



Build a Bug

Research Objective: Observation, Tools, and Measuring

Description

This activity explores how scientists use observable traits and measurements to identify and compare organisms through the design and construction of a unique bug. Begin by selecting a bug template, attaching it to cardboard, and carefully cutting out the body. Add legs using pipe cleaners and eyes using tissue paper. There is no correct number of legs or eyes, allowing each bug to have its own unique characteristics. Once assembled, the bugs can be painted and decorated with creative features.

After completing the bugs, use rulers, calipers, and scales to collect the bug's "stats," including length, width, and mass. Record measurements and observable traits on a designated journal page alongside a drawing of the completed bug. This activity reinforces how scientists use observable characteristics and quantitative measurements to describe, compare, and identify organisms.

Procedures

1. Select one mystery bug template and glue it to a sheet of cardboard.
2. Carefully cut out the bug body using scissors or a Chompsaw.
3. Use pipe cleaners to create the bug's legs. There is no correct number of legs, each bug should be unique.
4. Create the bug's eyes using tissue paper and markers. There is no correct number of eyes.
5. With instructor assistance, hot-glue the legs and eyes onto the bug.
6. Paint and decorate the bug. Add colors, patterns, and other features to make the bug unique.
7. Observe the completed bug and record its observable traits, including the number of legs and eyes, colors, patterns, and body shape.
8. Use a ruler, calipers, and scale to measure the bug. Record its length, width, and mass.

Materials

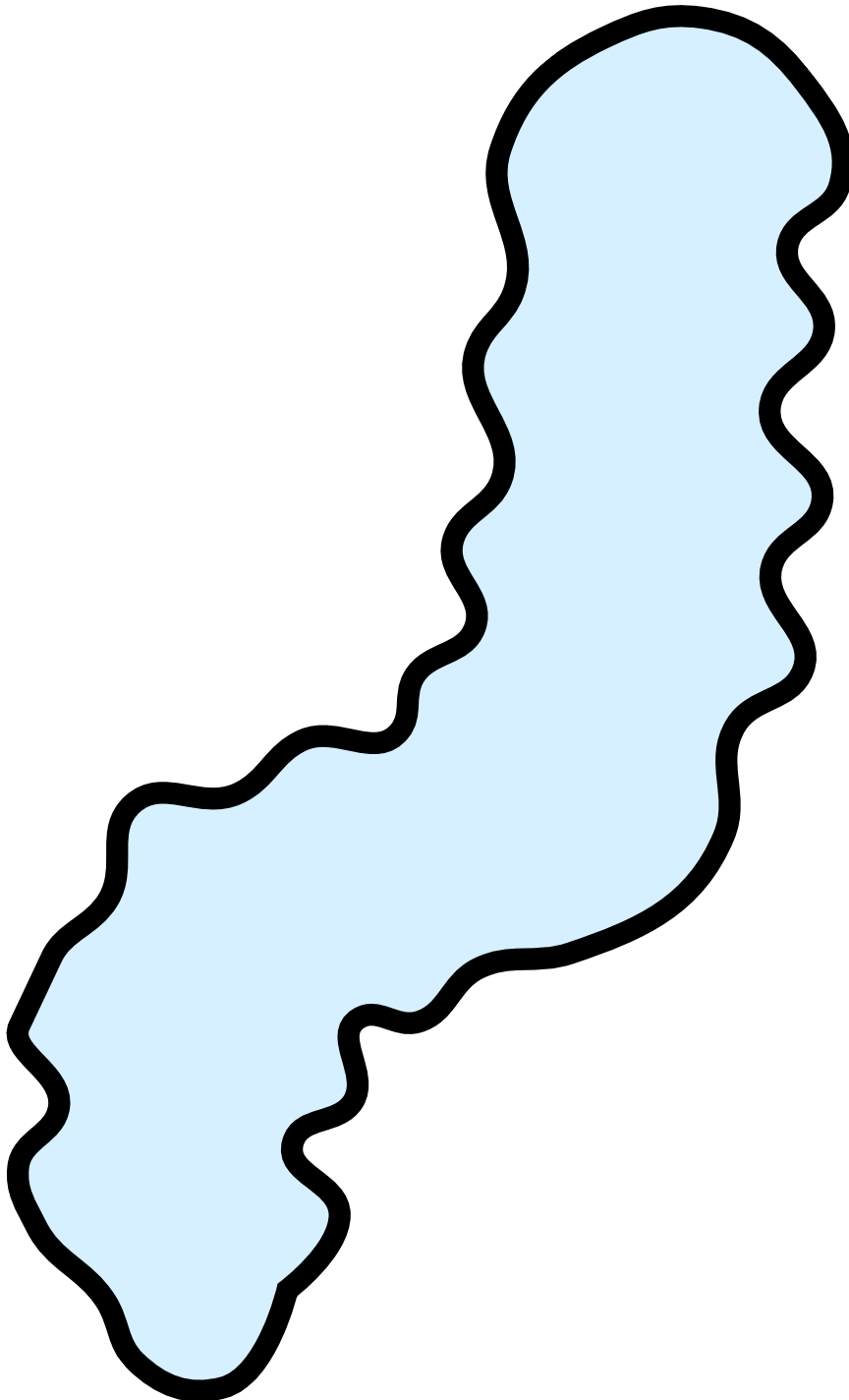
- Mystery bug body templates
- Scissors or [ChompSaw](#)
- Pipe cleaners
- Tissue paper
- Markers
- Glue sticks
- Hot Glue

