Cat Breeding Mat

This lesson plan for school year 4 to adult, shares knowledge on the breeding habits of cats and the impacts this can have on local wildlife and community. The download includes teacher's instructions and instructional video.

Resource Categories	Cat; Animal Reproduction; Impacts on Wildlife; Activity
Suitable Age Level	Year Four to Adults
Desired Understandings	Students identify the implications of free roaming, undesexed cats on both community health and wildlife. They can identify and derive solutions for reducing cat breeding and hunting opportunities.
Resources Required	Cat Breeding Mat Video (supplied) Sewing Instructions and material list (supplied) Animal templates (supplied) House templates (supplied) Cat face templates (supplied) Dog templates, extension activity (supplied) Dice inserts (supplied) 10cm foam dice with insert pockets
Additional AMRRIC resources to support lesson content	Cat Breeding Book What Cat, That Cat, How Many Cats? Dog Breeding Book Felt Cat Where does it belong? House or Bush/Sea? Hungry Cat Hunting Cat Cat Mask

Lesson Plan: Cat Breeding Mat

Introduction

Before you begin this activity, watch the Cat Breeding Mat demonstration video for instructions on now to deliver this lesson to a group/class.

- Ask students if anyone has a cat, if so, how many? Why do some people have more cats than others? How do we stop our cats having kittens and breeding?
- Explain to the students that one of the best ways to stop cats from having lots of unwanted kittens is to ensure they have a desexing operation.
- Explain the process and benefits of desexing our cats and allow students time to ask questions and share stories.
- Inform the students that you will now be looking at how quickly cats reproduce in just one year and the impacts this can have on their community, family and the environment.
- Explain to the students that they will be using both adult cats and kittens on the mat. To help with the activity the boys (males) are blue and girls (females) are pink.
- Start by placing one adult girl cat and one adult boy cat onto the mat.

Activity

First breeding cycle

- Select one student to roll the dice. The roll of the dice will determine the number and gender of kittens that the mother cat will have.
- Depending on the number and genders indicated on the rolled dice, the chosen student will need to place those kittens underneath the mother cat. For example, a three (2 boys, 1 girl) is rolled and the student places 2 blue boy kittens and 1 pink girl kitten underneath the mother cat.
- The mat is now showing that the mother cat has had three kittens.
- Explain to the students that like us, the kittens will grow into adults. To demonstrate this, remove the kittens and hold them up one by one to the students.
- Every girl kitten needs to be swapped over and becomes a mother cat and every boy kitten needs to be swapped over for an adult boy cat.
- Inform the students that the boy adult cats will now go off hunting and looking for food. Place them in the tree.
- Given that this example is based on three kittens (2 boys and1 girl), you will now have the original mother cat at the top of the mat, along with her female kitten who has become a mother cat. The boy kittens have become adult boys and are off hunting in

the tree. In total you will now have two mother cats at the top of the mat, and two adult boys in the tree.

- Select a student to pick which native animal(s) the adult boy cats will be hunting that night. For example; 1-4 native animal is removed for each adult cat. The native animals leave the environment and are placed in the tree pocket.
- Ensure that while the native animals are being remove, students are informed that both male and female cats hunt. Clarify with the students that in this activity only the male cats are hunting, but both male and female cats hunt when given the opportunity.

Second breeding cycle

- Select 1 adult boy cat from the pocket and place next to the two mother cats. As there are two mother cats at the top of the mat, they are both able to have kittens.
- Explain that a new male cat has arrived and found the two mother cats.
- Select one student to roll the dice. The dice will need to be rolled a total of two times. Once for the first mother cat and once for the second mother cat.
- Place the relevant number and gender of kittens shown on the dice under each mother cat.
- You will now have two mother cats, both with kittens underneath them.
- Follow the same process as outlined in the first breeding cycle, swapping out girl kittens to mother cats, placing them towards the top of the mat and swapping out boy kittens to boy adult cats and placing them in the tree to go hunting.
- Once all kittens have been swapped over to mother cats and boy adult cats, the process repeats itself again.

Third breeding cycle

- Run through this activity one more time. Three breeding cycles represents a year.
- The aim is to ensure that students understand just how easily cats reproduce and how the cycle is then repeated with maturing kittens.
- Remember to watch the demonstration video before delivering this lesson.

Appendix A

Cat Breeding Mat

The Cat Breeding Mat is 1m x 1m and contains pockets at the bottom to store cat heads. This is optional and cat heads can be kept separate in bags or containers for the activity.

Extension Activity: *This activity can be turned into a dual resource to demonstrate dog breeding. A few minor changes will need to be made to the activity. Please ensure the following is carried out: Subsite cat heads for dogs and use supplied dice insert (see templates below). When demonstrating the activity, follow the step up to the second breeding cycle only. This will accurately demonstrate a female dogs breeding habit in 1 year. You can choose to have the male dogs hunt native animals or you can leave this component of the activity out.*

Appendix B

Cat Breeding Mat Sewing Instructions

Resources Required	Templates 1m x 50cm Blue felt (sky) 1m x 60cm Brown felt (ground) 3 x Sheets A4 felt, various shades of green (tree) 50cm x 10cm Felt brown (tree trunk) 6 x Sheets A4 various colours (houses x 2/native animals x 20-30) 2m x 1m Pink felt (female cats x 60 and kittens x 60) 2m x 1m Blue felt (male cats x 60 and kittens x 60) 1.5m Material for backing (choose a cheap polly cotton) 10cm x 10cm Foam Dice Laminator A4 Laminating sheets Sewing machine Fabric scissors Pins Measuring tape Fabric marker/pen Various threads for stitching changes if desired

