

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Take Apart Activity v4**  
California Invention Convention



Today, you will be taking apart a toy provided by your teacher. Please use all tools appropriately and pay attention to the parts that you see inside the toy.

***Step 1: Previewing the Product***

Use a magnifying glass to look inside the toy. What parts of the toy can you see?

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Describe what the toy does. How does it do this?

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How do you think the toys' parts contribute to these actions? How do the parts cause the action you use?

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How would you go about taking this toy apart? What would be the first step? The second? The third?

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What do you think you will see when you take this toy apart? What do you think will be inside?

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***Step 2: Outside View***

Clues on the outside of this invention will help you learn what you may find on the inside. **Sketch and label the parts** you find on the outside. Use the magnifying glass to see parts inside the toy and a ruler to **measure some of the parts** of the toy.

***Step 3: Take the Toy Apart!***

Use the correct tools to carefully take the toy apart. Find the important parts that make this invention work and record them in the inventory below.

How many...?

Screws: _____	Bolts: _____	Wheels: _____
Nails: _____	Springs: _____	Gears: _____
Wires: _____	Nuts: _____	Axles: _____
Shafts: _____	Cams: _____	Knobs: _____

Draw and label any important parts that were not mentioned above.

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Use diagrams and labels to describe what parts are important and how they work together.

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By looking inside this invention, I found out:

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***Step 4: Thinking about the Parts***

Was there anything inside the toy that you did not expect? What surprised you?

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Explain how you think this toy works.

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How could you use the parts you found in this toy to make something different or repair something I already have?

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Some of the parts in this toy are made of plastic while other parts are made out of metal. Why do you think that the inventor chose these types of materials to build those parts? Could they have switched some of the materials? Could they have used other sources such as wood, paper, glass, or clay? Do you think these materials were a good choice?

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