



Bats of the World - Build your own Bat-mobile!

Activity Snapshot:

- Bats are fantastic! The only truly flighted mammals, flapping through the skies at night. Many species are *insectivores*, or 'insect-eaters' - they work hard in their ecosystems eating the bugs that can 'bug' us humans, keeping those insect populations in balance and saving humans billions of dollars every year.
- Bats use Echolocation to find their food. They send out a sound, and the 'echo' that bounces back helps tell them what's around them.
- Sometimes people think of bats as mean, or scary. Movies put bats in the role of villains or monsters, like the vampire. But bats are no meaner or scarier than owls!
- The 8 bat species that can be found here in Maine are:
 - The Little Brown Myotis - *Myotis lucifugus*
 - The Northern Long-eared Bat - *Myotis septentrionalis*
 - The Eastern small-footed Bat - *Myotis leibii leibii**
 - The Big Brown Bat - *Eptesicus fuscus*
 - The Tri-colored Bat - *Perimyotis subflavus*
 - The Silver-haired Bat - *Lasionycteris noctivagans**
 - The Eastern Red Bat - *Lasiurus borealis**
 - And the Hoary Bat - *Lasiurus cinereus**

Goal:

To Build a hanging mobile of bats and their food in flight!

Mobiles are dynamic, kinetic art displays that come in a wide variety of shapes and designs. Don't be afraid to get creative as we craft a free-form dance of Bats and Bugs flying in the night sky.

Time Recommended:

30 - 40 minute

Materials:

- Sticks and/or clothes hanger (for the mobile frame)
- String or yarn! (to hang the frame and shapes)
- Paper! (to make the bat and bug shapes)
- Art supplies (colored pencils, crayons, or markers, for decorating bats and bugs!)
- Scissors (for cutting strings, and cutting out your bat and insect shapes)
- Tape or Glue (if needed to help secure strings)
- A hole Punch (or a means of making holes for the mobile strings)

Instructions:

1. **Choose a style** for your mobile - how do you want to lay it out? Some template designs are provided to give you some ideas. You may choose any shape or form you'd like!
2. **Gather your materials**, whatever you will need for the frame of the mobile design you chose. Lay them out on a flat surface, such as a bed or table, to get an idea of how you want to place them.
3. **Lay out the string** along this and cut out the lengths you will need. Try to cut your strings a little longer than you think you'll need - they will be shorter once wrapped and tied to the frame and the shapes, and any extra string can be trimmed away.
4. **Choose your bats and bugs!** What shapes do you want to use for your mobile? What different sort of insects do you think your bats might be eating? We have included a number of bat and bug shapes for you to use, but you are free to let your imagination run wild, to find or create your own.
5. **Color and decorate your choices!** What colors are bats? What does their furry covering help them to do in the wild? How about the insects? Some can be bright to startle or warn away predators. Others can blend in and hide! You can color both sides of your bats and insects - when cut out, they will be hanging and twirling around!

