**Drink Like a Butterfly!**

**Objectives**: The objectives of this lesson are for the children to experience how butterflies drink nectar from flowers.

**Introduction**: I will introduce this lesson by talking to the children about how most butterflies use nectar from flowers as their main source of food.

**Lesson**: We will do an art activity to illustrate this concept. We will use plastic cups with a straw inserted through a flower. They will tape the flower over the top of the cup to cover the opening. The children will make the flowers and drink through the flowers to get a sense of how butterflies drink nectar. The straw represents the long proboscis that butterflies have in their mouths and use to drink the nectar of flowers. After this activity, I will ask the children if they have ever seen butterflies in a garden, and they have noticed what they do. I will ask them if they have noticed other insects visiting flowers.

**Materials**: The materials from this lesson are plastic drinking cups, straws, construction paper for flowers, scissors, tape, and water.

**Evaluation**: I will evaluate this lesson by discussing how butterflies drink with the children. I will ask them to draw a picture and write a couple of sentences about what they understood about this experience.

**Butterfly from a Chrysalis**

**Introduction**: To introduce this lesson we will talk about what symmetry means. We will look at objects that have symmetry such as leaves, shells, and butterfly wings.

**Lesson**: I will give each child a butterfly shape. I will ask them to put whatever colors of paint they want in any design on one side of the butterfly. They will then fold the butterfly in half and gently rub the paper. When they open it up again, the same pattern will be on both sides of the butterfly. I will explain that this is an example of symmetry in nature. Students will then paint a toilet paper roll to look like a chrysalis. When the butterfly is dry they will glue it onto a Popsicle stick. When both are dry they can put the butterfly into the toilet paper roll. When they pull it out, it will be as though the butterfly is breaking out of the chrysalis.

**Materials**: Butterfly shapes cutouts, paint, brushes, Popsicle sticks, toilet paper rolls

**Self-Evaluation**: I will evaluate this lesson by the discussion we have after the art project. I will also ask the children to think of other objects in the classroom and nature that have symmetry, and see what they know.

**The Lifecycle of a Butterfly – Part 1**

**Objectives**: The objectives of this lesson are that the children will discover through reading and discussion, the life cycle of the caterpillar.

**Introduction**: To introduce this lesson, we will do the first and second steps of the K-W-L chart. This will help me to learn what the children already know about the life cycle of the butterfly, and what they would like to learn from this lesson

**Sequence of Activities**: After working on the first two parts of the K-W-L chart, we will read and discuss books on our topic. I will use a lot of open-ended questions to assess their knowledge and to help them to think and focus.

After we have read and discussed the books, we will write on our chart what the children have learned. If the children still have unanswered questions, we will refer to our books and find the answers. I will put our chart on the wall where the children can refer to it. The books we read will also be available in the same area in case the children want to learn more later.

**Materials**: From Caterpillar to Butterfly, Caterpillar Caterpillar, Discovering Butterflies, Amazing World of Butterflies and Moths, The Very Hungry Caterpillar, Waiting for Wings, Ten Little Caterpillars, and paper for K-W-L chart.

**Self-Evaluation**: I will evaluate the children’s learning by reviewing the K-W-L chart with them at the end of the unit to see what they have learned and to answer and questions they still have.

**The Lifecycle of a Butterfly – Part 2**

**Objectives**: The objectives of this lesson are that the children will learn the meaning of the word metamorphosis, recognize the stages in a butterfly’s life cycle, be able to classify butterflies by type, color, and food, and learn to ask questions to further their knowledge.

**Introduction**: To introduce this lesson, I will share the life cycle cards with the children. We will discuss the stages and I will introduce the term metamorphosis.

**Lesson**: I will give them a paper that has all the life cycle names along with some facts about that stage. We will talk about the stages, and I will make sure they understand, and answer any questions. I will give them a worksheet where they will draw and label the stages of the butterfly, and one fact about that stage. After this activity, we will watch a video called Life Cycles of Butterflies, so the children will have a good visual representation to learn from.

**Materials**: The materials used will be caterpillar life cycle stage cards, butterfly life stages information paper, butterfly life cycle worksheet.

**Self-Evaluation**: I will evaluate this lesson by looking at the life cycle worksheets that the children work on, and asking questions to assess their understanding. I will also ask them to discuss with the class what they have learned from this lesson.

**Extension**: Paper plate butterfly lifecycle art activity

**Fun Butterfly Facts!**

We have gathered some strange butterfly facts to share with you. Amaze your friends! Enjoy!

1. The top butterfly flight speed is 12 miles per hour. Some moths can fly 25 miles per hour!
2. Monarch butterflies journey from the Great Lakes to the Gulf of Mexico, a distance of about 2,000 miles, and return to the north again in the spring.
3. The Morgan's Sphinx Moth from Madagascar has a proboscis (tube mouth) that is 12 to 14 inches long to get the nectar from the bottom of a 12 inch deep orchid discovered by Charles Darwin.
4. Butterflies range in size from a tiny 1/8 inch to a huge almost 12 inches.
5. Some moths never eat anything as adults because they don't have mouths. They must live on the energy they stored as caterpillars.
6. Many butterflies can taste with their feet to find out whether the leaf they sit on is good to lay eggs on to be their caterpillars' food or not.
7. There are more types of insects in one tropical rain forest tree than there are in the entire state of Vermont.
8. Many insects can carry 50 times their own body weight. This would be like an adult person lifting two heavy cars full of people.
9. Butterflies and insects have their skeletons on the outside of their bodies, called the exoskeleton. This protects the insect and keeps water inside their bodies so they don’t dry out.