NOTE: The following materials will make a mat which is 1m x 1m

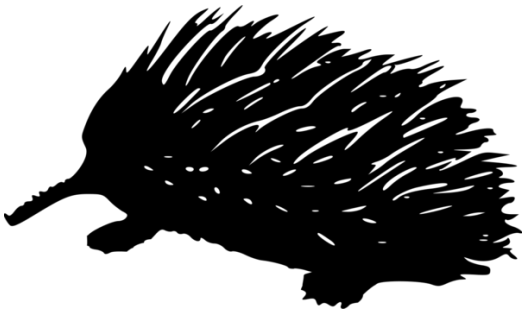
Instructions

- Laminate and cut out the templates (excluding dice template). Laminating will ensure that you are able to trace the templates easily onto the felt.
- Trace and cut cat head templates. Sixty sets of both adult and kitten heads are required for each colour.
- Trace and cut native animal templates (20- 30 animals).
- Cut out the remaining templates including houses and tree.
- Once you have finished cutting out the templates it is time to start making the mat.
- Cut a curved line, length ways across the bottom of the blue felt material. This will make the sky for the mat.
- Place the blue felt on top of the brown felt and overlap them slightly. Pin in place and then sew together. This will form the base of the mat.
- Attach houses in desired spot on the mat with pins. Sew around the base of the house and the roof. Both houses should be secure on the mat.
- Next pin the base of the tree and leaves to the mat. Sew in place.
- Using the remaining shades of green felt, cut out spears of grass. Pin and sew near the base of the tree truck or in a desired spot.
- Measure the backing material to fit the length and width of the mat. Allow 2-3cm of extra material on each side for the hem and sew around the edge of the mat.
- Using the excess backing material, measure and cut out a piece of material 1m in length x 14cm width. Fold in half to a width of 7 cm. This will start to form your pockets.
- Fold and hem the two lengths of fabric together to give the material strength.
- Fold the edges of the length of material over and pin to the long edge of each side of the mat.
- Sew along the edges and across the bottom to secure the pocket. This will make one large pocket along the bottom of the mat.
- Within this larger pocket create individual pockets by measuring out 6 cm pocket compartments. Mark each pocket compartment with a fabric pen.
- Sew vertically along each marked pocket compartment. This will make 6 even pocket compartments at the base of the mat.
- Using your pre-cut cat heads place a female and male head on the front of separate pockets next the each other and use fabric glue to attach. Repeat the process using the kitten heads.
- The pockets will now have four cat heads attached to the front and two blank pockets.

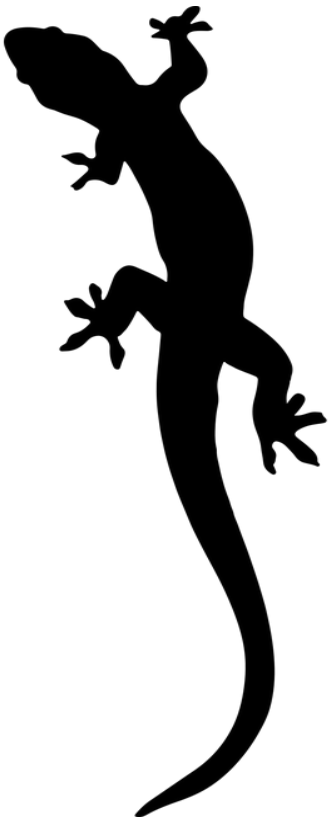
- Print, cut and laminate the dice templates and insert into a foam dice 10cm x 10cm.
- Your cat breeding mat is now complete. Place the cat heads into each allocated pocket and place the native animals in the tree. You are now ready to begin.