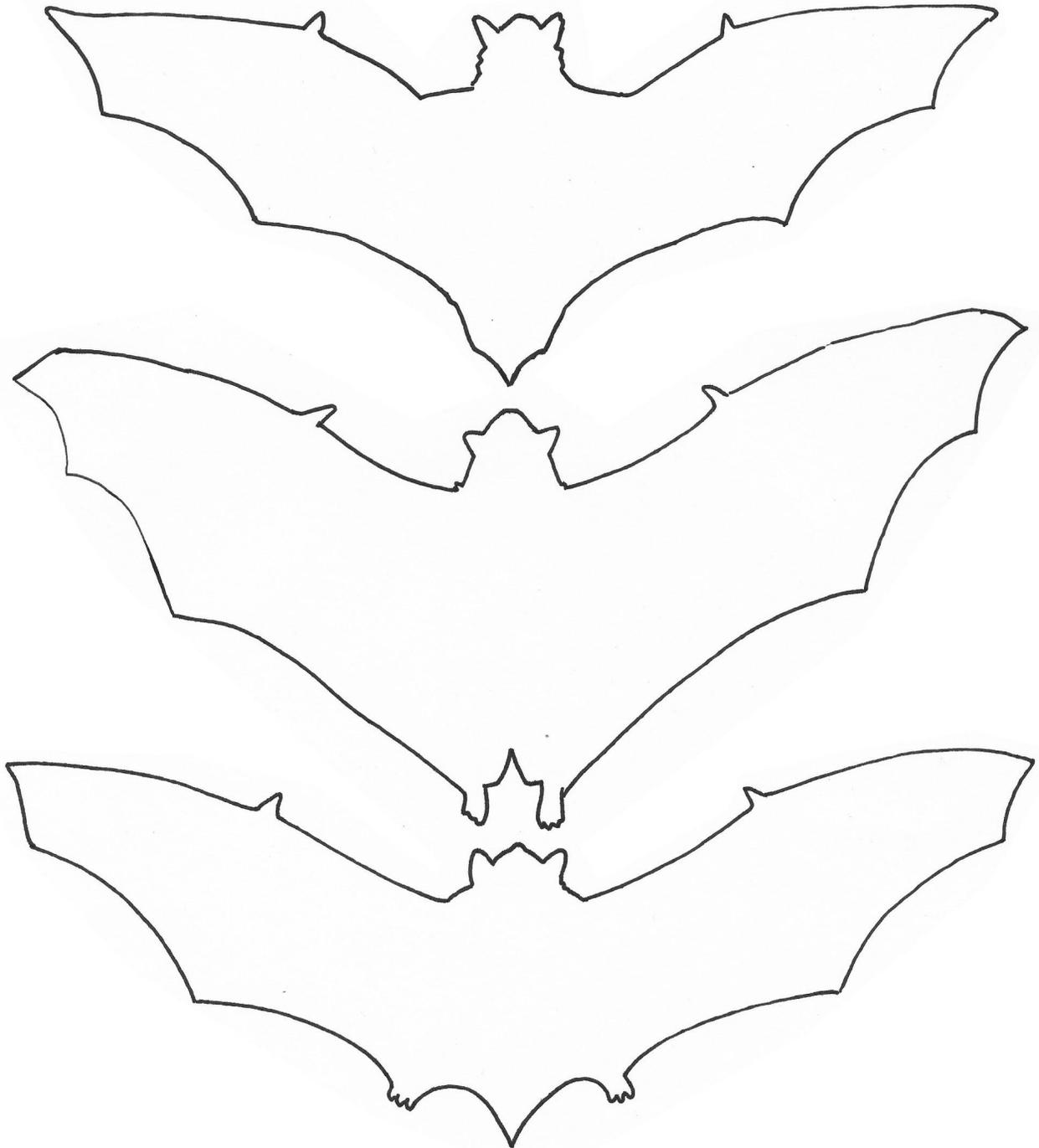
6. **Cut out your bats and bugs**, with help from a parent or guardian if needed.
7. Choose how you will **attach your string**. Will you tape it to the paper? Or punch a hole and tie the string around? Even gluing or stapling could work! Where will you attach your string? The head? The center of the body? The wings? You can experiment with lots of different methods, there is no wrong answer!
8. Once the strings are attached, **tie the strings to the mobile frame**. Depending on the design of mobile you choose, it may be a little tricky to balance - you can play around with the length of strings, or attach paper clips or pennies to the shapes to give them extra weight, if needed.
9. Find a nice place to hang your mobile, and **enjoy!**

Additional Material:

Templates for Bats, Bugs, and Mobiles (below)



