

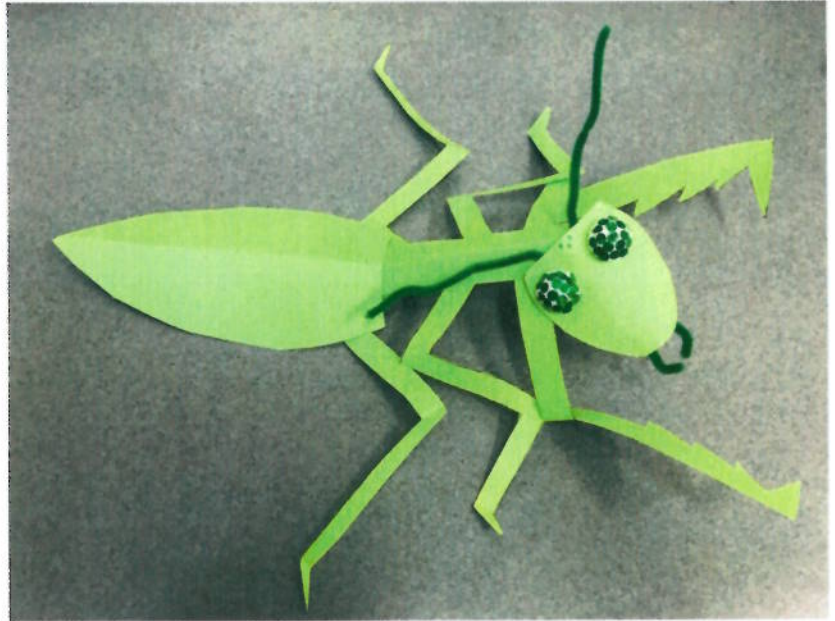
Make a Praying Mantis

Subjects: Science and Art

Objectives: Students will learn the names of insect body parts and construct a praying mantis out of paper and craft materials.

Materials:

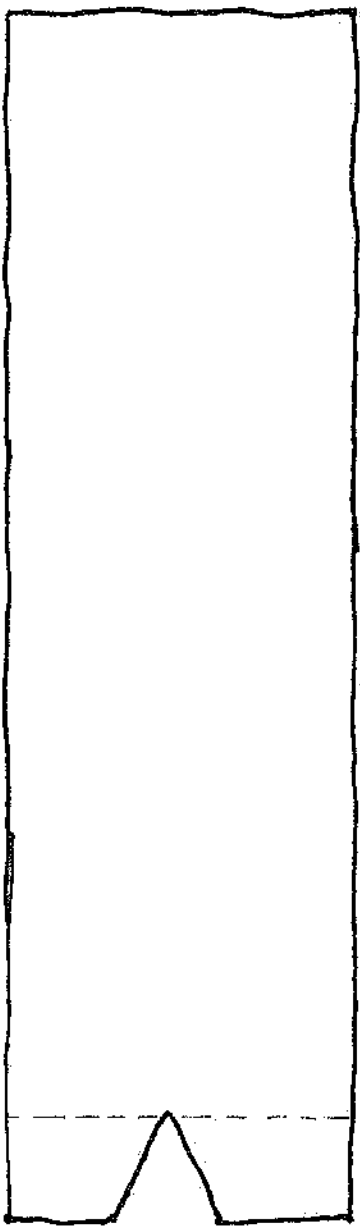
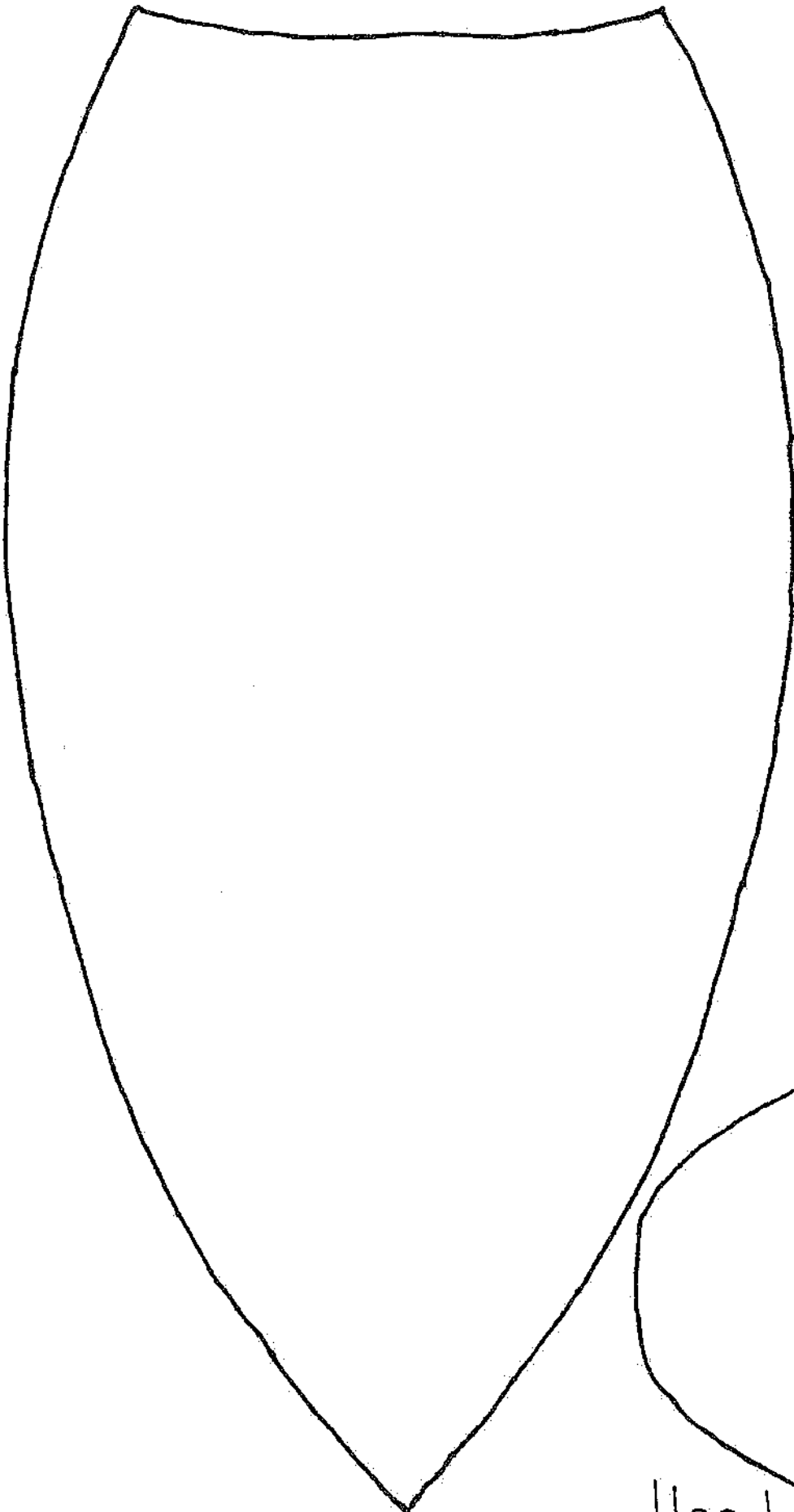
- Praying mantis body part patterns copied on green card stock – one set per student
- Scissors
- Tape and glue
- Green chenille stem (pipe cleaner) – one per student
- 1 inch Styrofoam ball cut in half – one per student
- Small green stickers and green marker



