

YEAR 7 PRACTICAL DESIGN

CRACKING CONTRAPTIONS

DESIGN & PROMOTE YOUR OWN RUBE GOLDBERG INSPIRED MACHINE

A Rube Goldberg machine, named after American cartoonist Rube Goldberg, is a machine intentionally designed to perform a simple task in an indirect and overly complicated way. Usually, these machines consist of a series of simple unrelated devices; the action of each triggers the initiation of the next, eventually resulting in achieving a stated goal. The design of such a "machine" is often presented on paper and would be impossible to implement in actuality.

https://en.wikipedia.org/wiki/Rube_Goldberg_machine

INSTRUCTIONS

If possible start this task by viewing one or more videos below:

Autochef - Cracking Contraptions - Wallace and Gromit

<https://www.youtube.com/watch?v=2igRcGxlshA>

Shopper 13 - Cracking Contraptions - Wallace and Gromit

<https://www.youtube.com/watch?v=kB1dXzHcuQg>

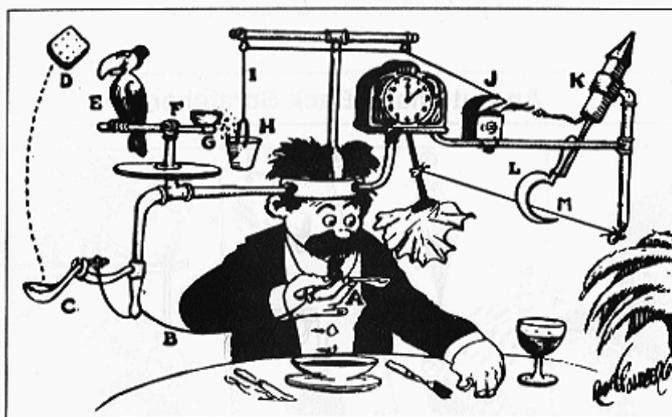
The Snoozatron - Cracking Contraptions - Wallace and Gromit

<https://www.youtube.com/watch?v=vGxRUgIFFME>

Now it's your turn to get creative!

- Develop a mind map to get your ideas moving. What contraption could you use in your daily life?
...now try and pin down one idea to develop further...
- Develop a diagram of your machine. Take inspiration from the drawing of *Professor Butts Self-operating Napkin*.
- Use annotation on your diagram to point out the various design features you have discussed.
- Design an advertisement to promote your Cracking Contraption to its target audience. You **MUST** include the annotated diagram in your poster. Present your advertisement as a tram stop poster. The advertisement should be completed as an A4 portrait format poster.

Self-Operating Napkin



Professor Butts and the Self-Operating Napkin (1931)

Soup spoon (A) is raised to mouth, pulling string (B) and thereby jerking ladle (C), which throws cracker (D) past toucan (E). Toucan jumps after cracker and perch (F) tilts, upsetting seeds (G) into pail (H). Extra weight in pail pulls cord (I), which opens and ignites lighter (J), setting off skyrocket (K), which causes sickle (L) to cut string (M), allowing pendulum with attached napkin to swing back and forth, thereby wiping chin.

Rube Goldberg cartoons often depicted devices that performed simple tasks in indirect convoluted ways.

The cartoon above is Goldberg's Professor Butts and the Self-Operating Napkin, which was later reprinted in a few book collections, including the postcard book Rube Goldberg's Inventions!

PRESENTATION

This must be neat and attractive/ eye-catching.

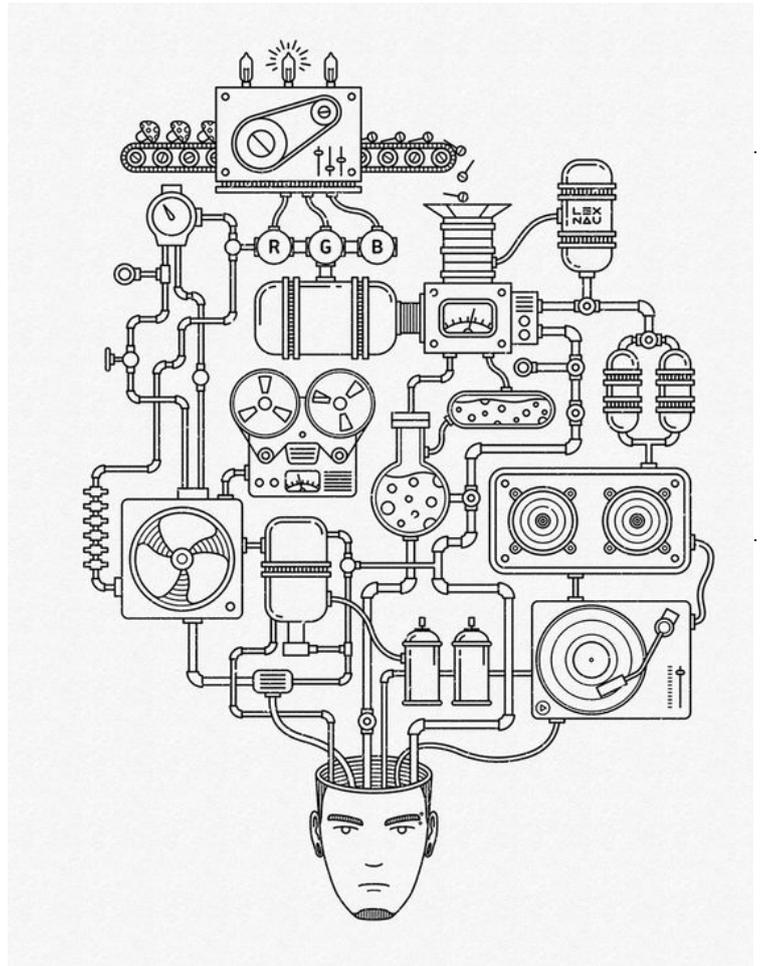
You are to present your work as a hard copy once we return from holidays.

DUE DATE

April 2020

SUBMISSION

Hard copy - A4 presentation



ASSESSMENT CRITERIA	O	E	VG	G	S	M	U
Presentation shows evidence of creative and critical thinking							
Cracking Contraption annotation is informative and interesting							
Appropriate imagery is included in the presentation.							
Presentation is neat and effectively designed.							
GRADE							