



## Pet Overpopulation

**V**arious estimates suggest that there are approximately 78 million dogs and 94 million cats living as pets in American homes today. Millions of people acquire pets each year, for a variety of reasons. Pets provide companionship, can be “employed” as working or service animals, and even assist in therapeutic programs for children and adults. Many of the animals acquired for these reasons will go on to live long, happy lives with the person or family who brought them home. However, for each life-long bond that is created, far too many animals will either be relinquished to shelters, given away to friends or strangers, abandoned, or get loose and go unclaimed. Some of these are puppies and kittens, the result of unplanned, accidental or irresponsible breeding and others are adults acquired during their “young and cute” stage and then discarded as the novelty and attraction waned.

**O**f the throwaways, the lucky ones will be re-homed and become to someone else a valued companion. Still others will live and die on the streets—very likely creating another generation, or several, along the way. The remaining may end up in animal shelters, where, space is tight, simply because there are so many others sharing a similar fate.

It is estimated that approximately 3 million–4 million dogs and cats are euthanized in shelters across the United States every year. Some of those animals are so medically challenged that euthanizing them is the most humane option. Others are too behaviorally challenged and/or aggressive to be rehabilitated and safely adopted to the public. Most of those animals, however, are killed for no other reason than there is simply not enough room for them. The sad reality for the majority of the companion animals that end up in shelters in most communities is that the final kind act they will experience is a gentle hand ending their life.



**Dogs and cats become sexually mature at an earlier age than their wild counterparts, are able to mate more often and typically have larger litters of young.**



No animal shelter aims to be a place where animals go to die. No shelter worker is pleased to serve as that last gentle hand—they do so because they have no choice. There are simply too many animals arriving

at their doorstep daily to be able to effectively care for them in a safe, healthy, and humane manner. The blame for animal deaths is often unjustly placed on the shelter itself. “Kill shelter” has come to be synonymous with what is, in reality, an open admission shelter: one that is contracted with the city or county to take in every stray and owner-relinquished animal who enters its front door. Without adequate space, these shelters often have no choice but to euthanize animals before the situation becomes

unmanageable, unsanitary and dangerous to both the animals and the humans that work there. Conversely, “No-Kill” shelters (otherwise known as limited admission shelters) are often held in high regard because they do not euthanize for space. What is often misunderstood is that limited admission shelters have the option to turn people and their animals away when they run out of space. Because they are not required to accept every animal handed to them, they avoid having to euthanize for reasons other than behavioral or medical issues. There exists the notion that the problem would be solved if “kill” shelters would just fall in line and commit to no longer killing because of a lack of space, but unfortunately, it’s not that simple. A commitment like that is unsustainable if humans don’t begin to take responsibility for the animals we domesticated.

Several factors, both biological and social, combine to cause the reality of homeless pets and the consequences they face. As domesticated species, dogs and cats differ from their wild ancestors in several key characteristics. First and foremost, they have been selected to socialize with people. In addition, like other domestic animals, they were bred to have higher reproductive rates. Dogs and cats become sexually mature at an earlier age than their wild counterparts, are able to mate more often and typically have larger litters of young. Cats for example, can reproduce as young as 4½ - 6 months of age, are capable of breeding twice per year and may average six young per litter. As a result, a single pair of cats can give rise to a population as high as 2,048 in 2½ years, assuming litters are equally divided between male and female kittens. A pair of African wildcats, the likely ancestor of the domestic cat, would produce a population of about eighteen in the same time period given their

later age for sexual maturity, breeding frequency of once a year and smaller litter size of about four kittens. Similar differences would be seen between the reproduction of dogs and of their ancestor, the wolf. While these numbers are projections, it does point out the vast difference in reproductive potential between wild animals and domestic animals as a result of the domestication process. It also argues strongly in favor of intervention. Humans created this high level of reproductive potential and it is our responsibility to provide some means of population control for our companion animals.

The surgical removal of the uterus and ovaries of female animals (spaying) and of the testes of male animals (neutering) is currently the most effective way to combat overpopulation. Through education and outreach, spay/neuter (S/N) has become more widely accepted, with many groups focusing on S/N as one of their main strategies to help alleviate the animal suffering and euthanasia that occurs as a direct result of overpopulation.

