

BREAK A TOY APART

RINGTAIL'S HOLLOW Environment & Outdoors



The Adventure :

Have you ever wondered how your favourite toys work? Break apart an old toy (with permission) and look inside to figure out what it is made of and how it does all the fun things it does!

Plan:

- Have you ever opened up a toy to see what is inside and how it works?
- What are some of the toys you have always wanted to see inside of?
- What toy do you want to bring to the meeting to break apart? (You might not be able to put it back together, so think of a toy you do not play with very much.)
- What simple machines do you know? How do they work?
- What tools do you think you will need?

Do:

1. Imagine:
 - What do you think you will see when you open up the toy? You can draw your ideas and talk about it with your friends.
2. Break the toy apart:
 - Gather the tools your Lodge will need to open up your toys.
 - Open up the toy and see what you find.
 - What do you notice about the parts? Group similar parts together. How many groups do you have?
 - You can also make a new drawing based on what you saw inside. How is it different from your first drawing?

Review:

- What do you know now that you did not know before?
- What other toy can you think of that might use the same parts to work?
- Do you think you could put the toy back together? Why or why not?
- What new thing could you create from the parts?
- What did you like about this adventure? What did you not like about it? How would you do this adventure differently?
- What elements of STEM do you think you used in this adventure? Science? Technology? Engineering? Math?



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MATERIALS:

- Old or used toys (one for each Beaver). You can also do the activity with items like a toaster, hair dryer, clocks with large gears, or a rotary telephone. The toy may not work again after this activity.
- A set of tools to open up the toys for each group of 3-4 Beavers (Robertson screw drivers, Phillips screw driver, slot screw driver, hammer, sockets, pliers)
- Papers and crayons
- Safety goggles (1 pair for each person)

ONLINE RESOURCES :

- Simple Machines idahoptv.org/sciencetrek/topics/simple_machines/facts.cfm
- The Essence of Simple Machines
www.cosi.org/downloads/activities/simplemachines/sm1.html

SAFETY NOTE:

- How can you make sure you are using the tools safely?
- Look at different parts of your toy. How can you make sure you do this activity safely?
- What are some of the things you should and should not do?
- Do you know how to use safety goggles?