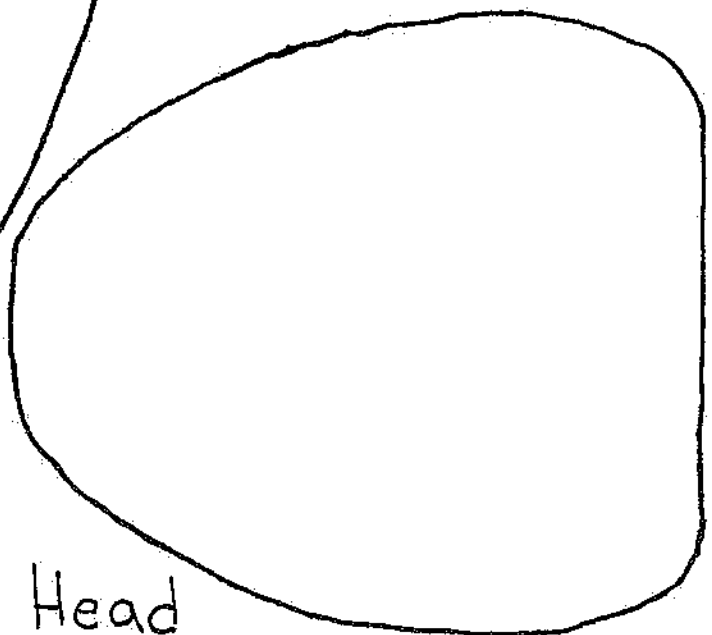
Procedure:

1. Cut out the head shape.
2. Cut two 1 ½ inch pieces off of the chenille stem. Tape them to the underside, bottom of the head to represent mandibles.
3. Cut the remaining chenille stem in half. Tape the pieces to the underside, top of the head to represent antennae.
4. For compound eyes, place small green stickers or draw green circles on the Styrofoam ball halves. Glue them to the head.
5. For simple eyes, draw three dots above and between the compound eyes.
6. Cut out the thorax body part. Bend the thorax in half lengthwise and bend up along the dotted lines where the notch is located.
7. Cut out the abdomen body part and bend in half lengthwise.
8. Tape the abdomen to the notched end of the thorax with bends pointing upward. This will make the abdomen stick up higher than the thorax.
9. Cut out the front, middle and back legs and tape them in the correct locations on the thorax. Bend the legs to make the “claws” face inward and give the mantis some dimension.
10. Tape head to the end of the thorax.