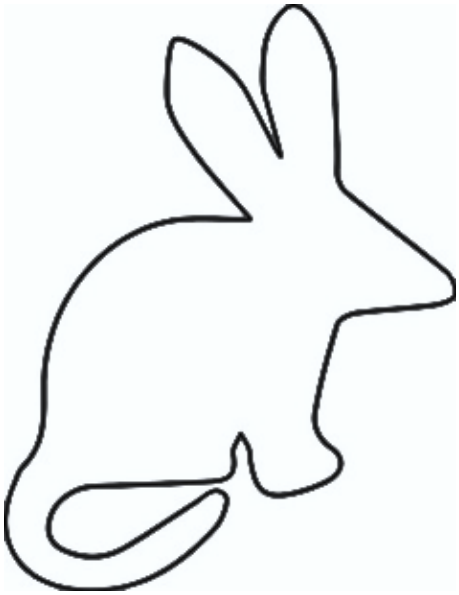
Appendix C

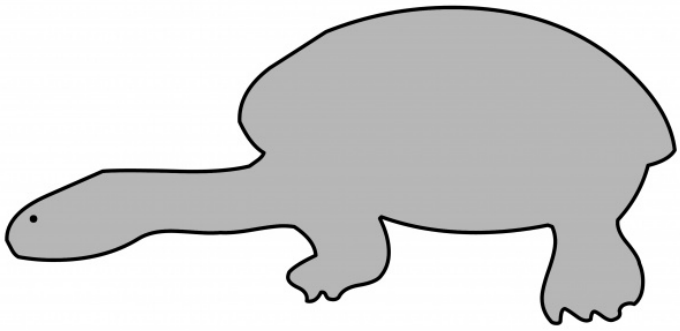
Animal Templates- Trace and Cut



Animal Templates- Trace and Cut