Humane Alliance, a group that began in 1994 as a small spay/neuter clinic in Asheville, NC, has now grown to be the nation’s most sought-after model for training veterinarians and shelter professionals in high-volume/high-quality S/N techniques. In addition to its work regionally, its National Spay/Neuter Response Team mentors other organizations who are interested in following their example. On its website, Humane Alliance quotes Dr. Janet M. Scarlett, DVM, MPH, PhD, and Professor of Epidemiology at Cornell University as saying “There is no disease or condition of companion animals that takes more of their lives than euthanasia.” It is Humane Alliance’s mission to end systematic euthanasia as a means of population control by implementing widespread S/N to pets, as well as homeless, abandoned and feral animals.

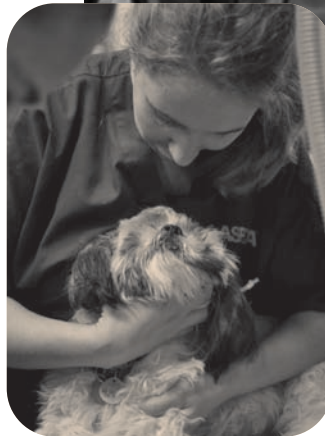


**The ASPCA’s Mobile Spay/Neuter Clinic (MSNC)**

In 1997, the ASPCA started a similar program, loosely based on the Humane Alliance Model, except it was on wheels. Originally called the Care-A-Van, the converted RV-turned-surgical-suite spent much of its time in Long Island, performing a maximum of fifteen spay/neuter surgeries per day mainly to shelter animals and feral cats captured as part of local Trap/Neuter/Return (TNR) program.

According to Joel Lopez, Administrative and Outreach Manager of what has now been renamed the ASPCA's Mobile Spay/Neuter Clinic (MSNC), the focus for the clinic changed around 2000. "Intake data collected at the ASPCA's Adoption Center indicated that high numbers of animals were entering the shelter from areas of the city where there were fewer resources across the board. By providing free or low-cost S/N (and vaccination) services to these areas, we are better able to help more people keep their pets, reduce the number of animal births, and thereby reduce the number of animals coming into the shelter."

"It's making a huge difference for animals in this city," says Lopez. There are now a total of five MSNC's, operating seven



days per week in more than 80 distinct New York City neighborhoods. In 2008, 23,000 of NYC's animals were spayed and or neutered—which includes both pets and many feral cats trapped by rescuers. According to Lopez, the ASPCA is projecting 30,000 surgeries performed by the end of 2009.

The euthanasia rate in the city has dropped significantly over the last few years, definitely due in part to programs such as the MSNC. Of course, it doesn't work on its own. "The first approach to any community's overpopulation issue has to be an effort to increase animal adoptions. But targeted spay and neuter has to follow to create a sustainable solution" says Lopez. "By increasing S/N, you're improving everything. You will still have your shelter resources, but fewer animals using those resources, so the animals who do end up in the shelter will have a better existence. Now, for many animals, ending up in a shelter is a death sentence. Decreasing the population with S/N can change that."

In addition to preventing unwanted litters of dogs and cats, spaying and neutering also provides behavioral and medical benefits. Neutered male dogs and cats are less likely to have aggression problems, roam from home and mark their territory with urine. They are also protected against cancer of the testes and certain diseases of the prostate gland. The chances of developing ovarian, uterine, and mammary cancers are eliminated by spaying females, particularly if it is performed before their first heat cycle.

**M**uch like Humane Alliance and the ASPCA, groups across the country are working tirelessly to sterilize as many companion animals as possible, but they cannot do it without public compliance and cooperation. It is up to each of us to help stop the needless deaths of dogs and cats due to overpopulation. Humans are the exclusive cause of this problem, and therefore it is our responsibility to create the change that these animals need. It is, after all, the least we can do for our "best friends."





## Activity Sheet 1 Grades K-2



**S**tudents learn that all pets do not find homes and are introduced to animal shelters as a place where companion animals should be taken if they are lost and/or need to find a new home. Students match the cats and dogs to homes so that the numbers add up to 20.



Include the name, location and phone number of your local shelter in the lesson. Explain that if students encounter a lost or abandoned animal, they should ask an adult to call the local shelter or animal control facility. Children should never approach or touch an animal they do not know. Let students know that the animal shelter is a place to look if your family has decided to bring a new pet into the home.

### STANDARDS:

**NCTM Mathematics Standard:**  
Number and Operations

## Activity Sheet 2 Grades 3-5



**C**hildren learn how many kittens can result from one unspayed female cat by solving simple addition and multiplication problems. Instruct children to read each math problem and fill in the number of kittens in the column on the right. The right column should then be totaled to get the correct number of kittens.



Review the answers in class and discuss what the family could have done to prevent so many kittens without homes from being born. The answer of course is that they could have had Samantha spayed.

Answers: 1) 1; 2) 5; 3) 4; 4) 15; 5) 6; 6) 8; 7) 35; and Total) 74.

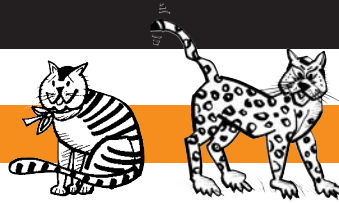
### STANDARDS:

**NCTM Mathematics Standard:**  
Number and Operations



# Teacher Instructions

## Activity Sheet 3 Grades 6-8



**D**iscuss with your class the differences in reproductive rates between domesticated animals and their wild ancestors and why this came about (see article, Pet Overpopulation). Hand out Activity Sheet 3 and review the variables that effect population size: age of sexual maturity, number of times animals breed in a given year, litter size and the number of males and females in each litter. Explain that students will be calculating the growth of two populations, domestic cats versus African wild cats.

For our purposes, population size or Total Cats equals the number of New Kittens plus the Previous Total Cats from the earlier time interval. We also assume that each population starts out with one mature male and one mature female (Total Cats = 2) and that mortality is 0 for 4 years. The number of New Kittens is equal to 1/2 the Total Cats times Litter Size (6 for domestic cats and 4 for African wild cats).

As an extension activity, students can graph the data on a separate sheet of paper and then calculate the reproductive rate for both populations.

*Answers:*

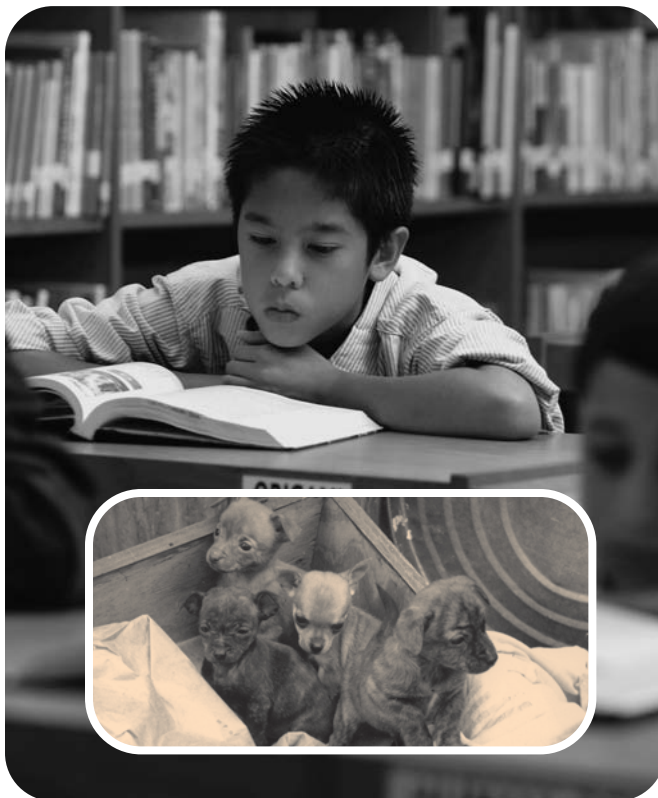
**Domestic cat:** 1 yr (24, 32); 1 1/2 yr (96,128); 2 yr (384,512); 2 1/2 yr (1536, 2048); 3 yr (6144, 8192); 3 1/2 yr (24576, 32768); and 4 yr (98304,131072).  
**African wild cat:** 1yr (4,6); 1 1/2 yr (0,6); 2 yr (12,18); 2 1/2 yr (0,18); 3 yr (36,54); 3 1/2 yr (0,54); and 4 yr (108,162).

