

## Year 1- Autumn

## DT Knowledge Organiser

Links to other year groups:

Year 4 Summer: Design and make a moving storybook

Mechanical Devices/New Materials-Year 10 Spring

Year 8 Design Movement / Modelling Project Prototypes: why, consumer, manufacturer Design movements - prep; practical skills: hand tools intro Materials knowledge - Styrofoam; use of modelling materials Finishes

### Key Vocabulary & Skills:

design  
criteria  
model  
plan  
communicate  
template  
strength  
materials  
cutting  
textiles  
stronger  
stiffer  
joining  
slider  
evaluate

### Real World Examples:



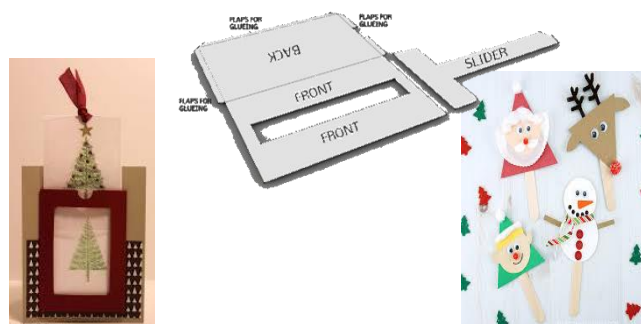
Christmas cards and books

### Key Info:

Can I design a purposeful, functional & appealing product?

Can I talk about it, draw it and use templates?

Can I select from and use a range of tools and equipment, including: cutting, shaping, joining and finishing and make them stronger, stiffer and more stable?



### Simple mechanism movements



In a straight line



Round and round



In a straight line,  
forwards and  
backwards

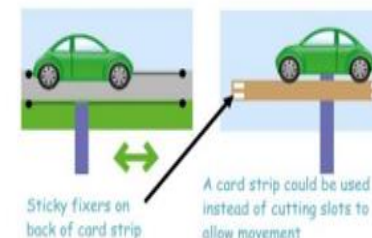
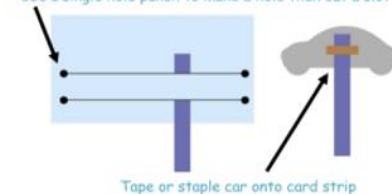


In a curve

### Constructional Diagrams, Mechanisms, and sliders

Sliders move from side to side and up and down

Use a single hole punch to make a hole then cut a slot



Lesson 1	Investigating sliding mechanisms in books and cards.
Lesson2	Create a simple slider using paper: Evaluate what is wrong with his product? How could it be improved. (use of a stronger material to make it stiffer.
Lesson 3	To make a up and down slider and evaluate what length the lollipop stick/card needs to be for the slider to work effectively.
Lesson 4	Introduce the design task and criteria. Plan their product.
L.esson 5	Final piece: create their own sliding product.
Lesson 6	Evaluate their product.