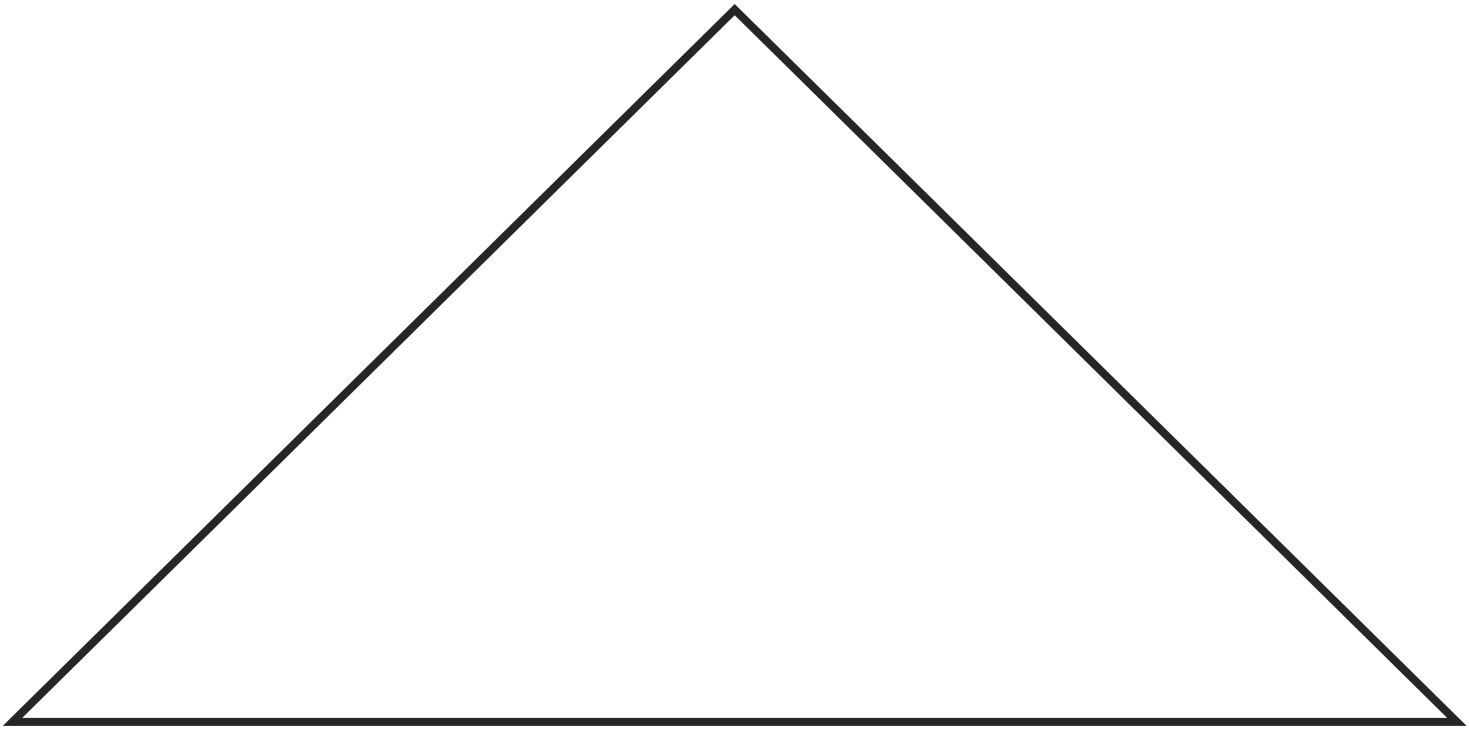


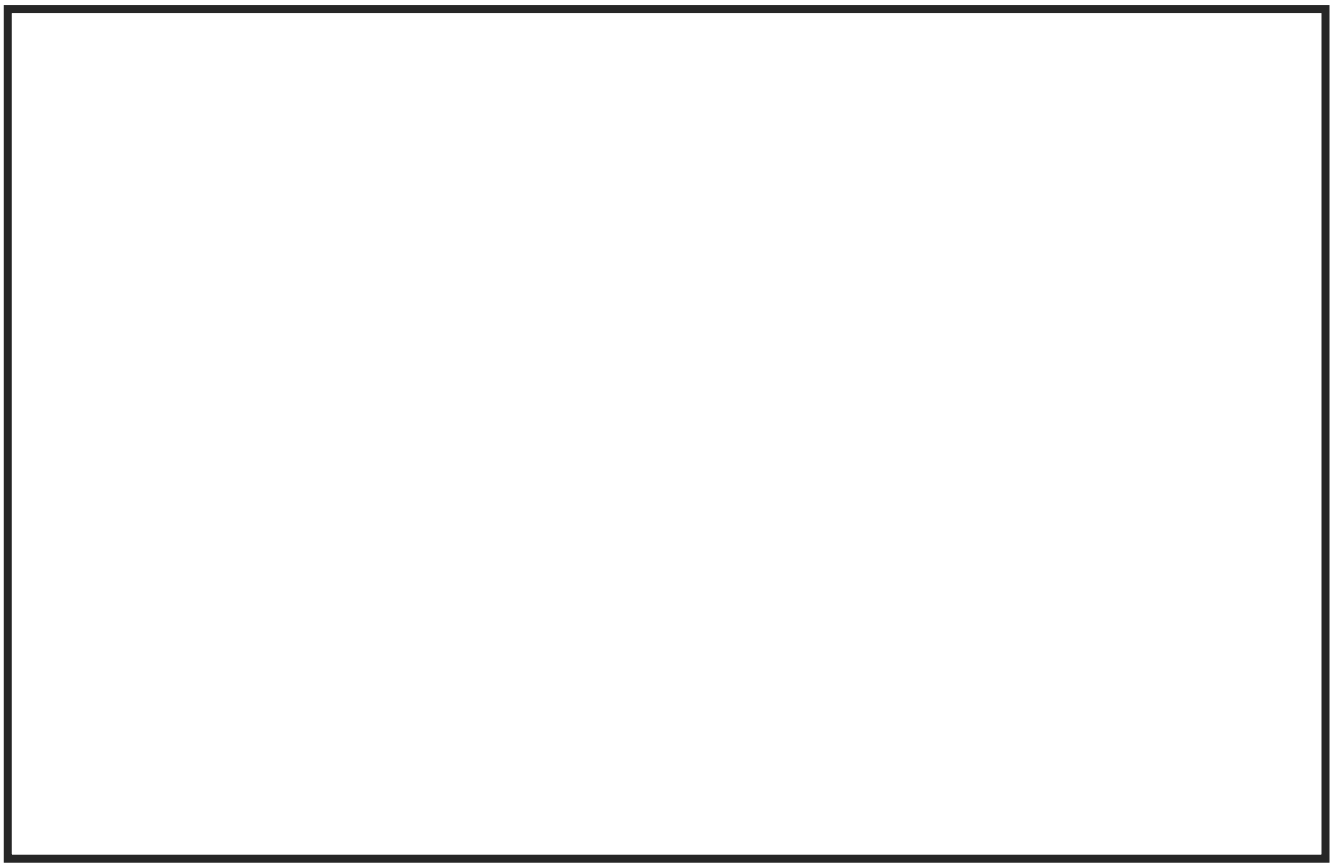




Appendix D

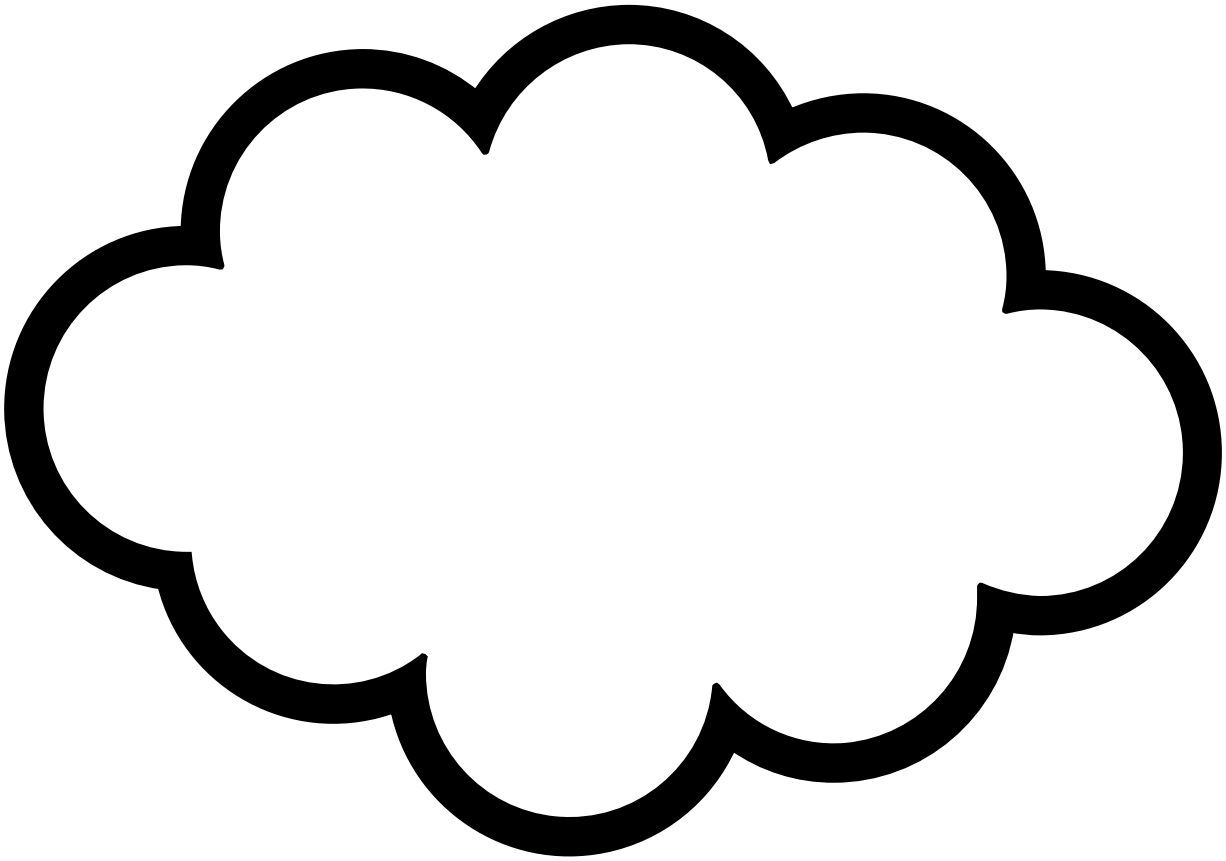
House Templates- Trace and Cut