### STANDARDS:

**NCTM Mathematics Standard:**  
Number and Operations

**NCTM Mathematics Standard:**  
Algebra

## Activity Sheet 4 Grades 3-8



**L**earning about pet overpopulation and the importance of spay/neuter is a vital first step in helping to reduce the number of homeless animals. Creating solutions and doing something about the problem are even bigger steps in helping to end pet overpopulation. This activity introduces students to a few service learning projects that address pet overpopulation. These are some suggestions for service projects. Students can also think of their own projects.

### STANDARDS:

**NCTE English Language Arts # 4:**  
Communication Skills

**NCTE English Language Arts # 8:**  
Developing Research Skills

**NETS Technology # 3:**  
Technology Productivity Tools

**NETS Technology #5:**  
Technology Research Tools



## Activity Sheet 5 Grades 6-12



In this activity students will create a virtual classroom using an online digital world called Second Life. Second Life is a 3D virtual world created by its residents. Each student is characterized by an avatar that represents his or her chosen digital persona.

Students can communicate via text messaging with others, hold private one-to-one asides, have access to planned events and communities, and build their own world. Unlike virtual world games with set goals, Second Life is a place where the residents decide where to live and what to do. According to the Second Life website, hundreds of leading universities and school systems around the world use Second Life as a part of their educational programs. Universities “residing” on Second Life include Harvard and Stanford.

Using information and facts from the Pet Overpopulation article, your students, in groups of five or more, will create a classroom—a virtual world—to teach other Second Life residents about pet overpopulation and the importance of spaying and neutering. Encourage your students to further research the topic online and gather information.

Discuss with your students the following important points that should be included and emphasized in their virtual classroom:

- statistical facts about pet overpopulation
- demonstration of the growth of a population of an unspayed female cat or dog
- definitions of terms
- Other information your students may wish to add

Each student will sign-up to Second Life and create an individual avatar. Students should have permission from their parents or guardian before signing-up. Many of the students may be familiar with virtual worlds from their gaming experiences, but you and your student’s should first become familiar with creating and building in Second Life. Links to video tutorials with step-by-step instructions on how to use Second Life are provided below. For more advanced tutorials search on Youtube.com or the Second Life website.

In their groups, students will work together as follows:

- Discuss the information they will teach in their virtual class and what the instructional plan will look like.
- Plan and build their virtual classroom.
- Decide when they will present the class. Once they have presented the class, the information will remain static in the virtual classroom so other residents of Second Life can visit.
- Devise a plan to announce the virtual class. The group will decide whether they invite residents of Second Life or use social networks such as MySpace.

Identify other steps you deem necessary and important.

After each group has completed their virtual classroom, give students (and yourself!) the opportunity to visit and participate in each group’s virtual classroom. This activity takes careful planning and teamwork, but with practice, provides a learning tool that your students can share with the virtual world.

### Learn to Use Second Life

<http://secondlife.com>

<http://www.youtube.com/watch?v=6b6WnMA3qgo&feature=PlayList&p=8CF5CF153E6F40C3&index=25>

<http://www.youtube.com/watch?v=AvsG45597cA&feature=PlayList&p=8CF5CF153E6F40C3&index=24>

<http://www.youtube.com/watch?v=UhwMI1ybNm8&feature=related>

<http://www.youtube.com/watch?v=bWhYUizovqk&feature=related>

### STANDARDS:

**NCTE English Language Arts # 4:** Communication Skills

**NCTE English Language Arts # 5:** Communication Strategies

**NCTE English Language Arts # 8:** Developing Research Skills

**NETS Technology # 3:** Technology Productivity Tools

**NETS Technology #4:** Technology Communication Tools

**NETS Technology #5:** Technology Research Tools

**NAEA Visual Arts # 1:**

Understanding and Applying Media, Techniques, and Processes

**Media Literary #1:**

Use media to practice general observation, critical thinking, analysis, perspective-taking, and production skills by fostering creative skills through encouraging the production of media messages about a topic.

**Media Literary #2:**

Use media to stimulate interest in a new topic.





## Activity Sheet 6 Grades 6-12

**S**hooting a video in Second Life is simply done with several commands and a click of the mouse. In this activity, students will create a movie using the virtual world of Second Life as their platform to teach others about the importance of spay and neuter.