Tips

- Make your bug unique! There is no correct number of legs or eyes. Use your creativity to design a bug with its own set of traits.
- Handle tools carefully. Use scissors and other tools safely, and always ask your instructor for help when using the hot glue.
- Measure carefully. Make sure your ruler and calipers are lined up correctly, and that your bug is sitting flat on the scale for accurate measurements.

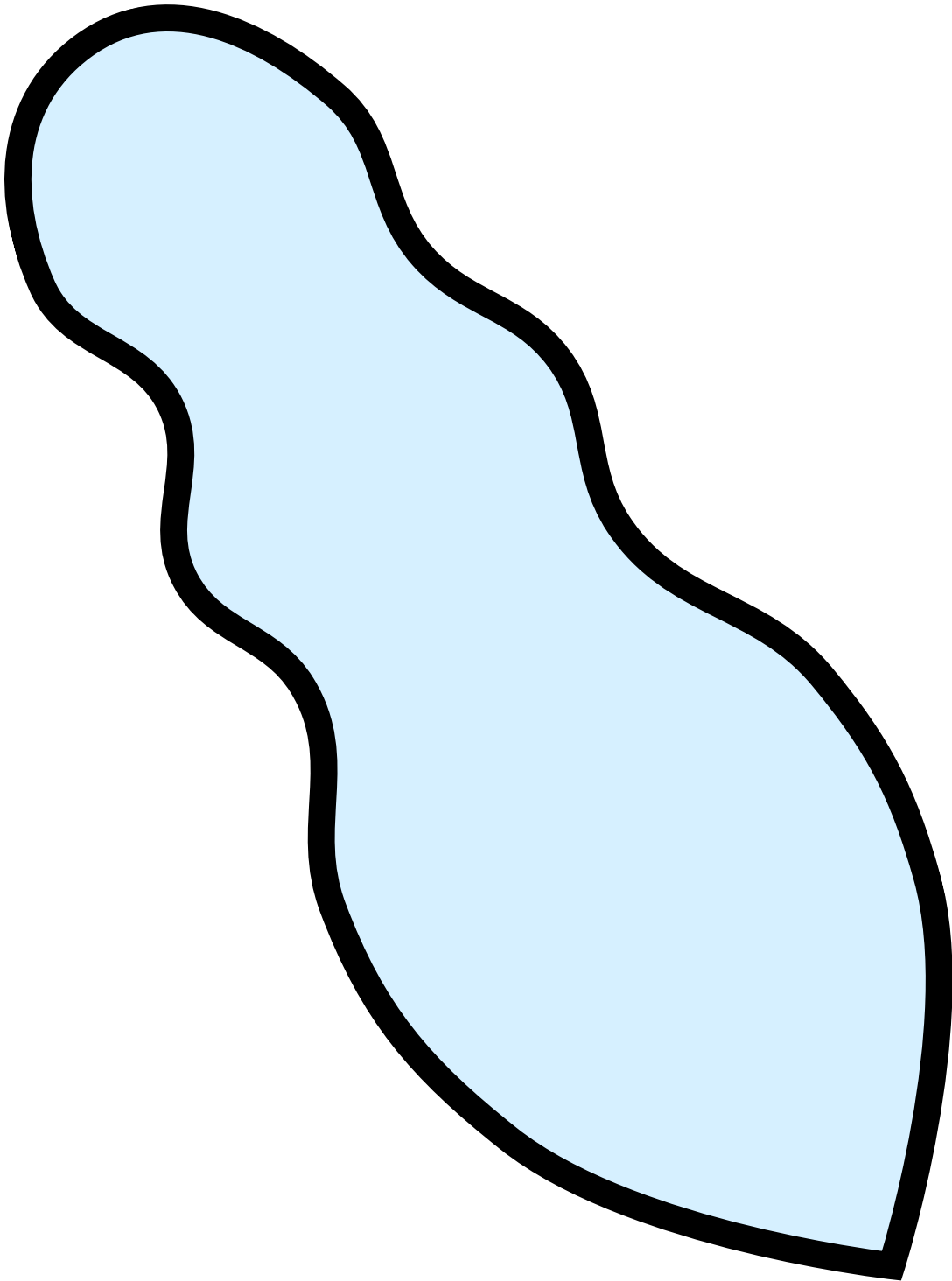


Mystery Bug 1



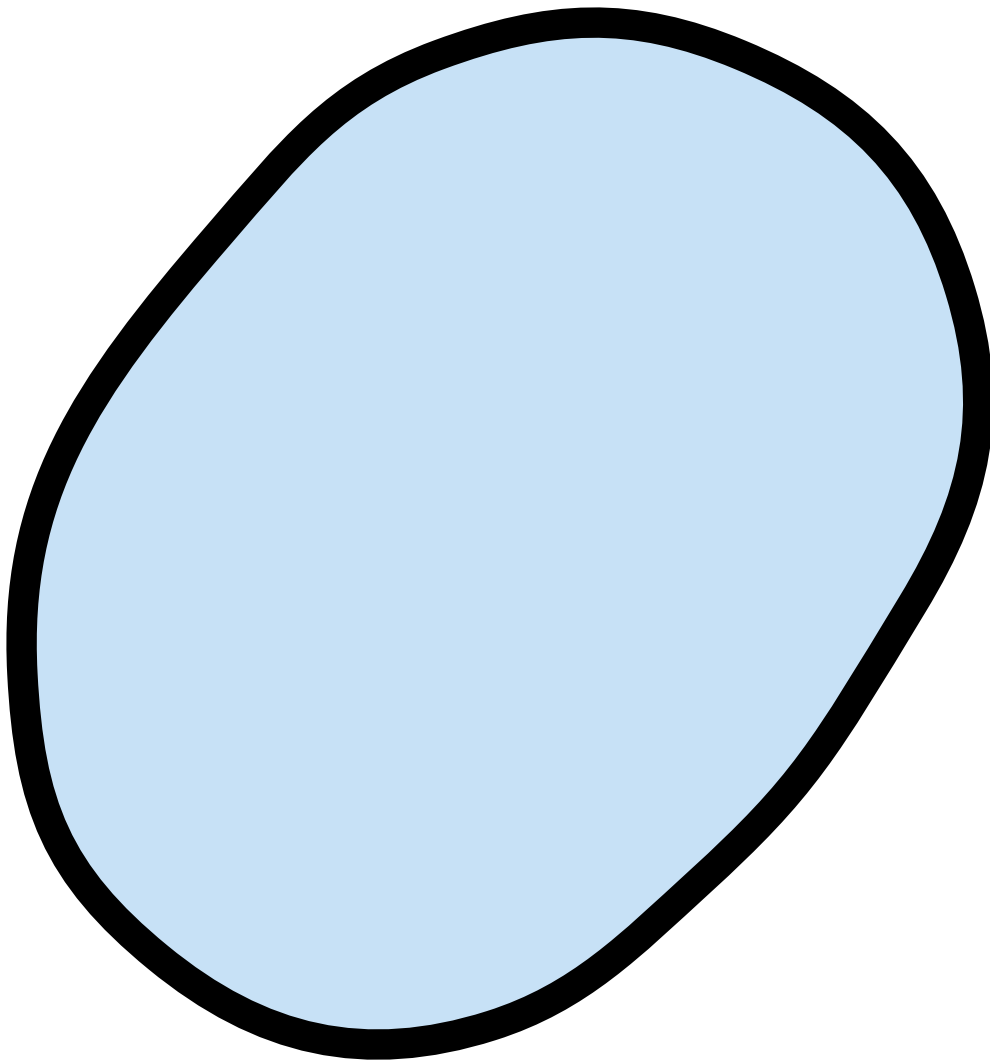


Mystery Bug 2



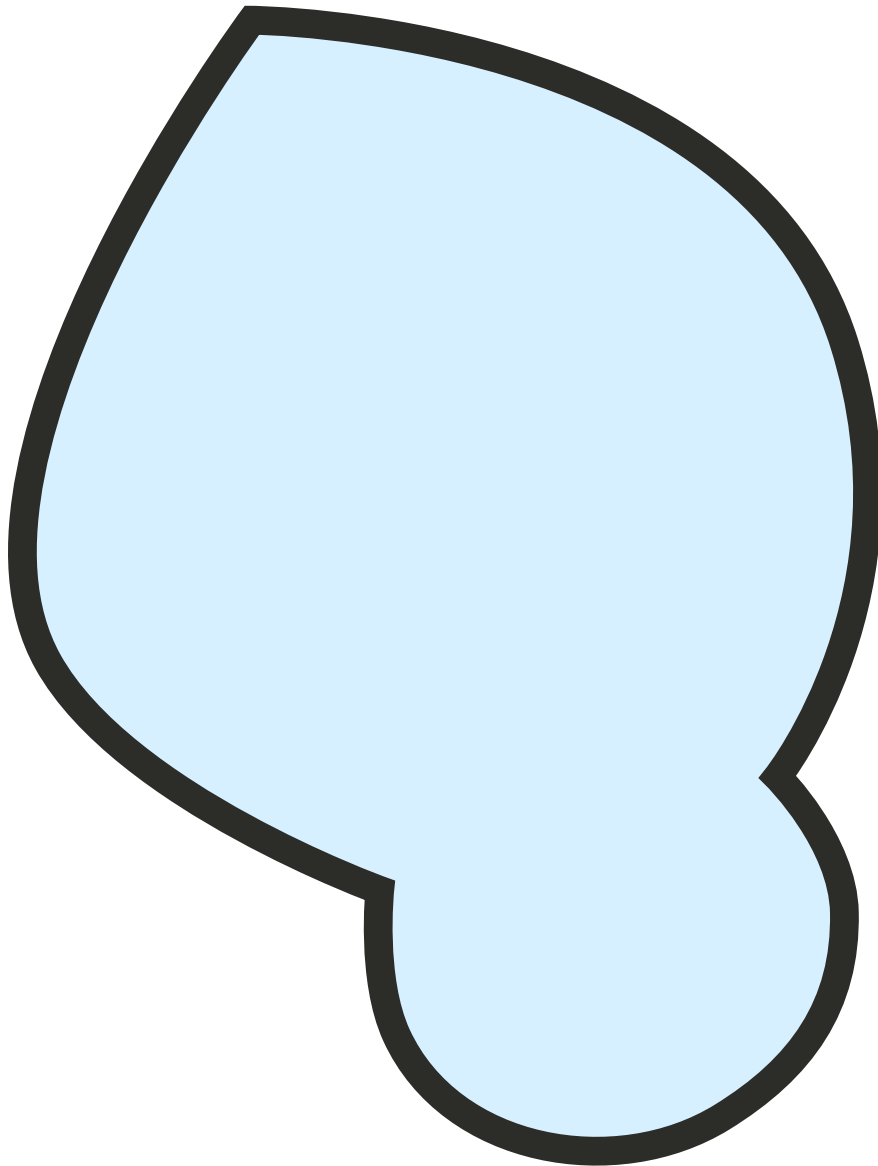


Mystery Bug 3