BAT- Mobile
Bat outlines





BAT- Mobile
Bat outlines



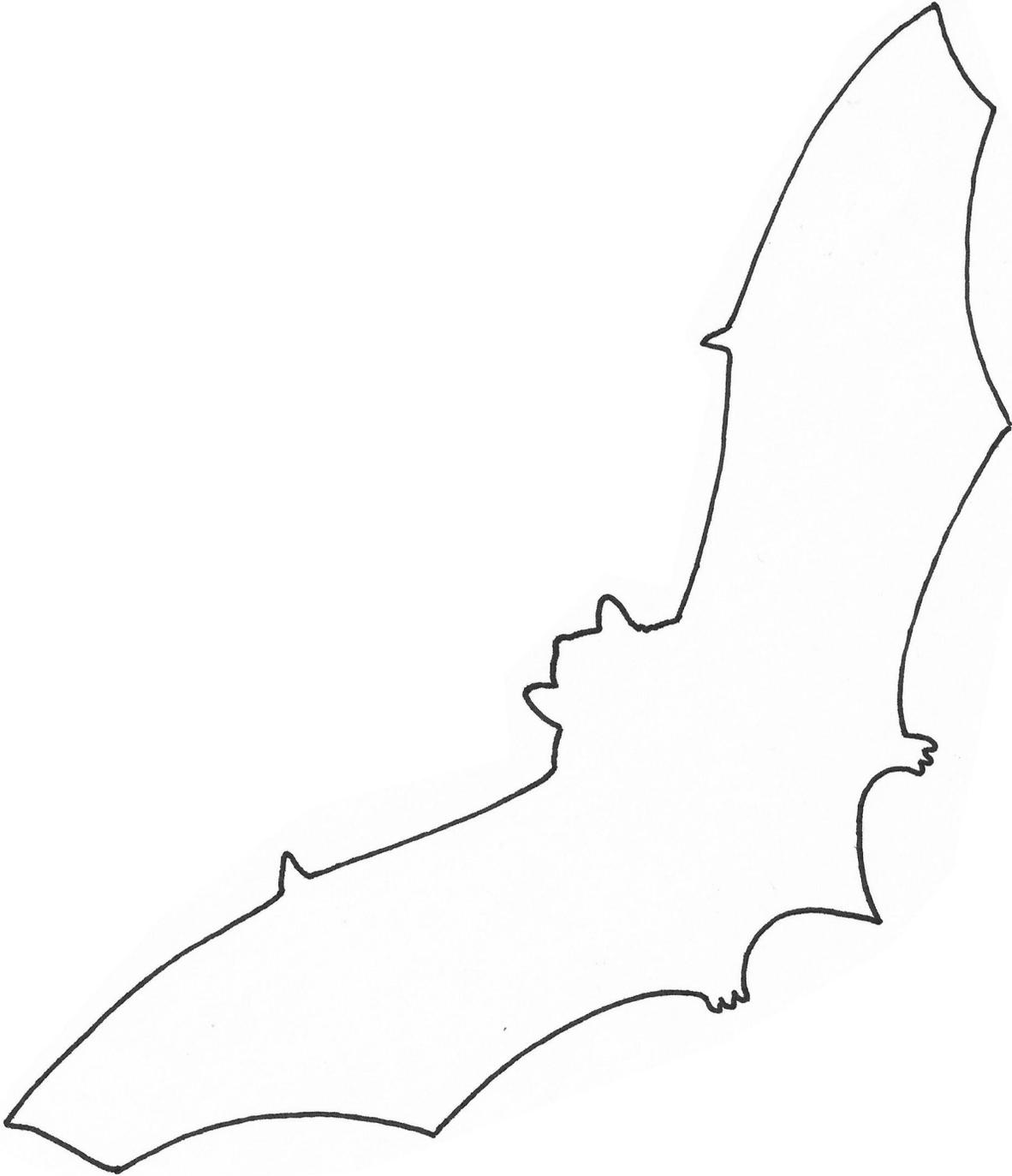


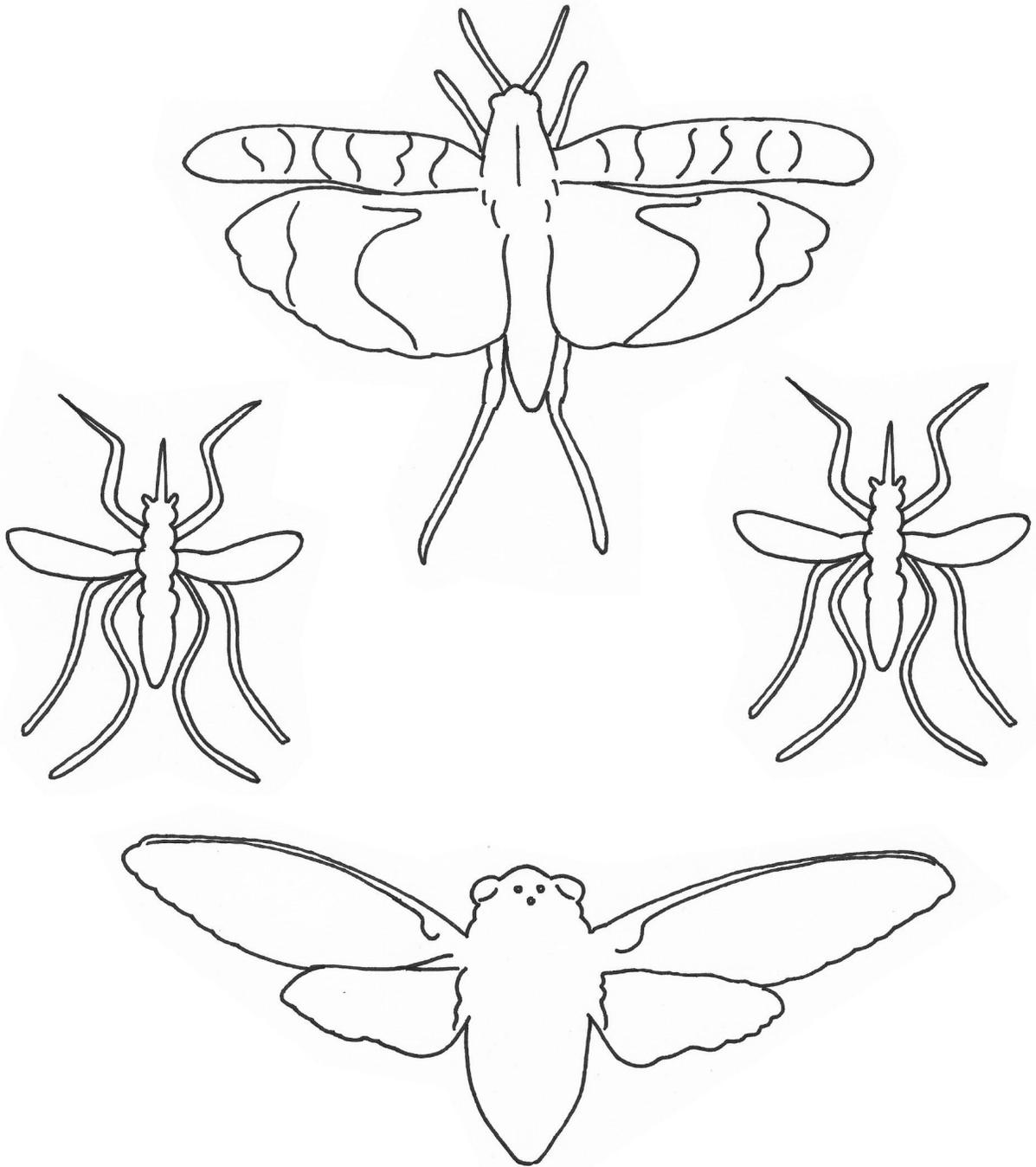
BAT- Mobile Bat outlines





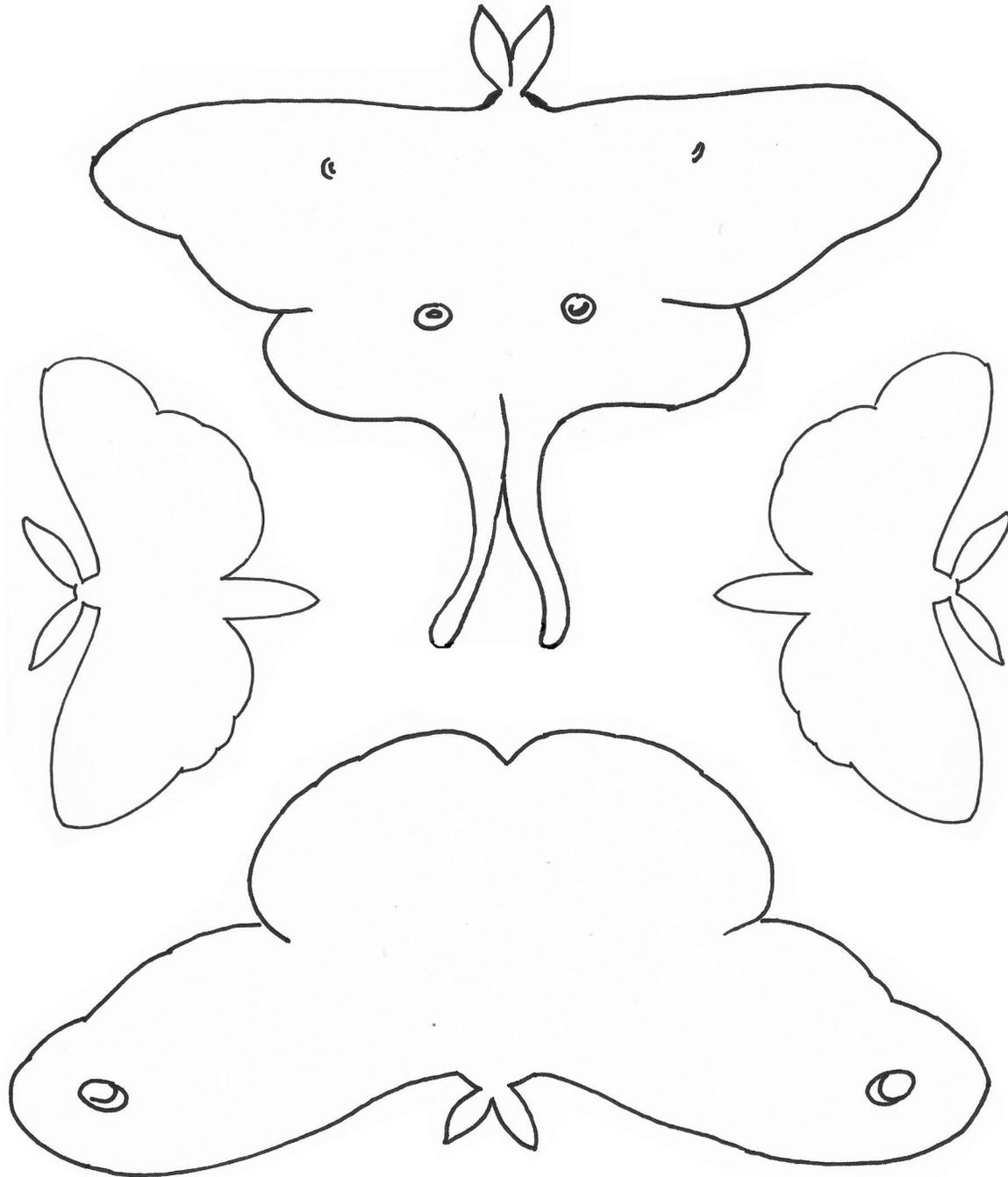
