



## Creating an Animal Cage Design Challenge

### DESIGN CHALLENGE Notes:

This design challenge explores how to keep animals safe and people safe so they can interact together

**Problem:** We need to keep baby animals safe from predators and themselves.

**Challenge:** Using materials that are available create a cage that serves the purposes stated.

### Materials:

We need a variety of materials that we can use to create a structure

We need string, twist ties, velcro, and zip ties

We need tarps and fabric pieces

We need various pieces of metal and wood

### Brainstorm:

1. What are the predators that want to get to baby animals?
2. Are humans considered predators?
3. Can baby animals be their own worst enemy?
4. What do we know about the materials you have?

### Design/Build:

1. What makes a great cage?
2. You must have a door, sides, and a system to keep small animals in
3. How will we feed and water the babies?

### Test:

- What happens when you try your design?
- Can you be sure you have a strong cage?
- Can we tell it is working? How?
- How do you know when the cage is done?

### Evaluate:

- How will you record your results?
- How will you know how much of each component you have is doing what?
- What would you modify to test your results?
- Can you determine if there is a benefit of multiple materials?
- What would you do differently?

### Share:

- Record your tests on a chart.
- Which combination or type of cage worked best?
- How did you know?