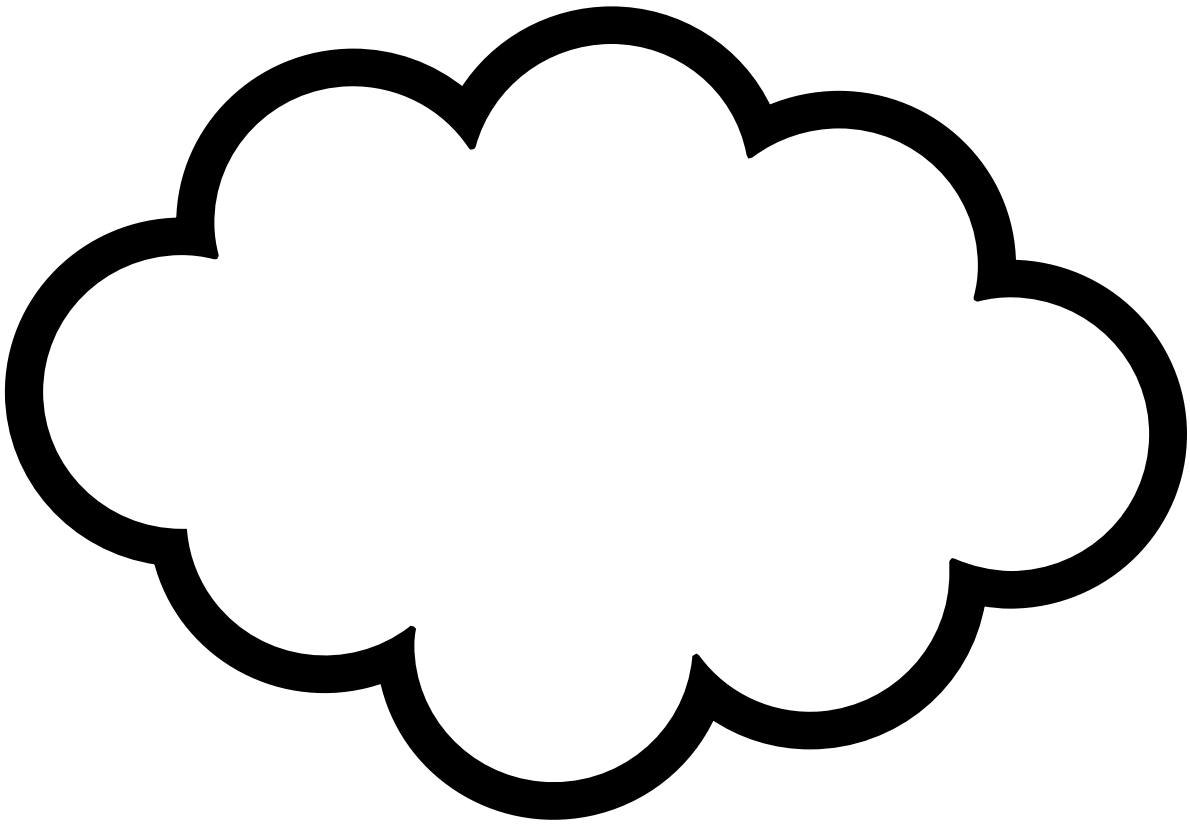




Appendix E

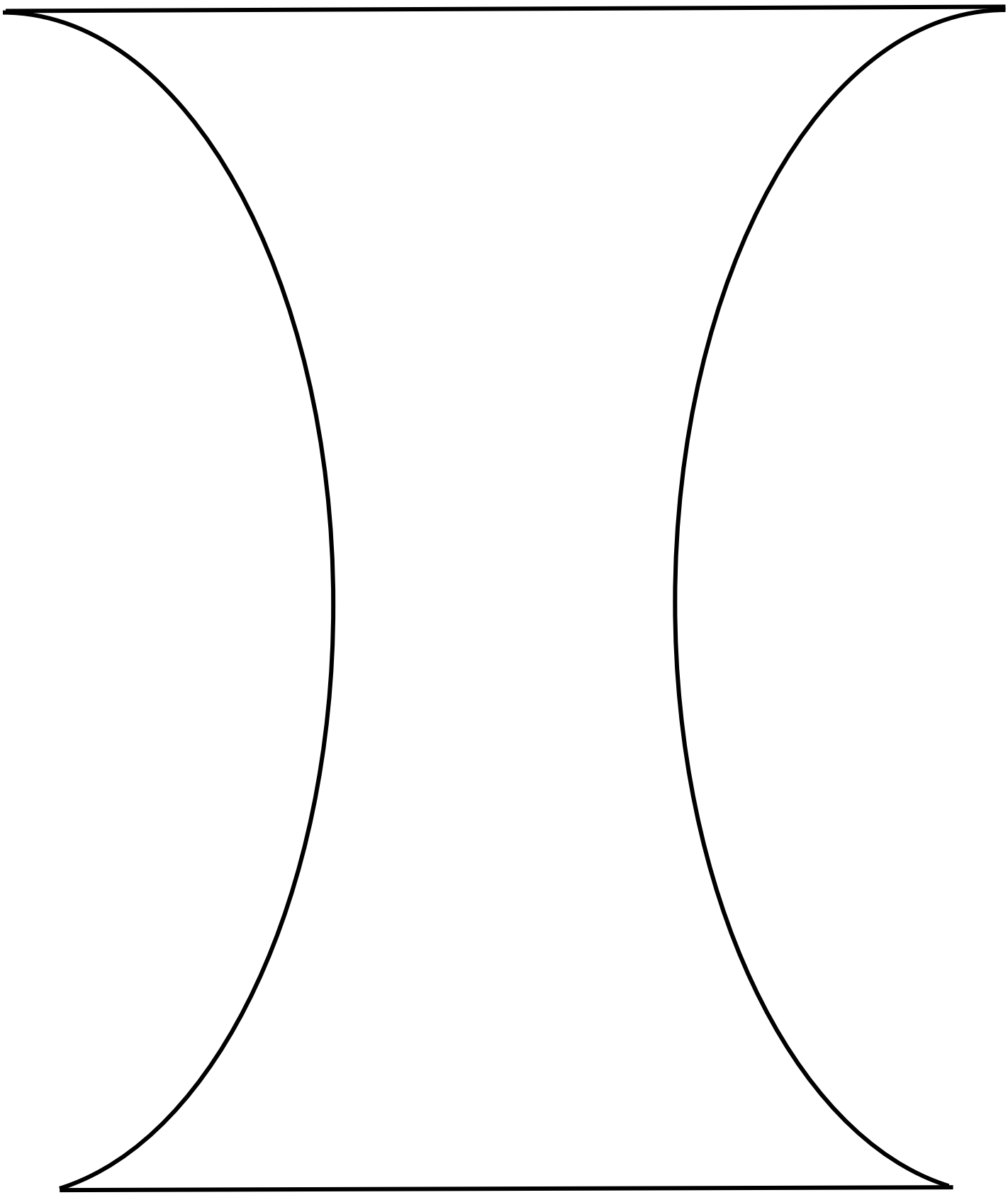
Cloud/Tree Foliage Templates- Trace and Cut