Machinima (Machine + Cinema) is filmmaking within a real-time, 3D virtual environment, often using 3D video-game technologies. Machinima provides the user with creativity and flexibility to film real-time events in

an interactive environment. In Machinima each individual avatar in Second Life becomes an actor in a scene, and the computer server doubles as the camera, recording everything that happens in the virtual world. All you need to create a Machinima movie is the proper software and hardware.

In groups of five or more, students will create a message using Machinima on the importance of spay and neuter and pet overpopulation based on the Pet Overpopulation article and online research. Have your students sign-up and create an avatar on Second Life, if they do not have a character already. They will need a parent or guardians permission to sign-up.

Before dividing your students into groups, have students view the Machinima video created by Global Kids (link provided). Next, each student should become familiar with the concept of Machinima and how to create a movie on the Second Life platform.

In their groups, the students will:

- Brainstorm and decide what they would like to message in their movie.
- Create a storyboard and action plan. This includes the roles of the characters, the scene, etc.
- Animate and film their characters and scenes.
- Edit movie and include title screens and voice editing, if necessary. Students can edit their movie using Moviemaker® by Microsoft (free), Final Cut Pro® by Apple, Adobe Premiere® or any video editing software you choose.
- Upload movie to YouTube or TeacherTube.

Have each group present their movie and reflect on the process of creating the movie and the relevance of the issue.

Students can then share their movies with other friends and family by posting them on their social networking sites or on Second Life.



### Making a Movie using Machinima

<http://wiki.secondlife.com/wiki/Machinima>

<http://www.slideshare.net/jeremykemp/making-machinima>

### Example of Machinima project on Second Life

<http://www.youtube.com/watch?v=HW7ZeXVKsnQ>

### Play YouTube videos on Second Life

<http://www.slvid.com/video/Play-YouTube-videos-in-Second--2>

### STANDARDS:

#### NCTE English Language Arts # 4:

Communication Skills

#### NCTE English Language Arts # 5::

Communication Strategies

#### NCTE English Language Arts # 8:

Developing Research Skills

#### NETS Technology # 3:

Technology Productivity Tools

#### NETS Technology #4:

Technology Communication Tools

#### NETS Technology #5:

Technology Research Tools

#### NAEA Visual Arts # 1:

Understanding and Applying Media, Techniques, and Processes

#### Media Literary #1:

Use media to practice general observation, critical thinking, analysis, perspective-taking, and production skills by fostering creative skills through encouraging the production of media messages about a topic.


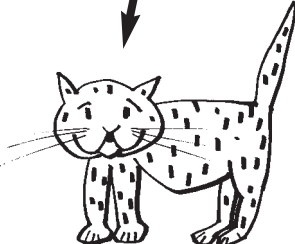



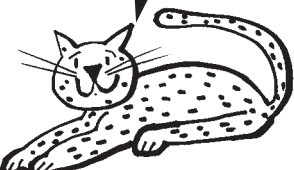





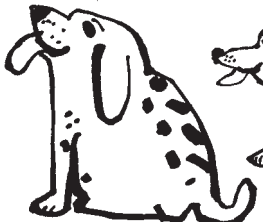

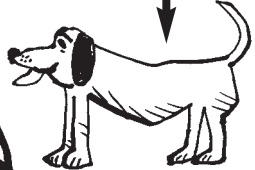





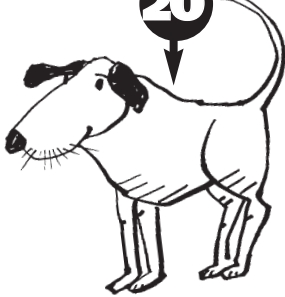












#### Media Literary #2:

Use media to stimulate interest in a new topic.



## Help Me Find a Home

Match the **animal** to the **home** so that the two numbers sum to **20**.

 ↓ 	 ↓ 	 ↓ 	 ↓ 	 ↓ 	
 ↓ 	 ↓ 	 ↓ 	 ↓ 	 ↓ 	
 ↓ 	 ↓ 	 ↓ 	 ↓ 	 ↓ 	 ↓ 

- Did all of the animals find a home?
- How many cats found a home?
- How many dogs found a home?
- How many cats did not find a home?
- How many dogs did not find a home?
- Where can the animals that did not find a home be taken care of until they find one?







