Rube Goldberg Design Challenge

THE CHALLENGE
Create a Rube-Goldberg inspired system to complete a simple task.

CHALLENGE DETAILS
- You may work alone or with a partner.
- Your system must include a push and pull and use of gravity and friction.
- Your system must go for no longer than 30 seconds.
- You may use any of the materials provided to you by your teacher but are also free to use your own belongings (e.g. stationery, books, lunch boxes, etc).

POSSIBLE PURPOSES
- Some examples of tasks you system may be designed for are:
- Closing a door.
- Passing a pencil to another student.
- Placing an item in your tub.
- Opening a lunch box.
- Emptying a cup into a sink.
- Putting a toy/item back into its box.

ASSESSMENT RUBRIC
Your teacher will assess your contraption using the rubric below. Refer to this when creating your design.

	Great - 3 points	Good - 2 points	Not Yet - 1 point
Forces	The student has effectively used all four forces discussed in the lesson (push, pull, gravity, friction).	The student has attempted to use all four forces discussed in the lesson (push, pull, gravity, friction).	The student has attempted to use 1-3 of the forces discussed in the lesson (push, pull, gravity, friction).
	The student is able to explain each of the four forces discussed in the lesson and identify how they have been used in the system they designed.	The student is able to explain each of the four forces discussed in the lesson.	The student is able to recall each of the four forces discussed in the lesson.
Purpose	The system effectively achieved its intended purpose.	The intended purpose of the system is clear without explanation being required.	The student can explain the purpose of the system they have created.
Timing	The time kept within the 30 second limit.	The time exceeded the 30 second limit.	The system was unable to be timed.