Abdomen

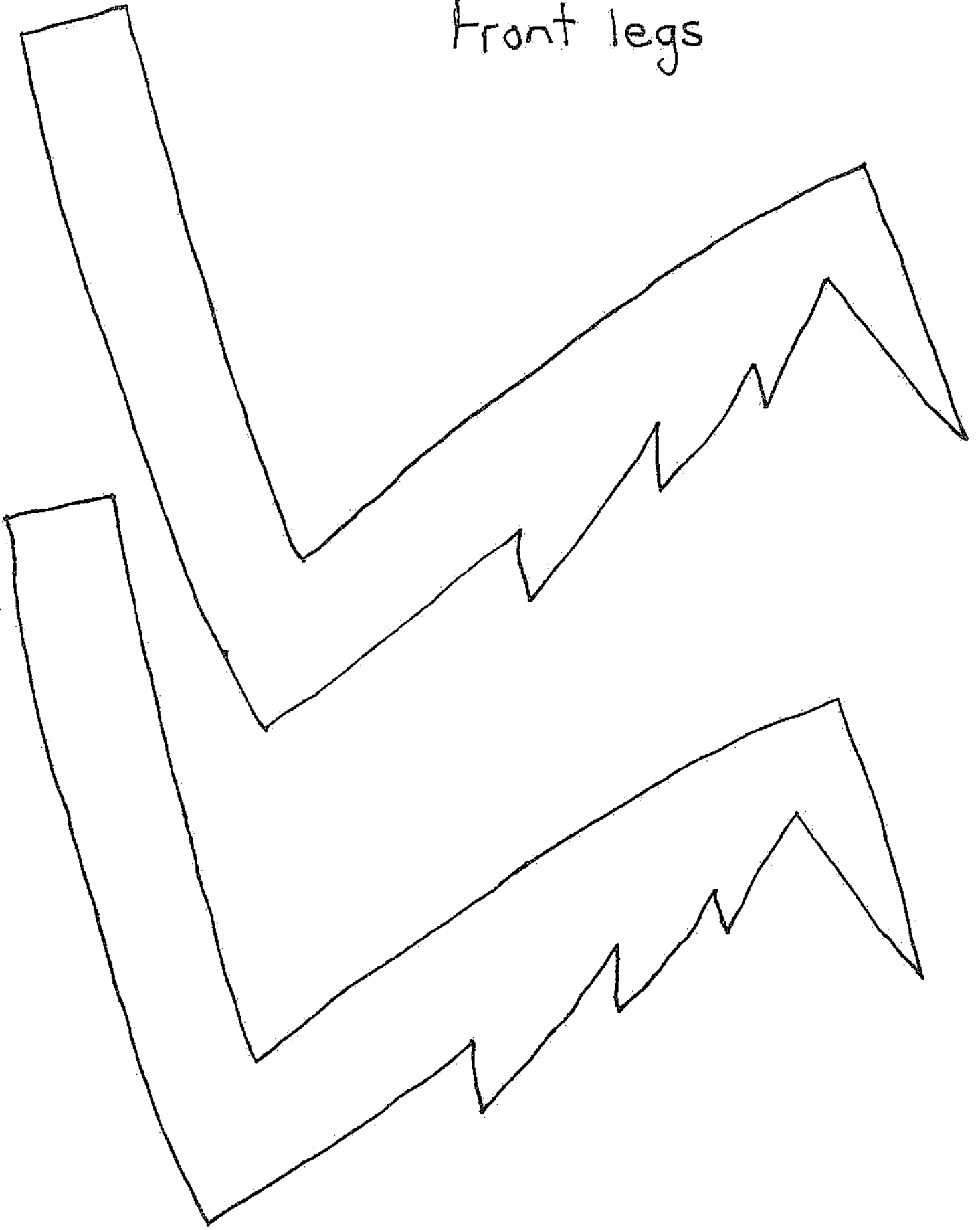


Thorax

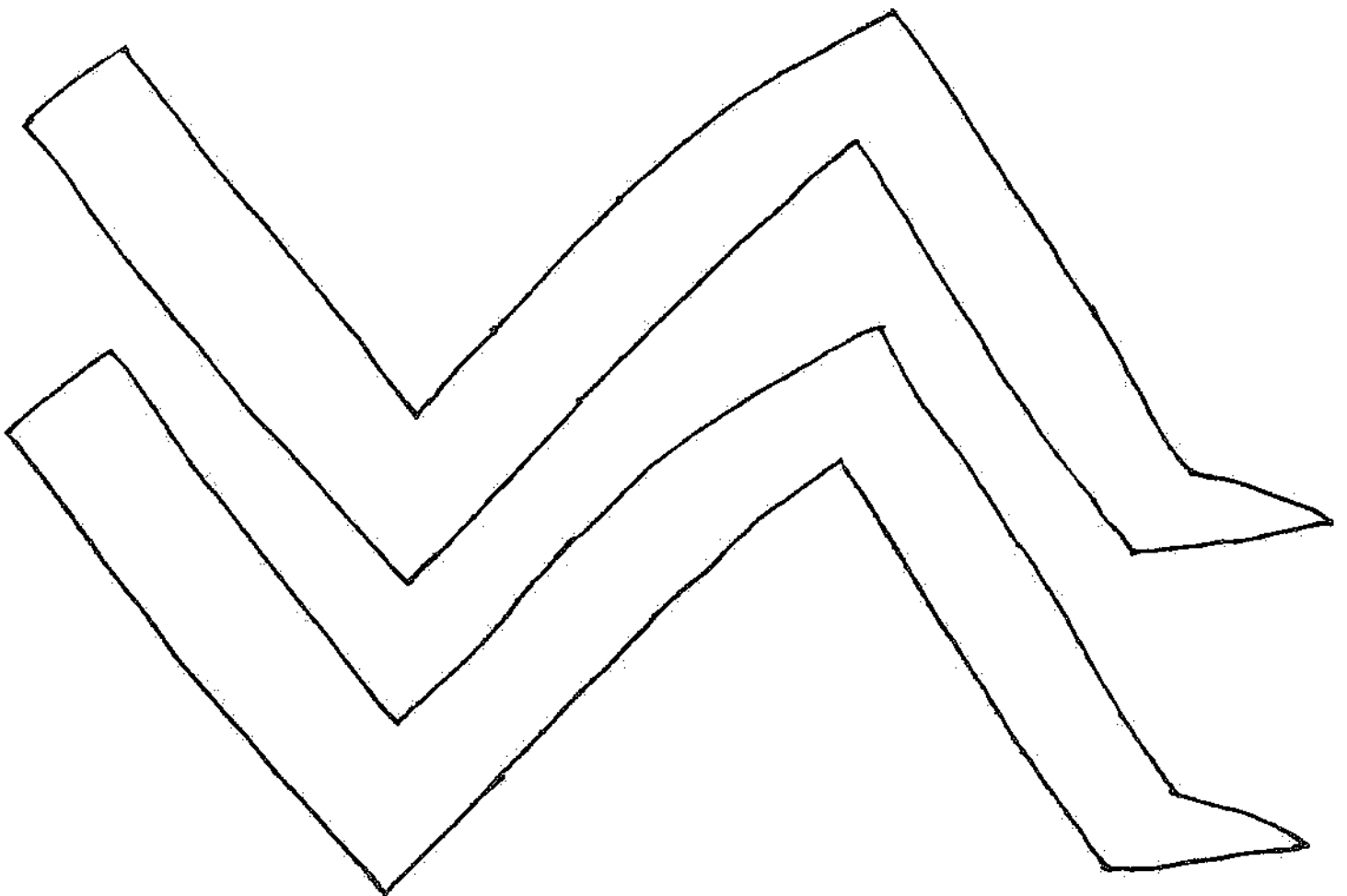


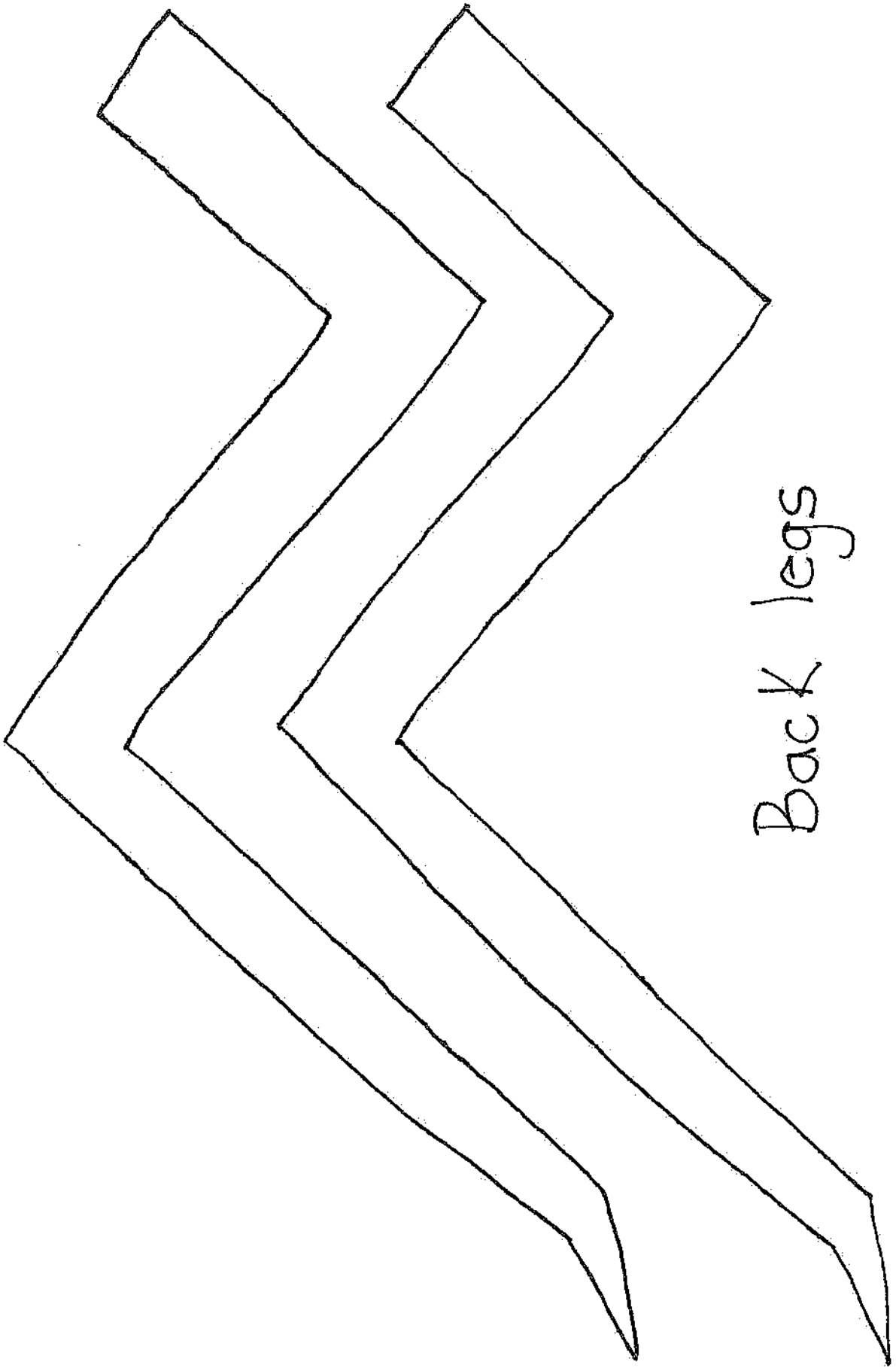
Head

Front legs



Middle legs





Back legs

Insect Body Part Song

Here is a song to help children remember the basic parts of an insect's body. It is sung to the tune of "Head, Shoulders, Knees and Toes".

Head, tho-rax, ab-do-men, ab-do-men
Head, tho-rax, ab-do-men, ab-do-men-eh-eh-en
Six legs, some wings, and an ex-o-skel-eton
Head, tho-rax, ab-do-men, ab-do-men

Head, tho-rax, ab-do-men, ab-do-men
Head, tho-rax, ab-do-men, ab-do-men-eh-eh-en
Big eyes, small size, and a pair of feel-ers, too
Head, tho-rax, ab-do-men, ab-do-men

This song can also be combined with movement. Have the children pretend they are the insects. As they sing, they should point to the following body parts:

- head
- thorax (point to chest)
- abdomen (point to stomach)
- legs
- wings (point over their shoulders)
- exoskeleton (arms over head and make sweeping motion down toward feet)
- big eyes (hold hands up to eyes as if looking through binoculars)
- small size (hold out thumb and pointer finger to indicate small size)
- feelers (put arms over head and wiggle pointer finger)

Presto-Change-o

Subject: Science

Objectives: Students will be able to identify insects that go through incomplete and complete metamorphosis.

Materials:

- access to research materials
- card stock copies of cube and tetrahedron for each student
- coloring and writing utensils
- glue stick or tape
- scissors

Procedure:

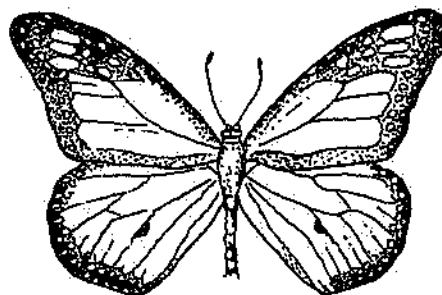
1. Review complete and incomplete metamorphosis with your students. Ask them to brainstorm lists of insects that go through each type of metamorphosis.
2. Tell students they will be researching one type of insect for both complete and incomplete metamorphosis. Have the students gather the following information: name of insect (common and scientific), complete or incomplete metamorphosis, illustration of each stage, and habitat for each stage of metamorphosis.
3. Hand out the card stock templates. The cube should be used to identify an insect that goes through a complete metamorphosis. The tetrahedron should be used for an insect that goes through an incomplete metamorphosis. Have the students write and draw the information below on the templates. Then cut out templates, fold along dotted lines and glue or tape to complete.