## Cats, Cats *and more* Cats!

**A**nimal shelters take care of millions of lost, abandoned and relinquished (given up) animals each year. They try to find homes for as many as they can, but there are not enough homes for all the animals in shelters. Read each sentence and write the correct number of new kittens in the column to the right. When you finish, add up all the numbers. This will help you understand how quickly cats can fill up shelters!

**1** Last December, a family adopted **ONE** unspayed female kitten. She was two months old. Her name is Samantha.



**2** In March, Samantha had **FIVE** kittens. Two were male and three were female.



**3** In July, Samantha had her second litter. She had **FOUR** kittens, two males and two females.



**4** In September, Samantha's **THREE** daughters from her first litter each had **FIVE** kittens. Seven were female. (3x5)



**5** In November, Samantha had her third litter of **SIX** kittens. They were all female.



**6** In January, her **TWO** daughters from her second litter each had **FOUR** kittens. Five were female. (2X4)



**7** In March, **SEVEN** of Samantha's granddaughters each had **FIVE** kittens. (7x5)



**Total** number of kittens that were born from March to March because of one unspayed female cat!

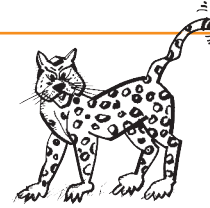


**What could the family have done to prevent so many kittens without homes from being born?**

# Activity Sheet 3



## Domestic vs. Wild



**W**hen humans domesticated cats and dogs, they not only chose animals that would be more sociable with people, they also selected for higher reproductive rates. Domestic cats, for example, can reproduce as young as 5-6 months of age and may breed twice a year. As a result a single pair of cats may result in a population as high as 2,048 cats in 2 1/2 years, assuming breeding at 6 months, 2 litters per year and 6 young per litter equally divided between male and female kittens. A pair of African wildcats would produce a population of about 18 in the same time given a later age for sexual maturity, breeding just once a year and a smaller litter of 4 kittens.

Complete the following table by using the formulas at the top of each column. Assume each population starts out with a total of two cats, one mature male and one mature female cat. Show your work in the space provided.

	Domestic Cat (Breed twice per year)		African Wildcat (Breed once per year)	
Time	New Kittens = $\frac{1}{2}$ Total Cats x 6	Total Cats = New Kittens + Previous Total Cats	New Kittens = $\frac{1}{2}$ Total Cats x 4	Total Cats = New Kittens + Previous Total Cats
Start	0	2	0	2
6 months	$1 \times 6 = 6$	$6 + 2 = 8$	X	2
1 year			X	
1 1/2 years			X	
2 years			X	
2 1/2 years			X	
3 years			X	
3 1/2 years			X	
4 years			X	

How does the difference in reproductive rate effect how we control the population of domestic cats?  
How does it effect the protection of the African wild cat?

As an extension activity, graph the domestic cat and African wild cat populations at 6 month intervals on a separate piece of paper. Determine the reproductive rate for both populations using  $y=mx+b$ .



## What Can You Do to Help Prevent Pet Overpopulation?

**D**o you see stray cats or dogs in your community? Is your local animal shelter filled with lots of animals? If you answered yes to either of these questions, then you know that there is a pet overpopulation problem—when there are too many cats, dogs and other companion animals who don't have homes. There are many ways you can help bring awareness to the issue of pet overpopulation.



### RAISE AWARENESS ON THE IMPORTANCE OF SPAY AND NEUTER (surgery to prevent animals from reproducing)

#### What is pet overpopulation?

- Explain what is meant by pet overpopulation. Research the reasons why it occurs and provide possible solutions to prevent overpopulation.

#### Educate others on this issue

- Create a Wiki, a blog, a podcast or post information on your social network page
- Develop a Public Service Announcement (PSA) similar to the one created by the ASPCA with Joe Girardi of the New York Yankees <http://www.youtube.com/watch?v=vk3zFj-OjIM>. Post the PSA on your favorite social network, and share with friends and others in the community

#### Create posters, flyers or brochures and distribute in your school and community.

- Campaign for low cost and/or free spay and neuter programs in your community
- Research how spaying and neutering can decrease the number of stray animals and animals entering the shelters.
- Work with your local animal shelter and/or community to lobby for low-cost and/or free spay and neuter programs.

