

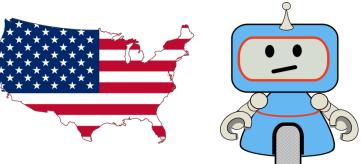
## Sixth Form Induction Day

Miss Brennan & Mr Teece





## Roboville, AI, USA



Mr & Mrs Smith have just bought a new home in the heart of '*Roboville*' a new development of robotically dependent homes in the newly named American state of AI.

Every home within Roboville will be run entirely by automated systems and will have its own 'robocleaner'.

Each night when the homeowners are asleep in bed the robocleaner will be programmed to clean the downstairs areas; washing the floors and vacuuming the carpets.

As a result all furniture has to be designed to be capable of being stored up off the floor.

## Your challenge...



- To spend the first 15 minutes designing a simple stool for young children aged 5-8, appropriate for use in a '*Roboville'* home.
- The stool **MUST**:
  - Be capable of being bought in flat pack form
  - Be easily put together without the use of adhesives or tools and equipment
  - Be put together and taken apart in less than 3 minutes
  - Be able to be hung on the wall to allow the 'robocleaner' to clean at night
- Use the remaining time to model your stool design from the following materials:
  - Foamboard
  - Corrugated cardboard
  - Polypropylene
  - Art straws
  - String

- Wooden cocktail sticks
- Thin card
- Thin plastic sheet
- Masking tape/sellotape
- Double-sided tape

## Your summer task...



- 1. To create a 3D virtual model of your stool design using the programme SketchUp Make.
- 2. Once you have completed it, save it and export it as a 2D graphic .jpg file.
- 3. Next you will need to annotate your design (on computer or by hand), explaining how you have considered the following:
  - Aesthetics
  - Customer
  - Ergonomics
  - Safety
  - Sustainability
  - Function
  - Materials

You will be expected to present your idea in full colour on A4 and bring to your first lesson with us in September.

If you haven't got SketchUp on your computer or Laptop at home then you can register and use the web based version of **SketchUp** for free at: <u>https://www.sketchup.com/plans-and-pricing/sketchup-free</u>

For those students who have never used it before you may find the following YouTube tutorials helpful to get to grips with the programme and help you to develop the skills needed to complete the task: SketchUp for Beginners - Part 1 - Basic Functions <u>https://www.youtube.com/watch?v=BZ-uPJLxav0</u> SketchUp for Beginners - Part 2 - Modelling a House <u>https://www.youtube.com/watch?v=9QREMRZqb3o</u>