

# Lucky Dog Humane Education Lesson 3 – STEM BUILDING

## Aligns to the following California Standards for K-5

- ! CA 3-5 ETS1 Engineering Design - Standards 1, 2 & 3
- ! CA.3 LS1 Life Science - Standard 2
- ! CA.CC.MP Mathematical Practices – Standards 1, 2, 3 & 7

## Aligns to Social Emotional Learning Outcomes

- ! **Self Awareness:** Identifying emotions, thoughts and values
- ! **Self Management:** Self-discipline - Impulse control
- ! **Social Awareness:** Perspective-talking - Empathy - Respect for others - Diversity
- ! **Relationship Skills:** Communication - Relationship building
- ! **Responsible Decision-making:** Identifying problems - Analyzing situations - Solving Problems - Ethical responsibility - Reflecting

**OBJECTIVE:** To challenge children to design and build appropriate housing for pets using knowledge of the species' needs, real pictures models, mathematical reasoning, and engineering design.

**PREPARATION:** Teacher or Presenter will lead a prepared PowerPoint discussion that includes reading the Book *Before You Were Mine* By Maribeth Boelts. This will give students basic knowledge about a companion animal's need for a loving home and shelter.

### **METHOD:**

- Lucky Dog H.E. presenters (or classroom teacher) will use a combined PowerPoint and Storybook presentation, accompanied by posters, puppets, and props – The children will be introduced things that make an animals feel safe and happy vs. things that make an animal feel scared and sad.
- Presenters will leave expansion activities for the classroom. These activities will help teachers promote compassion for animals and compassion in the classroom. They will also inspire children to understand that they, too, can participate in positive change for shelter animals, stray animals, and pet overpopulation.

### **IMPLEMENTATION:**

After participating in the Empathy for Animals lesson and story, the classroom teacher will lead a discussion on ways to help an animal feel safe, happy and loved. The teacher will lead the children to a building area (with blocks for younger children or building supplies for older children). The teacher will show the students real pictures of pet houses and discuss way to build a pet house using knowledge of the pet's needs, mathematic principals, and engineering design. The students will be given materials and time to plan, design, and build pet houses.

### **Materials:**

- Computer to research pet needs
- Printed pictures of real pet homes to copy (in resource packet)
- Measuring tools
- Graph paper
- Building supplies: foam, felt, rocks, cardboard, fake leaves, cardboard tubes (Paper towel or toilet paper rolls)
- Blocks (for younger children)

**Concepts:** Teaching empathy and respect for feelings of others, Learning planning and design with careful consideration of the needs of the pet

**CONCLUSION:** Allow for building area to remain “under construction” for as long as needed. Students can finish deskwork in a timely manner to gain building time. Save designs and finished projects to display at “Kindnessfest” at the conclusion of the Lucky Dog Humane Education Program