#### Adoption campaign

- Research the costs of adopting an animal from your local shelter versus buying an animal from a pet store.
- Research how the demand for purebred animals from a pet store increases the likelihood that more of these animals will be bred and sold. This demand also reduces the possibility of an animal being adopted from an animal shelter.

#### Spay/Neuter license plates

- New Jersey, Florida and Texas are just a few of the states with spay/neuter license plates available for licensed drivers. If your state has these license plates available, help spread the word so others are aware that they are available for purchase. If your state doesn't have them, campaign to the Department of Motor Vehicles to introduce these license plates to your state.

**These are just some suggestions—what else can you think of to help solve this problem?**





## Learning through Virtual Worlds



**S**econd Life (<http://secondlife.com/>) is a 3D virtual world created by its residents. Each individual is represented by an avatar, a character that you can personalize and use when interacting with friends online. You can communicate via text messaging with others, hold private one-to-one asides, access planned events and communities, and build your own virtual world. Unlike virtual world games such as World of Warcraft and Sims with set goals, Second Life is a place where you decide where to live and what to do.

### **YOU AND YOUR CLASSMATES WILL CREATE A CLASSROOM—A VIRTUAL WORLD—TO TEACH OTHER SECOND LIFE MEMBERS ABOUT PET OVERPOPULATION.**

*In your assigned group, you will work together to do as follows:*

- 👉 Your first step is to create an avatar on Second Life. You will need a parent or guardians permission to sign-up.**
- 👉 Research the topic online and gather information .**

*Discuss the information your group will teach in the virtual class and what that instructional plan will look like. Important information to include:*

- 👉 Statistical facts about pet overpopulation**
- 👉 Demonstrate the growth of a population of an unspayed female cat or dog**
- 👉 Definitions of terms**
- 👉 Other information your group may wish to add**
- 👉 Plan and build your virtual classroom on Second Life.**
- 👉 Decide when the class will be presented and if the information will remain static in the virtual classroom so other residents of Second Life can visit.**
- 👉 Devise a plan to announce the virtual class. The group will decide whether to invite residents of Second Life or to use social networks such as MySpace to invite others to visit your classroom.**
- 👉 Identify other steps your group deems necessary and important.**
- 👉 Once the group has completed creating this project, give your classmates the opportunity to visit and participate in your virtual classroom.**



## Virtual World-Making the Movie



**M**achinima (Machine + Cinema) is filmmaking within a real-time, 3D virtual environment, often using 3D video-game technologies. In Machinima you create an avatar using a platform such as Second life. Your avatar then becomes an actor in a scene, and the computer server doubles as the camera, recording everything that happens in the virtual world.

In your assigned group, you will create a message using **Machinima** on the importance of spaying and neutering and pet overpopulation.

Your first step is to create an avatar (a character that you can personalize and use when interacting with friends online) on **Second Life** (<http://secondlife.com/>). You will need a parent or guardians permission to sign-up.

*In your assigned group:*



**BRAINSTORM AND DECIDE WHAT MESSAGE YOUR GROUP WOULD LIKE TO SEND IN YOUR MOVIE.**



**CREATE A STORYBOARD AND ACTION PLAN. DECIDE AS A GROUP THE ROLES OF THE CHARACTERS, THE SCENE, AND ANY OTHER INFORMATION IMPORTANT TO THE MOVIE.**



**ANIMATE AND FILM YOUR CHARACTERS AND SCENES. THIS ENTAILS GIVING MOVEMENT AND VOICE TO YOUR AVATAR. EDIT THE MOVIE AND INCLUDE TITLE SCREENS AND VOICE EDITING, IF NECESSARY. YOU WILL EDIT THE MOVIE USING MOVIEMAKER BY MICROSOFT (FREE), FINAL CUT PRO BY APPLE, ADOBE PREMIERE OR ANY VIDEO EDITING SOFTWARE YOUR GROUP CHOOSES.**



**UPLOAD MOVIE TO YOUTUBE OR TEACHERTUBE.**



**GRAND PREMIERE! SHARE YOUR MOVIE WITH YOUR CLASSMATES, FRIENDS AND FAMILY BY POSTING IT ON YOUR FAVORITE SOCIAL NETWORKING SITE OR ON SECOND LIFE.**