BAT- Mobile
Bat outlines





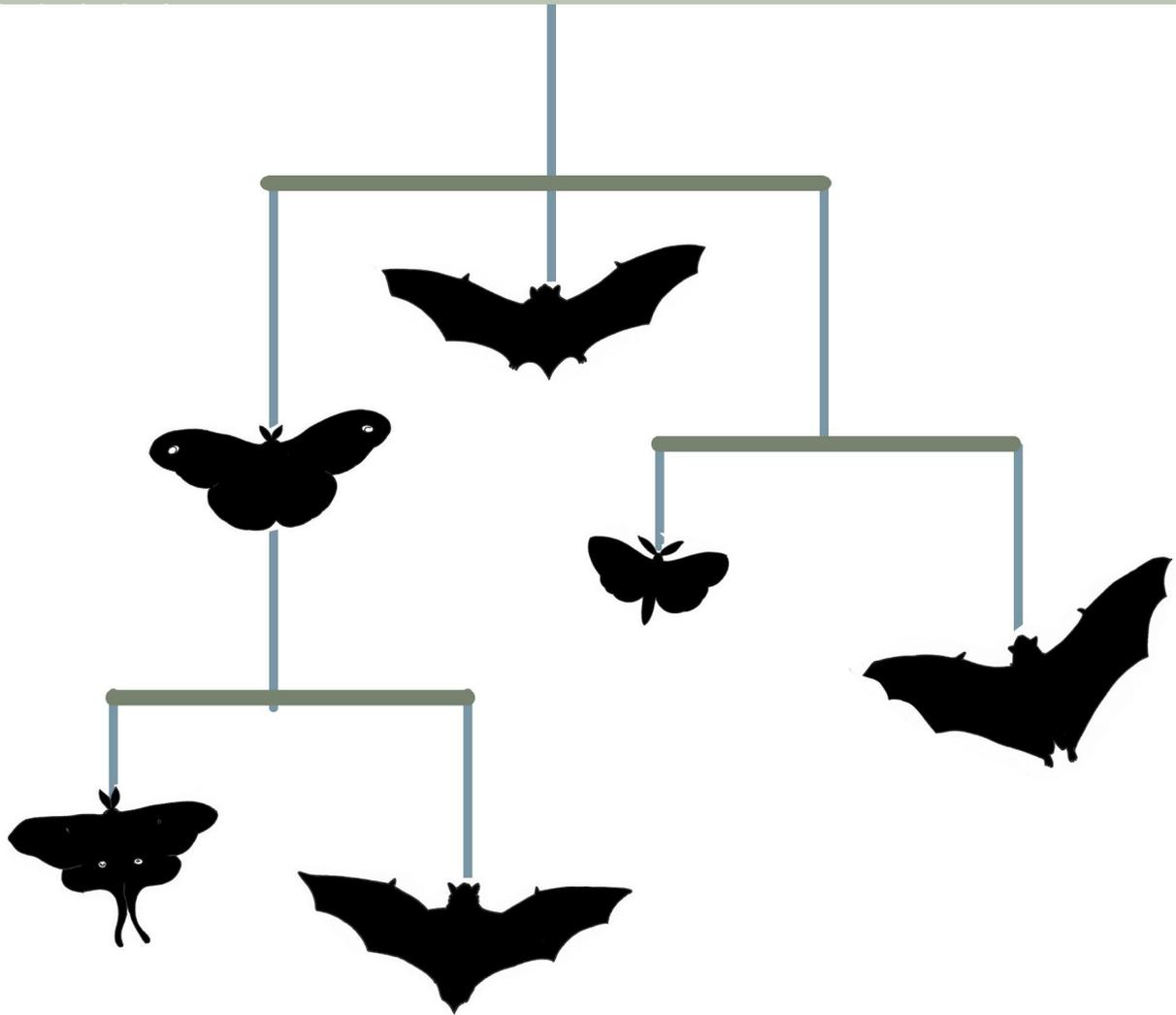


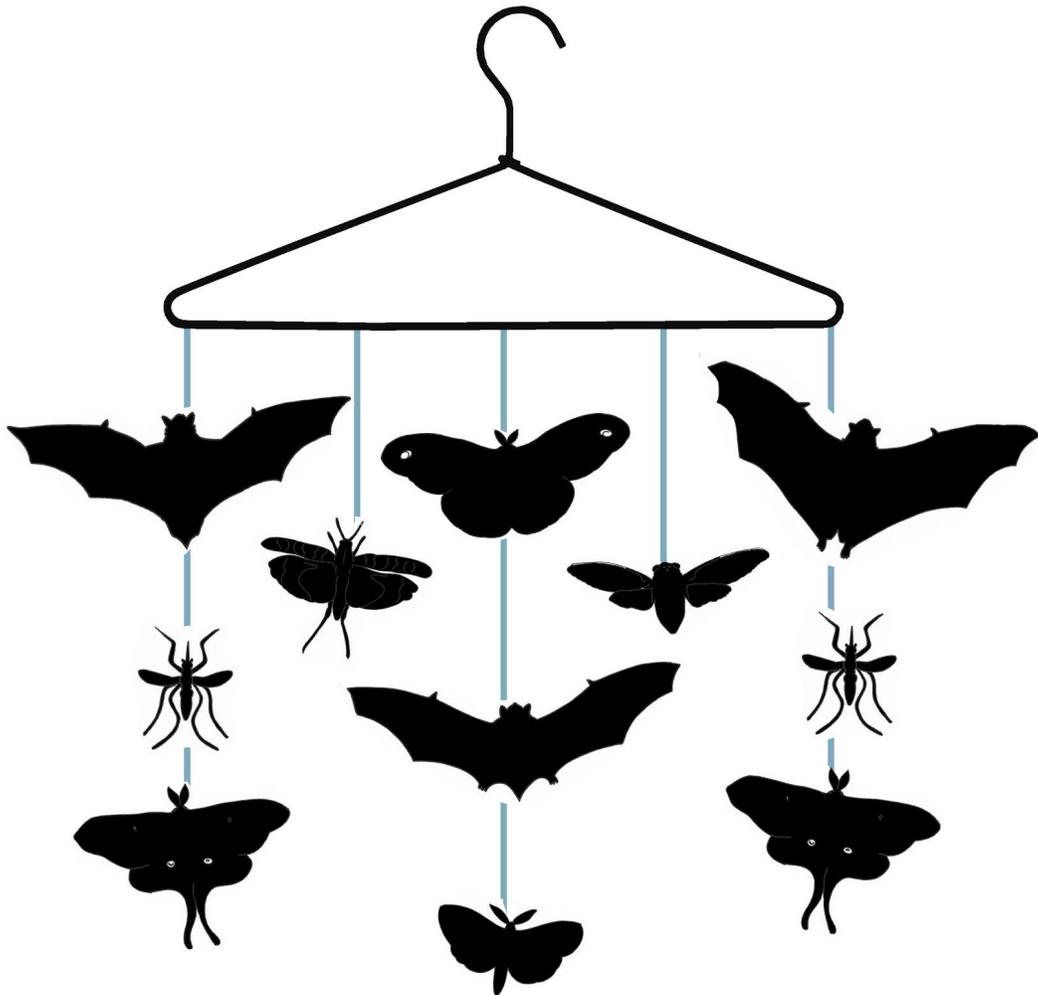
BAT- Mobile
Moth outlines





BAT- Mobile Possible Template







BAT- Mobile Possible Template