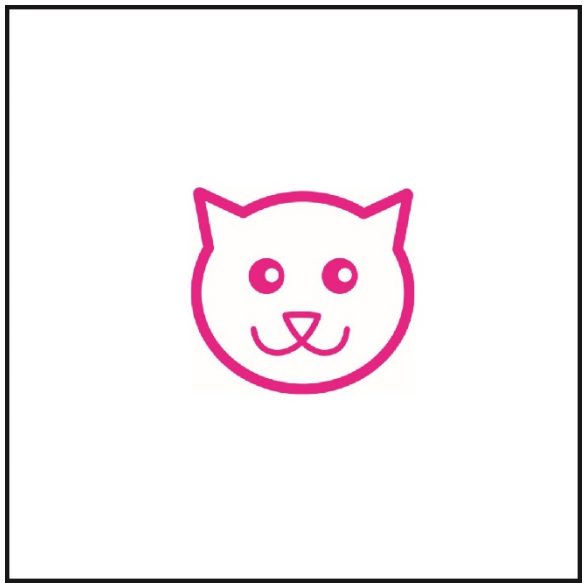


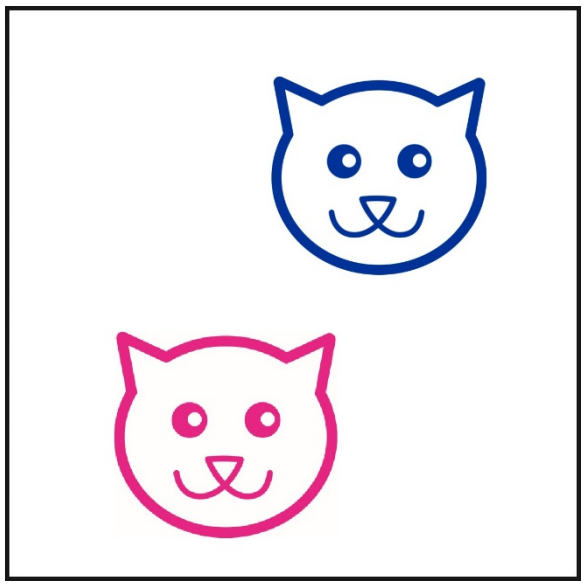
Appendix F

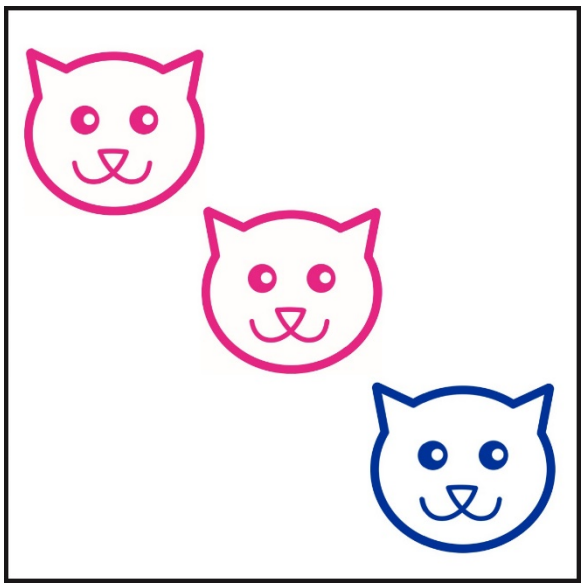
Tree Truck Templates- Trace and Cut

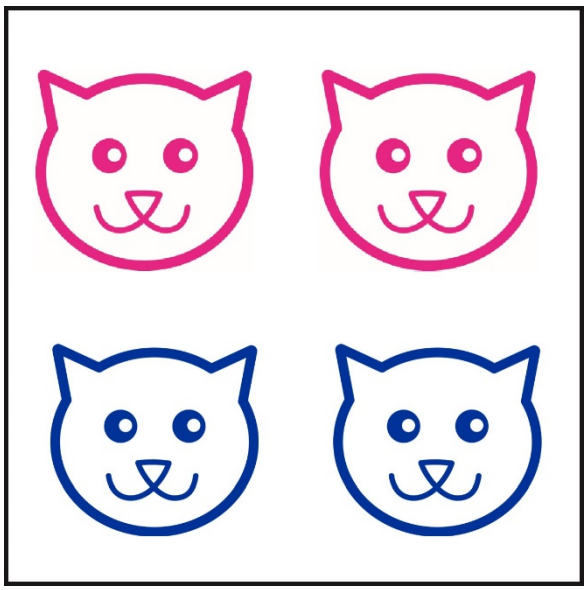


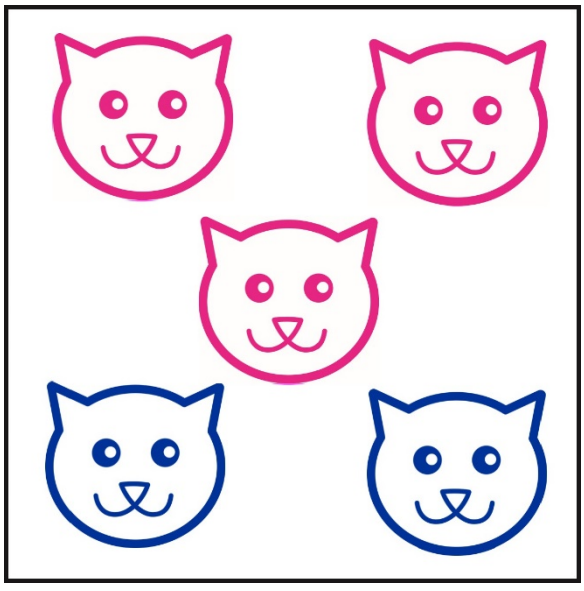
Cat Face Dice Inserts Templates- Cut & Laminate