Mystery Bug 4



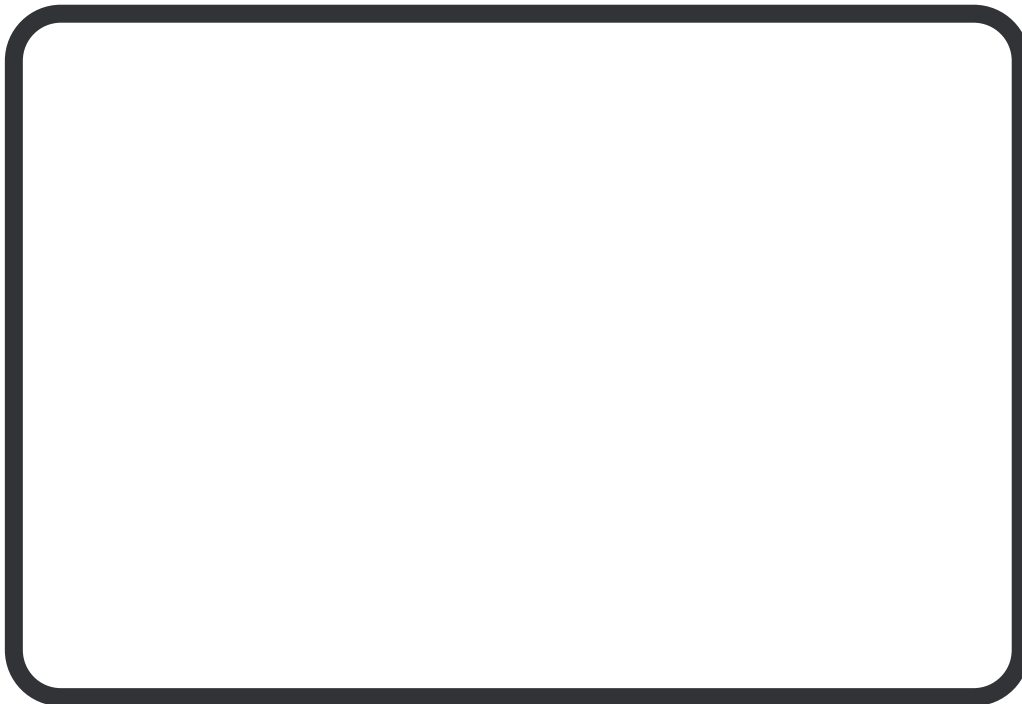


Build a Bug

Student Investigation

Design a trading card for your bug. Give it a name, draw it and add its stats

NAME:



HEIGHT:

WEIGHT:

ABILITIES: