## OverPOMpulation

Focus: This lesson will show students how quickly populations of a nimal can grow, and will lead to discussions on solutions to the pet overpopulation crisis.

Age Level: All
Prerequisite: None
Time: 60 Minutes
Number of Participants: Whole Class
Number of Educators/Assistants: 1/1
Prep: Gather materials

## Materials:

- Brown lunch bags (1 per pair)
- Many Poms (stored in brown bags)
- Labeled Buckets (Shelters, ACC, Rescues, Friends)

Animals:

- None

Instructional Objectives: Students will be able to define overpopulation, spaying, neutering, and euthanasia age-appropriately. Students will leam how pet ovepopulation occurs and understand spaying and neutering is one of the best ways to help prevent a nimal overpopulation and to also reduce the number of a nimals eutha nized each year.

Environmental Objectives: Students should work cooperatively together, use materials respectfully, and be engaged in the discussion.

## Procedure:

Introduction:

- Have students define "overpopulation".
o Overpopulation, in our example, means "too many animals". (Over = too much/too many, Population = a group of people or animals). There are more a nimals that need homes than there are homes for.
o Overpopulation = too many of a type of animal/people forthe place they live in and the resources available (ie: housing, food, etc).
- How can there be too many animals? (Everyone loves kittens and puppies!)
o Take guesses from the children (i.e.: breeding, buying not adopting, not spaying/neutering our pets, etc.)
- What happens to the animals when there are too many?

Lesson adapted from the San Francisco SPCA.
o Take guesses again. Ex: They become homeless. They are sent to shelters.

- What are some other reasons animals might end up in shelters or homeless? (The aim of this question is to get the students thinking about real reasons why animals end up in shelters. There are so many reasons that have nothing to do with a nything the animal has done - life happened to them.)
o Someone losta job. A family can't bring theirpet with them to theirnew home. More costly than they thought. New baby in the home. Not knowing how to deal with behavior issues (that class could help with). Etc.
- What are some things we can do to prevent overpopulation?

Take guesses, such as:
o Adopt, don't buy (from a breeder or pet store)
o Spay and neuter!
o Optional additional information:

- Which operation do the females have (spay)? The males (neuter)?
- Surgeries prevent a nimals from having babies.
- Spaying prevents cancers that kill $90 \%$ of cats a nd $50 \%$ of dogs that a re not altered
- All lowa shelters and rescues spay/neuter prior to a doptions; most in US as well
- Surgery is quick! Between 4 minutes (for small males) and 30 minutes (for large females)
- Pretty safe surgery. Animals are asleep during the procedure, feel better within hours, a nd are fully recovered after a week


## Body:

1. Assign the students into pairs.
2. Give one partner a brown bag filled with poms. (The other partner will cup their hands to receive the poms.)
3. Explain that each pom represents a pet, and the students' cupped hands represent a typic al home in the U.S. The student with the bag of poms will pass them into their partners' hands as you tell the story. The students holding the poms a re trying to hold all the poms in their hands without allowing them to overflow and spill to the floor - they don't want to smash the pomseither, though! They are pets!
a. Students with cupped hands can hold their hands over the table so they don't spill the poms onto the floor.
4. Tell students that an unaltered (non-spayed) female cat can get pregnant as early as 4 months and can begin having kittens at 6 months old. Cats can give birth to an average of 6 kittens per litterevery 2.5 months! That addsup to a lot of catsif no one is being spayed orneutered.
5. Story: A family adopts a cat and they name her Lulu. (Put one pom into parter's hands.) The fa mily loves Lulu very much, but - oh no! - they didn't spay her! Lulu has her first litter of 6 kittens (pass poms).
a. Three months pass, Lulu still isn't spayed, and she has $\mathbf{4}$ more kittens (pass).
b. A few more months pass, it is now springtime, also known as "kitten season", and Lulu has $\mathbf{4}$ more kittens, and her first litter of $\mathbf{6}$ kittens have $\mathbf{5}$ kittens each! (How many is that? $6 \times 5=30+4=34$ ). Campers hand over 34 poms).
c. Several more months pass, none of the catsorkittens have been spayed, so Lulu has 5 more kittens (pause); her firstlitter of 6 kittens have 5 kittens each ( $6 \times 5=30$ ) (pause), and her sec ond litter of 4 kittens has 6 kittens each ( $4 \times 6=24$ ) (pause).
d. Fall is a round the comer, the leaves change colors, and more kittens are bom. Lulu has a nother litter of 4 (pause), Lulu's first 2 litters of 6 kittens and 4 kittens all have 6 kittens each ( $6 \times 6=36,4 \times 6=24$ ) (pause), a nd Lulu's kittens' kittens (litter of 5) have 3 kittens each ( $5 \times 3=15$ ).
6. It's only been one year, and there are already many, many cats living in Lulu's house. Can this many cats live in one home? (No!) Is this the number of cats the family wanted to have? (No.)
7. You can quickly share that unaltered cats are driven by their homones and tend to sneak outdoors primarily in search of a mate. Mating just once can start a domino effect that can result, as they just witnessed, in dozens or even thousands of a nimals.
8. All pairs place their poms onto center of their table. We need to find homes for all these cats and kittens, since the fa mily only wanted their one cat, Lulu.
9. Where can these cats and kittens go? Take ideas. As students give ideas, go a round to each group and take a handful of poms from each group's pile and put them in the designated bucket.
-Shelters: have space to take a dozen orso
-Private rescues: can take another dozen
-Friends, neighbors, other neighborhoods: a few more. Your neighbors
already have the number of pets they want. Everyone in other
neighborhoods and states have the same problem.
-Where else can they go?

ForK, $1^{\text {st }}$, and $2^{\text {nd }}$ graders: there is just nowhere else for them to go. These animals will not be able to find a home. We want every cat and dog to have a home. This is why spaying and neutering is so important. If a student does bring up "putting to sleep", you can agree that unfortunately sometimes that doeshappen, and move on.

For 3rd graders and up: explain (if not already mentioned) "putting to sleep" or euthanasia. Ask campers if they know what "eutha nasia" means. It means a "good death". It's ending an animal's life as kindly as possible, so they don't feel scared orpain. Talk about how adoptathons and foster homes allow us to free up kennel space and care for more animals.

- Optional: An animal is given two shots. One shot makes them sleep, just like before you have a surgery so they don't feel a nything. The second shot slows everything down, including their heart, until it stops and they die.
- Unfortunately, 4 million cats and dogsare euthanized each year because there are more animals than there are homes for and there is nowhere for these animals to live.
- At the ARL we are very fortunate because we don't have to euthanize animals due to lack of space. Every animal we take in will stay with us, as long asit takes, until we find the right home for him or her. The only circumstances we euthanize animals in are 1) if they are very sick or are suffering (in pain) and we cannot make them betteror2) they have extreme behaviorissues.


## Debrief.

- What can we do to help solve the problem of overpopulation?
o Spay and neuterour pets!
o Adopt, don't buy
o Share your knowledge with others so they can make informed choices

