



Grade 4: Too Many Cats and Dogs

In-Class Lesson Plan

Introduction

Humane education examines the relationship between animals and humans, recognizing that we share many of the same physical and emotional needs. Concepts learned through humane education promote and encourage further development of important character and life-building skills including empathy, sensitivity, responsibility, respect, compassion and kindness to all living beings. Knowledge of humane education concepts also provide individuals with the capacity for responsible and humane decision-making, ultimately making our communities more enjoyable for all.

Learning Objectives

The purpose of this three-part lesson plan is to help students understand the importance of being a responsible pet owner, with a focus on the community impact of spaying and neutering domestic pets. By the end of the lesson:

- Students will understand the concept of pet over-population in the community.
- Students will understand pet sterilization, and explore common misconceptions about spaying and neutering.
- Students will be aware of the benefits associated with spaying and neutering pets for the community.
- Students will understand the role of the OHS with regards to pet overpopulation and homelessness, and be able to identify reasons why animals are brought to shelters.
- Students will explore several ways to prevent animal homelessness, by being responsible pet owners.

Curriculum Link

All OHS humane education topics are available by grade level and are linked directly with the Ontario Curriculum. The *Too Many Cats and Dogs* lesson aligns with the **Science and Technology: Understanding Life Systems – Habitats and Communities** and **Mathematics: Number Sense and Numeration** components of the Grade 4 curriculum. According to the overall expectations identified in the curriculum, by the end of Grade 4, students should be able to:

- Analyze the effects of human activities on habitats and communities;
- Solve problems involving addition and multiplication of single- and multi-digit whole numbers;
- Demonstrate an understanding of habitats and communities, and the relationships among the plants/animals that live in them.

Lesson Plan Summary

Day One: *Too Many Cats and Dogs* Lesson (Appendix 1)

- Begin teaching the lesson by facilitating the *Too Many Cats and Dogs* presentation. Teachers can book an OHS volunteer humane educator to facilitate the presentation, using the online booking form at <http://www.ottawahumane.ca/youth-programs/teacher-resources/classroom-presentations/humane-education-request-form/>.
- The presentation and accompanying script are also available for distribution if teachers would like to facilitate the presentation independently. We update our content regularly to ensure that it is always up-to-date and accurate. To ensure teachers have access to the updated content, the PowerPoint presentation and script are available electronically, by emailing humaneeducation@ottawahumane.ca.
- Leave time for a question and answer period at the end of the lesson. Students love to share their own stories about pets and animals – if time permits, allow them to share stories and help them draw conclusions about these experiences that relate to the lesson.

Day Two: *Spay, Neuter, Hooray!* Math Lesson (Appendix 2)

- Follow the instructions provided on the *Spay, Neuter, Hooray!* instruction sheet.
- Review the math worksheet as a class.

Day Three: *Spay and Neuter Campaign* Poster (Appendix 3)

- Follow the instructions provided on the *Spay and Neuter Campaign* instruction sheet. This activity is designed to engage students creatively by encouraging their peers to get their pets spayed and neutered.
- This activity empowers students to share their ideas with others. Students can take pride in educating friends/family, while engaging in discussions about their humane message.

Appendix 1: *Too Many Cats and Dogs* Script

Introduction

This presentation is one-hour in length and links directly to the Grade 4 curriculum in the subjects of **Science and Technology: Understanding Life Systems – Habitats and Communities** and **Mathematics: Number Sense and Numeration**. Throughout the lesson, students will learn about responsible pet ownership and the benefits of spaying and neutering companion animals. The presentation explores the following topics:

- *An introduction to the OHS;*
- *Lifespans of domestic pets;*
- *Animal homelessness and pet overpopulation;*
- *The benefits of spaying and neutering;*
- *Common misconceptions about spaying and neutering.*

REMINDER – A volunteer humane educator can be scheduled to facilitate the presentation using the online form available at <http://www.ottawahumane.ca/youth-programs/teacher-resources/classroom-presentations/humane-education-request-form/>. Alternatively, the script and PowerPoint presentation are available electronically by emailing humaneeducation@ottawahumane.ca.

Appendix 2: *Spay, Neuter, Hooray!* Math Activity

Overview

Students will use mathematics to understand the impact that unsterilized pets can have on the pet overpopulation problem in our community. They will solve problems involving addition and multiplication of single- and double-digit whole numbers.