**Butterfly Unit – Literacy Activities**

1. Find a variety of butterfly books to include in the Reading Centre. Include picture books, non-fiction texts, and information cards.
2. Alphabet game – print off each letter of the alphabet and glue them onto butterfly (or caterpillar) cut-outs. Have students race to put the letters in alphabetical order. You can also take one or two letters out and have the students figure out which ones are missing.
3. Uppercase/lowercase – write an uppercase letter on one side of a butterfly. Students will then practice writing the lowercase version of that letter on the other side of the butterfly. You can also do the opposite. You write the lowercase and they write the uppercase.
4. Spelling game – how many words can you make from the letters in BUTTERFLY or CATERPILLAR? Print out the letters of the word of your choice and glue them onto butterfly or caterpillar shapes so the students can physically maneuver the letters around. They can do this activity alone, with a partner, or in a small group. They can record their answers on a worksheet or in a journal.
5. C is for Caterpillar – Cut out a large “C” from construction paper. Glue the big “C” to another piece of construction paper. Decorate the “C” to look like a caterpillar using pompoms and glitter. Use a small piece of pipe cleaner for antennae and googly eyes.
6. Caterpillar names – cut out circles from coloured paper. Cut out enough circles for each letter in your name. Cut out one smaller circle for the caterpillar’s face. Write one letter in your name on each circle. Tape or glue the circles in a line to look like a caterpillar. Post all students’ caterpillars around the room.
7. Reader’s Theatre – find a reader’s theatre script to use for the butterfly lifecycle.

http://www.nald.ca/library/learning/nwt/family\_tutoring/readers\_theatre.pdf

1. Journal topics
	1. My life as a caterpillar
	2. My pet butterfly
	3. If I were a butterfly
	4. The very hungry day

**Butterfly Unit – Math activities**

1. Draw a butterfly/caterpillar Dice Game – This game can be played alone or in a group of up to three or four people. First player rolls the dice. The number they land on corresponds to a part of the butterfly/caterpillar that they will draw. Whoever draws a completed first butterfly/caterpillar wins. If you don’t want to have one specific winner, you can time the students and see how long it takes for everyone to complete their butterfly/caterpillar.

 http://storiesandchildren.com/the-very-hungry-caterpilliar-game/

* 1. This game can also be played with a colouring sheet that has a picture of a butterfly or caterpillar on it. Each section of the butterfly/caterpillar has a number on it. The dice corresponds to that number.
	2. This game can be made more complicated by making the numbers higher and having the students add another dice. When they roll the dice, they have to add or multiply the numbers together to get their answer.
1. Match the butterfly wings – print off pictures of butterflies and cut them in half. Have students find the matching pairs. You could also have students draw and colour their own butterflies, cut them in half, and put them all together. This butterfly pieces can be put together in the math centre for all children to play with.
2. Symmetry activity: draw the other side of the wing. Provide students with a butterfly on a large piece of paper. Decorate one of the butterfly’s wings. The students will have to duplicate what you have already drawn.
3. Count the dots – draw different shapes of dots on the wings of butterflies. Have the students count all the dots, all the small dots, all the large dots, all the red dots, etc.
4. Butterfly dot addition/subtraction – draw dots onto the wings of a butterfly. Use these butterflies for addition/subtraction questions.
5. Butterfly dot-to-dot – this can be found online for any primary level. You can make it more complicated by increasing the numbers the dot-to-dot goes up to.

**Butterfly Unit – Art activities**

1. Popsicle stick butterfly/caterpillar – get ten Popsicle sticks and put a piece of tape on both sides of two of them to hold them together side-by-side. This will be the body of the caterpillar. Tape another Popsicle stick on either side of the body, putting the tape on the backside of the caterpillar’s body. Attach three more sticks (three on each side), alternating the sides you put the tape on (front and back). Draw butterfly wings big enough to fit on the four outside sticks. Glue pompoms down the body of the caterpillar and glue a pipe cleaner for the antennae. Now you can fold the wings under the body of the caterpillar for the caterpillar and spread them out for the butterfly.

http://www.daniellesplace.com/html/caterpillarcrafts.html

1. Coffee filter butterflies – for the basket-type coffee filter: fold the filter in half. For the cone-type coffee filter: cut the stitched edge off and cut down the other edge so you can open up the filter later. Have the students draw designs on the one side of the filter with markers. Afterwards, spray the filter with water from a fine-mist spray bottle. Allow the filter to dry. For the basket-type filter, use a pipe cleaner to bunch the filter in the centre to make it look like a butterfly. For the cone-type filter, open up the filter and carefully wrap a pipe cleaner around the body (without bunching the filter), twist it at the top while leaving room for antennae.
2. Snack bag butterflies – fill a snack bag with something colourful (squares of paper, jellybeans, paper cut-out shapes, shredded paper, etc.) Spread the contents evenly into each corner of the bag. Then, decorate a clothespin like a caterpillar. Use the clothespin to bunch the bag in the centre to make the wings. Clip a pipe cleaner into the clothespin. You could also use a pipe cleaner if you don’t have any clothespins.

http://www.jugglingwithkids.com/2012/01/butterfly-snacks.html