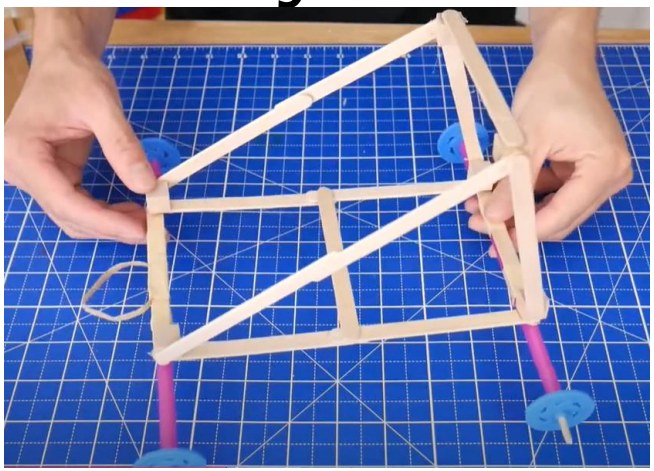
Equipment used to create our slingshot cars

- Doweling or wooden rod
- Paper straws
- Wooden pop sticks
- Cardboard wheels
- Glue gun
- Masking tape
- Scissors
- Pencil

Key knowledge

- A force needs to be applied to the car in order for it to move, using an elastic band
- That the materials we use (e.g. wood, plastic, rubber) have different properties that will help to create our design. These properties include: strength, flexibility and durability.
- We can identify some key risks of using the equipment, which can include snap back from elastic or burns from a hot-glue gun
- Precise measurements and balance in the build can help make an aesthetic (good to look at) design, as well as being practical for the purpose of the product

DT: Sling Shot Cars



Key skills

- Make a sling slot car in stages making continual refinements
- Design with the user in mind, motivated by the service a product will offer
- Consider and select from a wider range of tools and equipment to perform practical tasks, including assembling the base of a sling shot car
- Anticipate any problems that might occur in the design and build process, ahead of assembly
- Evaluate the effectiveness of the car against the design brief and success criteria

Key Questions

- Who would enjoy using this slingshot car? Why? How?
- Does anything like this already exist in the market?
- What purpose does it have?
- What materials would we need?
- How can I make and design my slingshot car?
- How can I improve my design along the way?
- Was I happy with the product? What worked well? What improvements could I have made?

Vocabulary

- **Elasticity** – when something can stretch and then go back to its original shape, like a rubber band. When you pull on a rubber band and let go, it snaps back to how it was before.
- **Product-** something that is made or created, usually to be sold or used. e.g., a toy, a book, or a game can be a product.
- **Prototype -** the first version of something you make to see if your idea works. It's like making a rough draft, which can be tested and improvements made to it
- **Frame -** the main structure or the skeleton of something that holds everything together
- **Speed -** how fast something is moving. If something is moving quickly, it has high speed. If it's moving slowly, it has low speed.