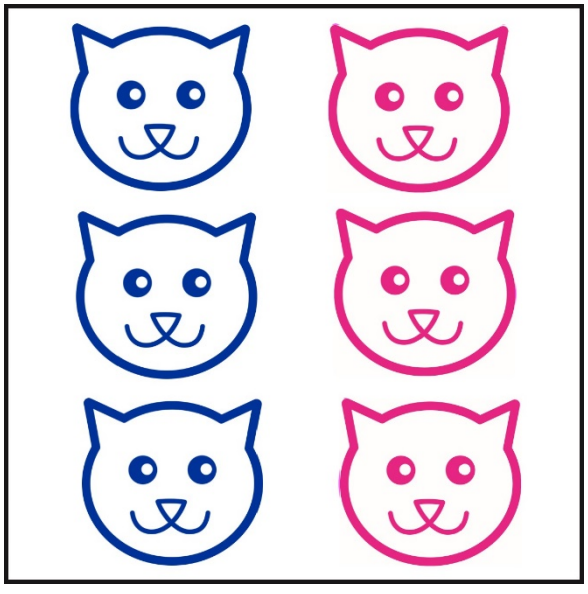




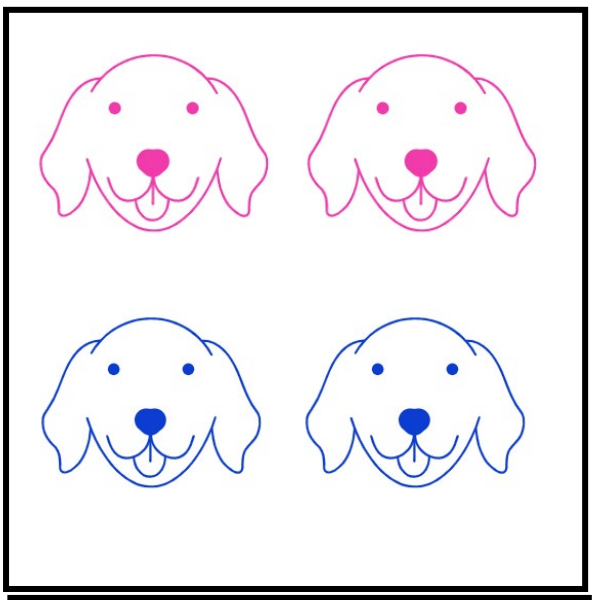


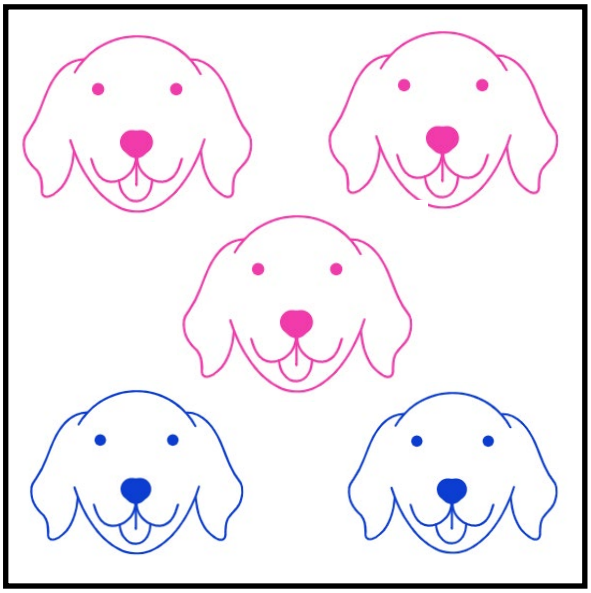


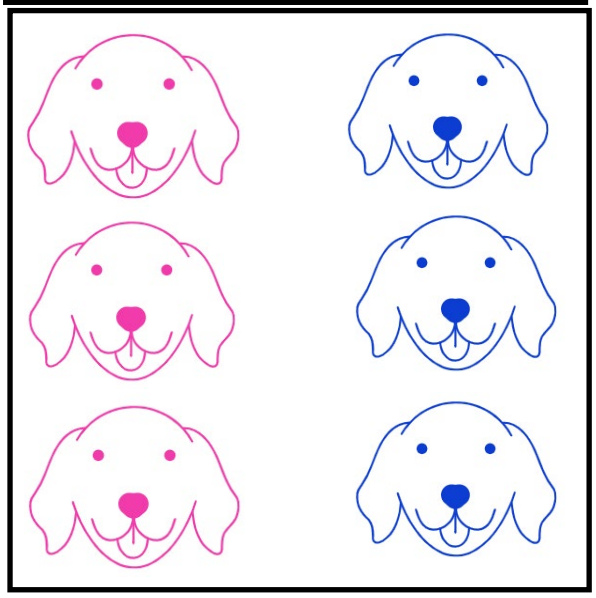


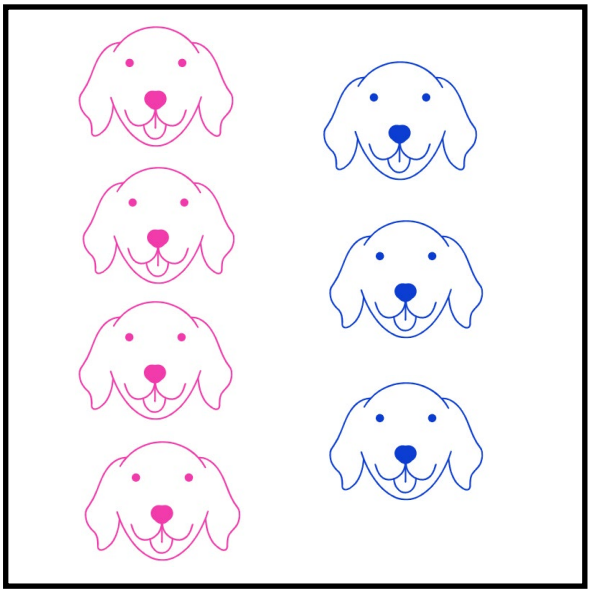


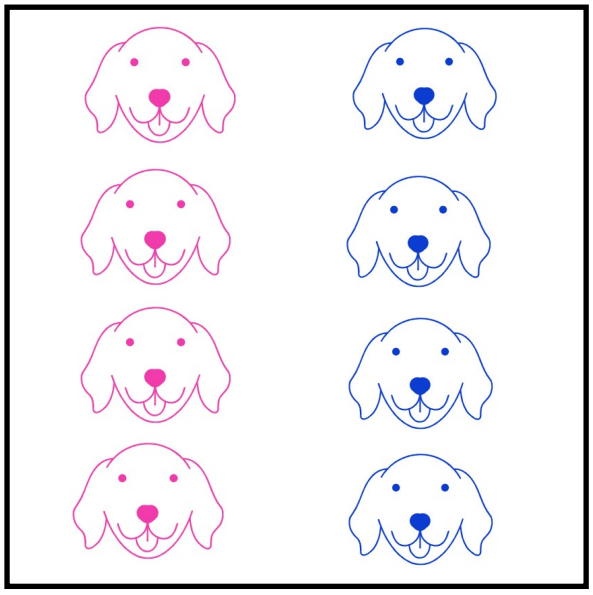
Dog Dice Inserts- Cut & Laminate (extension activity only)