Objective	For students to understand pet overpopulation by solving mathematical problems.
Time Needed	60 to 90 minutes.
Materials Needed	<ul style="list-style-type: none">• Pencil• <i>Spay, Neuter, Hooray!</i> Worksheet (next page)

Procedure

1. Distribute one *Spay, Neuter, Hooray!* worksheet to each student.
2. Introduce students to the activity by asking them if they can recall any of the following key facts from the lesson the previous day:
 - How many kittens are in the average litter?
 - i. Answer: *There are an average of six kittens per litter.*
 - How many litters can a female cat have in one year?
 - i. Answer: *A female cat can have three litters in one year, sometimes more!*
3. Ask the students to estimate how many kittens can be born as a result of just one female cat, who has not been spayed, in a seven year period.
 - i. Answer: *According to the ASPCA, over a period of seven years, one female cat can be responsible for the births of 420,000 kittens.*
4. Allow students to work through the math worksheet individually or in groups.
5. After each student has completed the worksheet, review the answers as a class.
6. Give students an opportunity to discuss the impact that these results can have on communities.

Spay, Neuter, Hooray!

Name(s): _____

Date: _____ Teacher Name: _____

According to Canadian Federation of Humane Societies, over 189,000 animals are admitted to animal shelters in Canada each year. On average, a typical female cat can have six kittens, three times a year. Assume that half of each litter is female, and the other half is male. The answer to this math problem will help you understand why there are so many homeless dogs and cats in the community.

Directions: Read each sentence carefully and write the total number of new cats in each of the answer boxes.

Katie is an unspayed female cat.

In the spring, Katie has SIX kittens – three males and three females.

In the summer, Katie has her second litter of six kittens.
AND
Her three daughters have six kittens each. (3x6)

In the fall, Katie has her third litter of six kittens.
AND
Her six daughters each have a litter of six kittens. (6x6)
AND
Her nine granddaughters each have a litter of six kittens. (9x6)

The next spring, Katie has her fourth litter of six kittens.
AND
Her nine daughters each have a litter of six kittens. (9x6)
AND
Her 54 granddaughters and great granddaughters each have a litter of six kittens. (54x6)

Total A : _____

Total B : _____

_____ + _____ = _____
Total C : _____

_____ + _____ + _____ = _____
Total D : _____

_____ + _____ + _____ + _____ = _____
Total E : _____

_____ + _____ = _____
Total A : _____

_____ + _____ = _____
Total B : _____

_____ + _____ + _____ = _____
Total C : _____

_____ + _____ + _____ + _____ = _____
Total D : _____

_____ + _____ + _____ + _____ + _____ = _____
Total E : _____

How many cats are there in total?

$$\frac{\quad}{\text{Total A}} + \frac{\quad}{\text{Total B}} + \frac{\quad}{\text{Total C}} + \frac{\quad}{\text{Total D}} + \frac{\quad}{\text{Total E}} = \underline{\hspace{2cm}}$$

Appendix 3: Spay and Neuter Campaign Poster

Overview

Students will work individually or in groups to create a persuasive poster to promote the importance of spaying and neutering domestic pets.

Objective	For students to develop a clever spaying/neutering campaign poster to promote sterilization and reduce pet overpopulation.
Time Needed	60 to 90 minutes.
Materials Needed	<ul style="list-style-type: none">• Blank paper/bristol board• Decorative stickers• Pencils, markers, crayons• Glitter, yarn, glue, and other decorative craft supplies (optional)

Procedure

1. As a class, ask students to brainstorm how they might convince a friend or family member to get their new pet spayed/neutered. Write their ideas on the board.
2. *This activity can be done individually or in groups.* Give each student/group a blank paper or bristol board.
3. Encourage students to design a persuasive and colourful promotional poster with some of the ideas they discussed, using key words, rhymes, catchy phrases and pictures to advocate for spaying and neutering of domestic pets.
4. Once complete, have the students present their posters to the class.

Credits and References

Some materials in this in-class lesson plan have been derived in-part or in-whole from Humane Education Advocates Reaching Teachers' (HEART) *Humane Education Resource Guide* and the Cochrane Area Humane Society's online humane education curriculum.

For more information, please visit:

- <http://www.teachheart.org>
- <http://www.cochranehumane.ca/education/>