The boxes on the cube should contain the following:

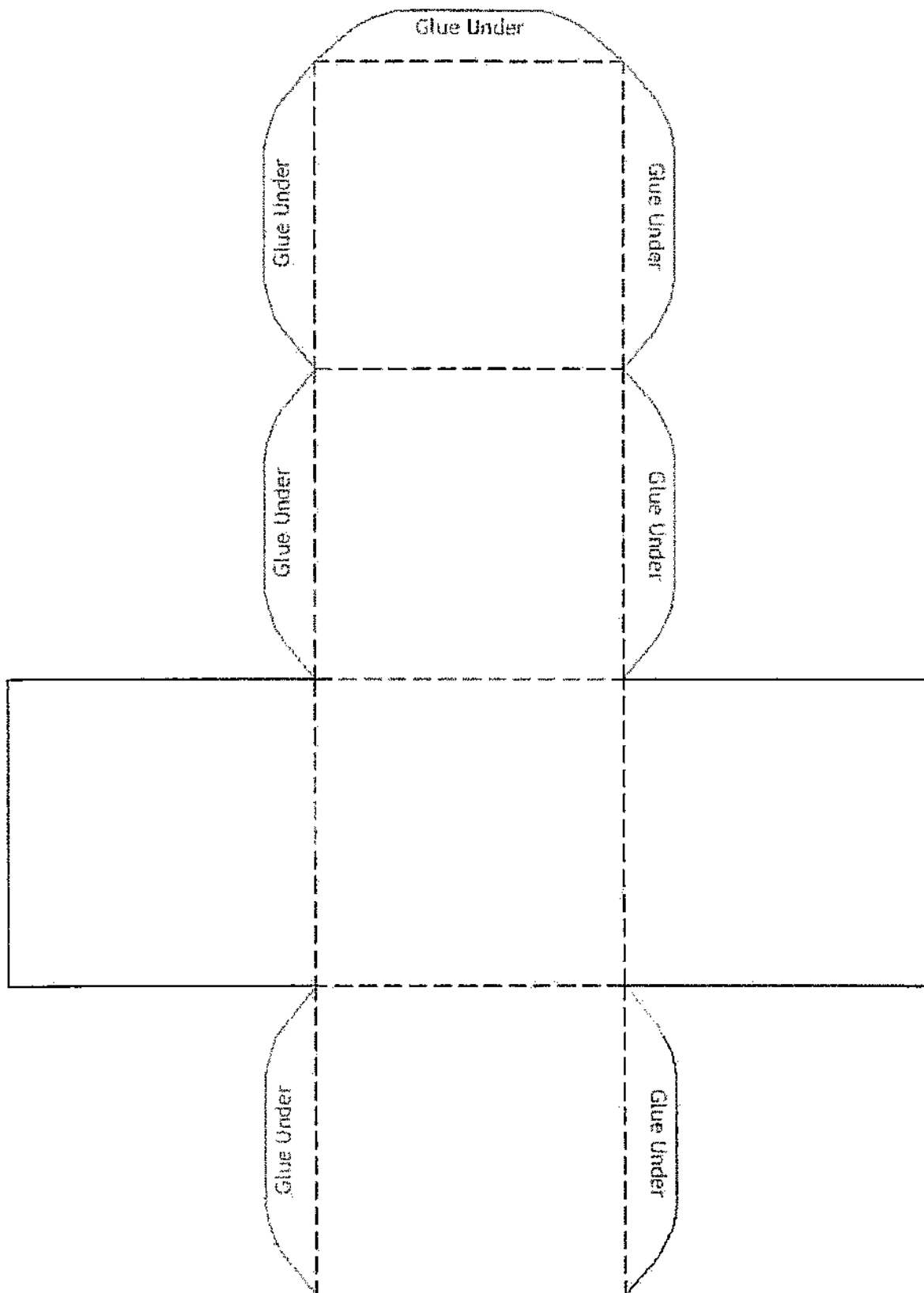
1. Name of insect
2. Stage one
3. Stage two
4. Stage three
5. Adult
6. Habit for one of the stages

The boxes on the tetrahedron should contain the following:

1. Name of insect
2. Stage one
3. Stage two
4. Stage three



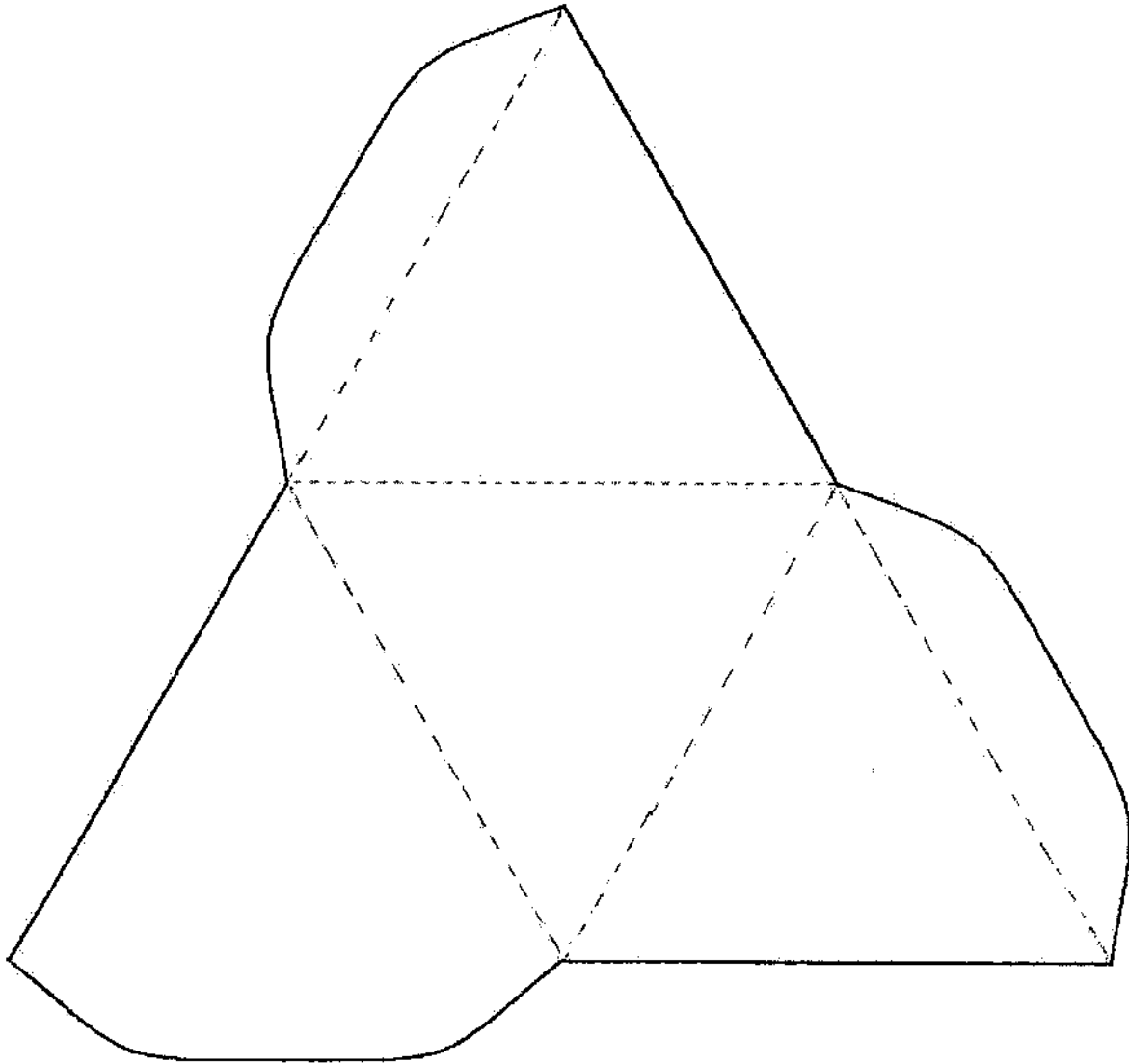
Cube Model Template



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Tetrahedron Model Template



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