

Topic: Butterflies

CONTENT GOALS: The students will learn about the parts of a butterfly and the life cycle of the butterfly.

PROCESS GOALS: Students will learn as a whole class. They will cooperatively participate in a small groups guided by teachers, librarian and CIT. They will take the information learned through research and prepare and present it to their peers and 5th grade buddies. They will also evaluate both the process and final outcome.

NISD KINDERGARTEN ACADEMIC PERFORMANCE STANDARDS ADDRESSED THROUGHOUT PROJECT ARE THE FOLLOWING:

Language Arts:

Students will hear several big books, stories and videos on Butterflies. They will respond critically to them, and in the process, address the following NISD Standards and TEKS:

NISD Standards:	TEKS:
III. C	K.1 (a, d)
VI. B, C, D, E, J	K.11 (a, c)
V. B, C, D, F, G, H	K.12 (a, b, c, d)

Students will present research findings to peers and buddies.

NISD Standards:	TEKS:
VI. A, F, G	K.3 (a, c)
X. B, C, D, E, F	K.4 (c)

Student writing will address, in the process, the following standards:

NISD Standards:	TEKS:
VII. A, B	K.14 (a, b, c, d, e)
VIII. A, B, C, D, E, F, G	K.15 (a, b, c, e, f)
IX. A	K.16 (a, b)

Mathematics:

Students will apply knowledge of:

NISD Standards:	TEKS:
II. B	K.1 (a, c)
IV. B	K.2 (b)
VI. C	K.6 (a)
	K.11 (c)

Science Standards :

Students will expand their knowledge of butterflies through the study of the parts of a butterfly and the life cycle of the butterfly.

NISD Standards:	TEKS:
The Life Cycle Standards addressed are	K.2 (a, c, d, e)
III. B.	K.6 (c)
	K.7 (d)
	K.8 (a)

Social Studies Standards:

Students will research butterflies using these standards:

NISD Standards:

VIII. A.

TEKS:

K.15 (a, b, c, d)

PROJECT PLAN

PREPLANNING: Kindergarten teachers need to check into ordering of caterpillars at least 2 months before the project begins. Teachers, librarian, and CIT need to meet at least a month to two weeks before the project start date to create a schedule, decide how students will record and track information, finalize project activities, and review project expectations. Project will be implemented in May 2003.

WEEK 1: FOCUS ON THE BUTTERFLY LIFE CYCLE AND PARTS OF A BUTTERFLY

Engagement—*Kindergarten teachers* will introduce live caterpillars to the students. Discussion will be prompted with students and students will formulate hypotheses on what the caterpillars will become.

Formulation Of Questions—Based on the initial discussion above, *kindergarten teachers* will model and help students generate questions, which will form the foundation of the students' research.

Research— Students from each class will be divided into 3 groups. Each group will rotate through 3 areas of research led by 3 different facilitators over 3 days. The expected allotment of time per group will be 30 minutes. The *librarian* will lead a group in research by reading non-fiction selections. These will target information on parts of the butterfly and the butterfly life cycle. The *kindergarten teachers* will read fiction literature selections to their students and show the students butterfly sequence cards that will contribute to the students' research. The *CIT* will lead exploration through the use of Internet sources. The district's science curriculum will be used as the basis for this learning.

Extended Learning—The *music teacher* will teach movement that corresponds with the life cycle of a butterfly during music classes. The *art teacher* will teach symmetry that corresponds with the parts of a butterfly during art class.

The knowledge gained this week will be used to complete the final products and encourage the sharing that will take place during week 2.

WEEK 2: PRESENTATION OF ACQUIRED INFORMATION

Final Products—*Kindergarten teachers*, the *librarian*, and the *CIT* will assist students in creating their final products to be shared. All students will create the following final projects:

- ✧ Students will create a class book comparing and contrasting a kindergarten student to a butterfly based on The Very Hungry Caterpillar by Eric Carle. It will be named The Very Hungry Kindergartener.
- ✧ Students will create a model of the life cycle of a butterfly using construction papers pieces.

✧ Students will create a slide show showing the life cycle of a butterfly in the computer lab using KidPix 3.

Sharing—An invitation will be given to the 5th grade buddies to view the projects. A third of each class will present one of the projects to the 5th grade buddies (i.e., one-third will present the class book, another third will present the construction paper model and another third will present the slide show).

PROJECT EVALUATION

Kindergarten teachers will use a rubric to evaluate the cooperative learning in each group and also individual student mastery of the information. The students will be given a rubric to complete evaluating their own feelings on the project, their own learning, and their performance in delivering their final product to their 5th grade buddies. The project team (*kindergarten teachers, librarian, and CIT*) will meet after the completion of the project to reflect on and revise the project, if needed, for the next year.

ENRICHMENT ACTIVITIES

Center or classroom activities to enrich research and learning over the 2 weeks may consist, but are not confined or limited to the following (see attached forms):

1. Grow and hatch butterflies
2. KWLS chart
3. Caterpillar measuring
4. Caterpillar to Butterfly sequence cards
5. Acting out The Very Hungry Caterpillar
6. Draw and label the parts of a butterfly
7. Magic School Bus video on butterflies
8. The Very Hungry Caterpillar listening station