
She was a butterfly!
Literacy: RECOMMENDED BOOKS

Snuggle up in a big comfy chair and read together

*The Very Hungry Caterpillar* by Eric Carle
*A Butterfly Is Patient* by Dianna Aston
*Waiting for Wings* by Lois Ehler
*10 Little Caterpillars* by Bill Martin, Jr.
*From Caterpillar to Butterfly* by Deborah Heiligman
*Catterfly Is Born* by Alma Hammond

See you next week with issue 28 of *Minis at Home*!

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