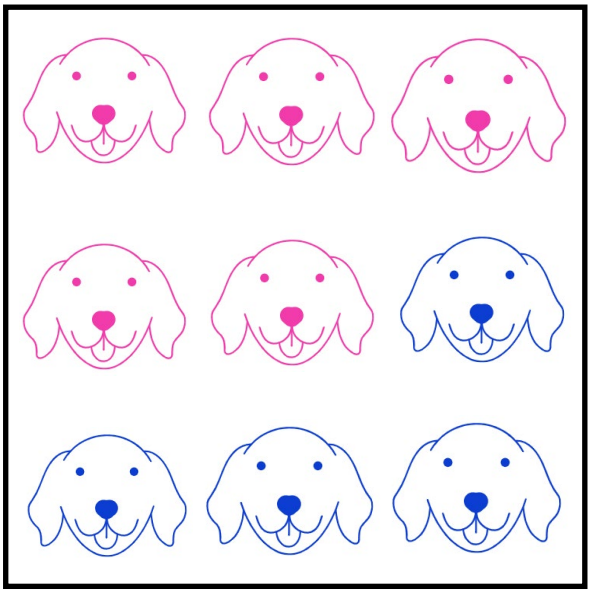






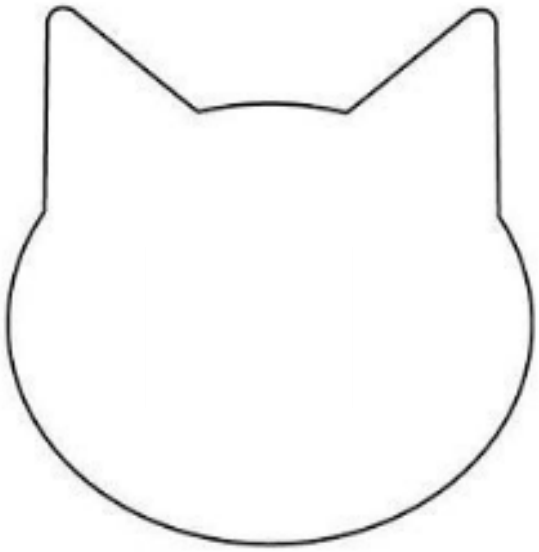


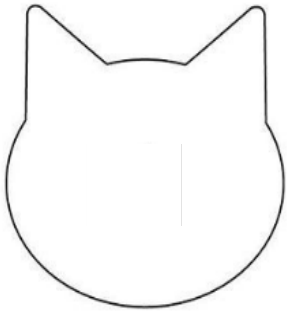
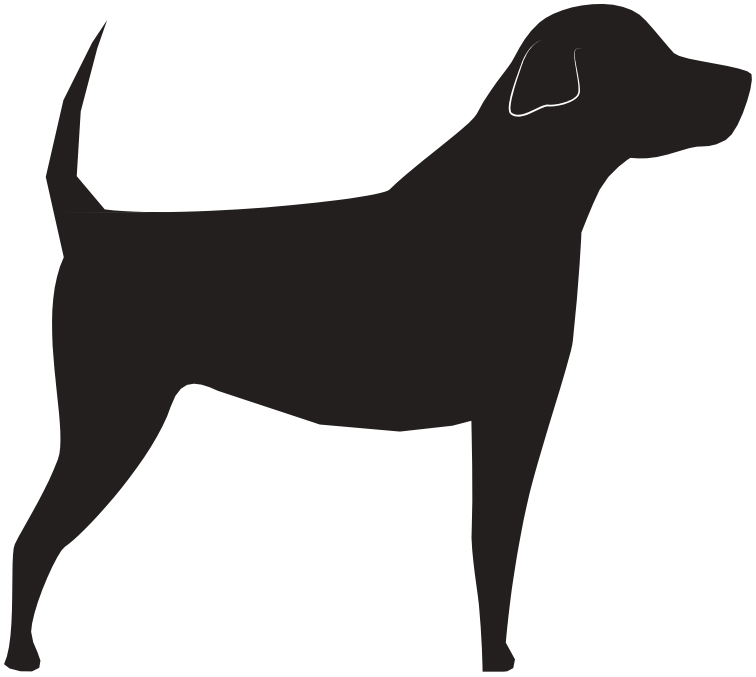




Appendix I

Cat Face Stencil Templates- Trace and Cut





Dog Stencil Templates- Trace and Cut (extension activity only)