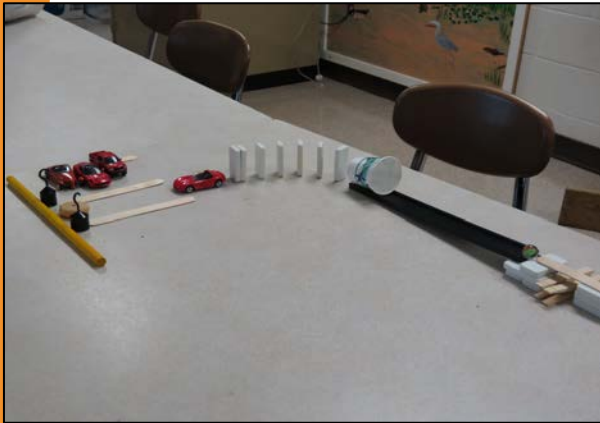


30 - 45
Minute
Activity
For
Everyone

Simple Inventions

At the root of all inventions is the need to make the tasks and processes of our everyday lives better, easier and more efficient. Are there any chores or parts of your daily life that you want to make easier? Feeding the dog? Watering the plants? Turning off the lights? Though some inventions are quite complex, many are more simplistic, using a number of diverse resources and linking sequences to complete a simple task. Try this activity to create your own sequenced invention, sparking your creativity and strengthening your tactile and problem-solving skills.



Added Challenge:

Once you have successfully created a sequenced machine with 3-5 action steps, try adding on more to make your invention more complex. Does your invention spread across the entire room? What challenging tasks have you been able to complete?

Material Idea's:

The best materials to use are those that transfer and link one action to the next. E.g. Dominos, marbles, balls, mini cars, rolling pins, fans, PVC pipe and paper towel rolls all work well as they are round and can be sequenced together. To keep the transfer of sequence contained you will also need materials to help stay on track. E.g. Race car tracks, books, cups, string, tape, wooden blocks, containers, pulleys, clothes pins, paper, cardboard, plastic bottles, etc.

Activity:

- Start by brainstorming and writing down the task that you want to complete. (e.g. Opening a door, turning off the lights, watering the plants).
- Create a plan. Write out and sequence together 3-5 action steps that connect to complete your task (e.g. Dominos fall one by one, hit the car which rolls to end of the table, knocking off the cup of marbles, making the ball bounce, etc.)
- Gather and inventory all the materials that you'll need for your sequenced invention.
- Build step by step. Set up the first action step and test it, once you're satisfied with that step, add on the next action step. Continue until your sequenced invention is complete.
- Test it. As this may be your first sequenced invention, be patient, you may need to modify and adjust your sequence of action steps many times before your invention successfully completes the task you created it to do.
- Once it is complete, take a video of your invention and send it to a friend. Challenge them to create their own sequenced invention.

Reflective Questions:

- What was the most challenging part of this activity? Why?
- What do you think is the most creative part of your sequenced invention? Why?
- How did completing your invention make you feel?
- Think bigger. What are some bigger tasks or challenges that you feel others struggle with? How do you think we can solve those problems?