

Toy Take-Apart, Project Make

Mr. Hays

Tuesday 4/18/23, Wednesday 4/19/23

1. Write your group member names up top of the poster paper.
2. Play with the toy gently. See what it does.
3. Draw a sketch, about four inches tall, of your toy.
4. Describe in one or more complete sentences what your toy does in terms of motion. For example, when we wind the knob, the toy hops, and often falls over.
5. As a group, discuss how the toy might work internally (the parts you cannot see that make the parts you CAN see do what they do.) Write in larger letters "BEFORE", then write down in words how you think it works. Specifically, I want you to answer this question: How do you think your toy turns rotational motion (the knob you're turning) into whatever kind of motion your toy produces.
6. Draw a diagram that shows what your theory might look like mechanically. (Literally, draw gears, wheels, levers, etc. that could create the behavior you see with your toy.)
7. Write down one or more questions that your group has about the inside of the toy.
8. Carefully take your toy apart. There are two screwdrivers per table, please share thoughtfully. Be careful not to lose any of the parts.
9. Write "AFTER" and then write down how your toy actually works now that you see the internal mechanisms. Draw a diagram of how the insides work.
10. Draw a small picture of each individual part from the inside of the toy.
11. As a group, come up with a new question about the toy and/or how it works. This could relate to manufacturing, durability, cost, or other issues relating to the toy. Write "PARTING THOUGHT" and write your question down.
12. Get ready to present your poster to the entire class. Decide who in your group will talk about what.