



# Everybody Wants To Rule The World

## How can I use tools effectively to measure, cut and join materials to make a chair?

### Health and Safety



Do's

- Keep your hands away from hacksaws when cutting wood
- Keep your fingers away from the hammer when fixing with nails.
- Stand up with your chair



Don'ts

- Walk around the class-room.
- Shout out in class. It needs to be a clam atmosphere
- Touch the blade on the hacksaw.

### Key Vocabulary

**Annotated sketches**—a detailed sketch with labels

**Cross-section**— a surface or shape exposed by making a straight cut

**Exploded diagram**—a technical drawing showing how parts fit together.

**Prototype** - an early sample model of a product.

**Pattern pieces**—a template of the pieces to be cut.

**Functional** - the product is fit for purpose.

### Tools

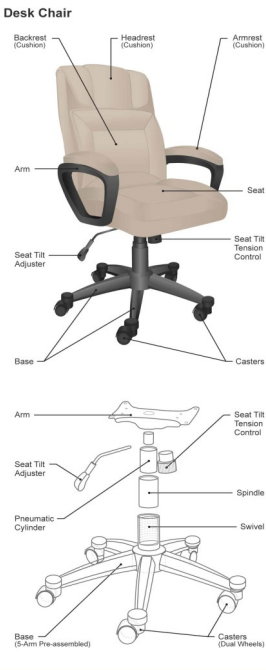
- Hammers & nails
- Needle and thread
- Craft knife
- Hacksaw



### Are all chairs the same?

- All chairs are used for sitting, but **different chairs serve different purposes.**
- The **structure and materials** used to make the chair contributes **to the purpose.**
- e.g. school chairs are plastic because:
  - ⇒ It is a material that can be easily wiped down if there are any accidents or spillages
  - ⇒ It is a **cheaper material** as schools need to buy lots
  - ⇒ They are designed to be stacked away so the cleaners can clean more effectively.
- Mrs Francis' chair needs to be made **more comfortable** as she spends a long time at her desk in front of the computer.

### What are the features and purpose of a chair?



**What do I want my chair to look like?**

### What tools will I use to cut and join my materials together?

**Hacksaws and cutting block** to **cut** the wood safely.

**Glue gun** to **join** the wood together, or other materials such as felt and sponge (for the seat).

**Ruler and knife** to **measure** and **cut** materials.

**Hammer and nails** to **join** the wood together for a **more fixed, permanent structure.**

### How will I make sure I am using the equipment safely?

**Do not** walk around the classroom when you or your team are using the tools.

**Make sure** you keep your fingers and hands away from sharp blades.

**Ensure** you keep your fingers and thumbs away from hammers.

**Be aware** of everyone around you when we are using the tools.

**Applying past knowledge:** This learning links to your learning from year 5 when you used saws to cut and glue guns to join the dowel rods to the cams.

